

**Cochrane** Database of Systematic Reviews

# Strategies for expanding health insurance coverage in vulnerable populations (Review)

Jia L, Yuan B, Huang F, Lu Y, Garner P, Meng Q

Jia L, Yuan B, Huang F, Lu Y, Garner P, Meng Q. Strategies for expanding health insurance coverage in vulnerable populations. *Cochrane Database of Systematic Reviews* 2014, Issue 11. Art. No.: CD008194. DOI: 10.1002/14651858.CD008194.pub3.

www.cochranelibrary.com

Strategies for expanding health insurance coverage in vulnerable populations (Review) Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration. WILEY



# TABLE OF CONTENTS

HEADER
ABSTRACT
PLAIN LANGUAGE SUMMARY
SUMMARY OF FINDINGS
BACKGROUND
OBJECTIVES
METHODS
RESULTS
Figure 1
Figure 2
Figure 3
Figure 4
DISCUSSION
AUTHORS' CONCLUSIONS
ACKNOWLEDGEMENTS
REFERENCES
CHARACTERISTICS OF STUDIES
DATA AND ANALYSES
Analysis 1.1. Comparison 1 Awareness and application support versus no intervention, Outcome 1 Enrolment
Analysis 1.2. Comparison 1 Awareness and application support versus no intervention, Outcome 2 Continuous enrolment 2
Analysis 1.3. Comparison 1 Awareness and application support versus no intervention, Outcome 3 Sporadic enrolment 2
Analysis 1.4. Comparison 1 Awareness and application support versus no intervention, Outcome 4 Mean time to obtain 2
insurance.
Analysis 1.5. Comparison 1 Awareness and application support versus no intervention, Outcome 5 Parental satisfaction with process of enrolment.
Analysis 2.1. Comparison 2 Handing out applications versus no intervention, Outcome 1 Enrolment
ADDITIONAL TABLES
APPENDICES
WHAT'S NEW
HISTORY
CONTRIBUTIONS OF AUTHORS
DECLARATIONS OF INTEREST
SOURCES OF SUPPORT
DIFFERENCES BETWEEN PROTOCOL AND REVIEW
INDEX TERMS

### [Intervention Review]

# Strategies for expanding health insurance coverage in vulnerable populations

Liying Jia<sup>1,2</sup>, Beibei Yuan<sup>3</sup>, Fei Huang<sup>4</sup>, Ying Lu<sup>4</sup>, Paul Garner<sup>5</sup>, Qingyue Meng<sup>3</sup>

<sup>1</sup>Center for Health Management and Policy, Key Lab for Health Economics and Policy Research, Ministry of Health, Shandong University, Jinan, China. <sup>2</sup>Key Lab for Health Economics and Policy Research, Ministry of Health, Shandong, China. <sup>3</sup>China Center for Health Development Studies (CCHDS), Peking University, Beijing, China. <sup>4</sup>Center for Health Management and Policy, Shandong University, Jinan, China. <sup>5</sup>Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, UK

**Contact address:** Qingyue Meng, China Center for Health Development Studies (CCHDS), Peking University, 38 Xueyuan Road, Beijing, Beijing, 100191, China. qmeng@bjmu.edu.cn.

**Editorial group:** Cochrane Effective Practice and Organisation of Care Group. **Publication status and date:** Edited (no change to conclusions), published in Issue 10, 2019.

**Citation:** Jia L, Yuan B, Huang F, Lu Y, Garner P, Meng Q. Strategies for expanding health insurance coverage in vulnerable populations. *Cochrane Database of Systematic Reviews* 2014, Issue 11. Art. No.: CD008194. DOI: 10.1002/14651858.CD008194.pub3.

Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration. This is an open access article under the terms of the Creative Commons Attribution-Non-Commercial Licence, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

# ABSTRACT

#### Background

Health insurance has the potential to improve access to health care and protect people from the financial risks of diseases. However, health insurance coverage is often low, particularly for people most in need of protection, including children and other vulnerable populations.

#### Objectives

To assess the effectiveness of strategies for expanding health insurance coverage in vulnerable populations.

#### Search methods

We searched Cochrane Central Register of Controlled Trials (CENTRAL), part of *The Cochrane Library*. www.thecochranelibrary.com (searched 2 November 2012), PubMed (searched 1 November 2012), EMBASE (searched 6 July 2012), Global Health (searched 6 July 2012), IBSS (searched 6 July 2012), WHO Library Database (WHOLIS) (searched 1 November 2012), IDEAS (searched 1 November 2012), ISI-Proceedings (searched 1 November 2012), OpenGrey (changed from OpenSIGLE) (searched 1 November 2012), African Index Medicus (searched 1 November 2012), BLDS (searched 1 November 2012), Econlit (searched 1 November 2012), ELDIS (searched 1 November 2012), ERIC (searched 1 November 2012), HERDIN NeON Database (searched 1 November 2012), IndMED (searched 1 November 2012), JSTOR (searched 1 November 2012), LILACS(searched 1 November 2012), NTIS (searched 1 November 2012), PAIS (searched 6 July 2012), Popline (searched 1 November 2012), ProQuest Dissertation &Theses Database (searched 1 November 2012), PsycINFO (searched 6 July 2012), SSRN (searched 1 November 2012), Thai Index Medicus (searched 1 November 2012), World Bank (searched 2 November 2012), WanFang (searched 3 November 2012), China National Knowledge Infrastructure (CHKD-CNKI) (searched 2 November 2012).

In addition, we searched the reference lists of included studies and carried out a citation search for the included studies via Web of Science to find other potentially relevant studies.

#### **Selection criteria**

Randomised controlled trials (RCTs), non-randomised controlled trials (NRCTs), controlled before-after (CBA) studies and Interrupted time series (ITS) studies that evaluated the effects of strategies on increasing health insurance coverage for vulnerable populations. We defined

strategies as measures to improve the enrolment of vulnerable populations into health insurance schemes. Two categories and six specified strategies were identified as the interventions.

#### Data collection and analysis

At least two review authors independently extracted data and assessed the risk of bias. We undertook a structured synthesis.

#### **Main results**

We included two studies, both from the United States. People offered health insurance information and application support by communitybased case managers were probably more likely to enrol their children into health insurance programmes (risk ratio (RR) 1.68, 95% confidence interval (CI) 1.44 to 1.96, moderate quality evidence) and were probably more likely to continue insuring their children (RR 2.59, 95% CI 1.95 to 3.44, moderate quality evidence). Of all the children that were insured, those in the intervention group may have been insured quicker (47.3 fewer days, 95% CI 20.6 to 74.0 fewer days, low quality evidence) and parents may have been more satisfied on average (satisfaction score average difference 1.07, 95% CI 0.72 to 1.42, low quality evidence).

In the second study applications were handed out in emergency departments at hospitals, compared to not handing out applications, and may have had an effect on enrolment (RR 1.5, 95% CI 1.03 to 2.18, low quality evidence).

#### **Authors' conclusions**

Community-based case managers who provide health insurance information, application support, and negotiate with the insurer probably increase enrolment of children in health insurance schemes. However, the transferability of this intervention to other populations or other settings is uncertain. Handing out insurance application materials in hospital emergency departments may help increase the enrolment of children in health insurance schemes. Further studies evaluating the effectiveness of different strategies for expanding health insurance coverage in vulnerable population are needed in different settings, with careful attention given to study design.

# PLAIN LANGUAGE SUMMARY

#### Strategies for expanding health insurance coverage in vulnerable populations

Researchers in The Cochrane Collaboration conducted a review of the effect of strategies to increase the number of people from vulnerable populations that are enrolled into health insurance programmes. They searched for all relevant studies and found two studies. Their findings are summarised below.

#### What is a health insurance programme?

Governments in many countries offer healthcare services at low rates or free of charge to all their citizens, often paying for these services through taxes. However, in many developing countries and some developed countries this is not the case. In these countries, many people get their healthcare expenses covered through government health insurance programmes, which are often paid for through membership fees. But certain groups of people, such as children, the elderly, women, people with low incomes, people living in rural areas, racial and ethnic minorities, immigrants, and people with chronic diseases or disabilities, are less likely to be members of these programmes even though they are more likely to have health problems.

In some of these countries governments have tried to make sure that health insurance programmes cover these vulnerable groups. One way of doing this is to improve the design of the programme. For instance, governments can change the rules for who can join the programme or they can make it cheaper to join. But even if a programme is well-designed, people may still not join it. For instance, they may not know that they can become members or they may find the application process too difficult. To address these problems, for instance, governments can give people more information about the programme and who can join, or can make the application process easier.

#### What this research says

Both studies in this review took place in the USA and were aimed at uninsured children. In the first study, case managers contacted the families of uninsured Latin American children, gave them information about health insurance, helped them apply, and helped them appeal when a wrong decision was made. In the second study, insurance application forms were handed out to the families of children visiting hospital emergency departments. In both studies, these families were compared to families who were not given additional information or support. The studies showed the following:

#### People who are offered health insurance information and application support:

- are probably more likely to enrol their children into health insurance programmes (moderate quality evidence);
- are probably more likely to continue insuring their children (moderate quality evidence);
- may be quicker at getting insurance (low quality evidence);

Strategies for expanding health insurance coverage in vulnerable populations (Review)

Cochrane

Librarv

- may be more satisfied with the process of enrolment (low quality evidence).

#### People who are given insurance application forms in the emergency departments of hospitals:

- may be more likely to enrol their children into health insurance programmes (low quality evidence).

No unwanted effects were reported in the studies. A possible unwanted effect might be that people could experience the information and support as annoying or unhelpful. However, in the one study that measured the parents' satisfaction, people were more satisfied when given information and support.

# A summary of this review for policy-makers is available here

# SUMMARY OF FINDINGS

# Summary of findings for the main comparison. Information and application support compared to no intervention

#### Awareness and application support compared to no intervention

**Patient or population:** Children with no health insurance **Settings:** USA (urban Latino American community in Boston) **Intervention:** Awareness and application support

**Comparison:** No intervention

Outcomes	Comparative r	isks* (95% CI)	Relative ef-	No of partici- Quality of the Comments pants evidence		
(11-month follow up)	Without in- tervention	With awareness and application support	(95% CI)	(studies)	(GRADE)	
Enrolment	574 per 1000	<b>964 per 1000</b> (827 to 1000)	<b>RR 1.68</b> (1.44 to 1.96)	257 (1 study)	⊕⊕⊕⊝ moderate <sup>1</sup>	RR calculation based on number of events imputed from percentage and number of participants measured
Continuous enrolment	303 per 1000	<b>785 per 1000</b> (591 to 1000)	<b>RR 2.59</b> (1.95 to 3.44)	257 (1 study)	$\oplus \oplus \oplus \odot$ moderate <sup>1</sup>	Same comment as above
Mean time to obtain insur- ance	134.8 days	87.5 days ( 60 to 114.2 days)	-	200 (1 study)	⊕⊕⊕⊝ low <sup>1,3</sup>	Outcome was only measured for children obtaining insurance
Parental satisfaction with process of enrolment <sup>2</sup> (measured on a scale from 1=very satisfied to 5=very unsatisfied)	2.40	1.33 (0.98 to 1.68) (increased satisfaction) 2	-	173 (1 study)	⊕⊕⊕⊝ low1,4	Outcome only measured in respondents at final follow-up. Parents in the interven- tion group were on average between sat- isfied and very satisfied compared to par- ents without the intervention, who were on average between uncertain and satis- fied

\*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI). **CI:** Confidence interval; **RR:** Risk ratio

GRADE Working Group grades of evidence

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

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

Low quality: 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 quality: We are very uncertain about the estimate.

Trusted evidence. Informed decision: Better health.

Cochrane Database of Systematic Reviews

ochrane

# Handing out applications in emergency departments of hospitals compared to no intervention

<sup>3</sup> Downgraded by 1 for imprecision, the confidence intervals are wide and the sample size is small

Patient or population: Children with no health insurance

Settings: USA (4 inner-city hospitals in 4 cities: New York City, NY; Baton Rouge, Louisiana; Chicago, III; Miami, Florida)

Intervention: Handing out applications in emergency departments of hospitals

**Comparison:** No intervention

very satisfied in some respondents

Outcomes	Comparative risks* (95% CI)				Quality of the evidence	Comments	
(90 days fol- low up)	Without inter- vention	With intervention		(studies)	(GRADE)		
Enrolment	278 per 1000	<b>417 per 1000</b> (286 to 606)	<b>RR 1.5</b> (1.03 to 2.18)	223 (1 study)	⊕⊕⊕⊙ low <sup>1,2</sup>	RR calculation based on number of events imputed from percentage and number of participants measured	

\*The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI). **CI:** Confidence interval: **RR:** Risk ratio

**GRADE** Working Group grades of evidence

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

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

Low quality: 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.

<sup>2</sup> Parental satisfaction score was examined with Likert scale scores where 1 = very satisfied, 2 = satisfied, 3 = uncertain, 4 = dissatisfied, 5 = very dissatisfied

Summary of findings 2. Handing out applications in emergency departments of hospitals compared to no intervention

Very low quality: We are very uncertain about the estimate.

<sup>1</sup> Downgraded for indirectness. Only one RCT found that evaluated this intervention in 4 city hospitals from 4 cities of US, so it is uncertain whether the intervention would have similar effects in other settings

<sup>2</sup>Downgraded by 1 for imprecision. The optimal information size criterion (at least 182 in each group) is not met. And the confidence intervals indicate that there could be little or no difference, or a large difference



## BACKGROUND

#### **Description of the condition**

Health insurance can improve access to health care for the insured population and protect them from the financial burden of diseases. For example, a study found that uninsured children in the US were less likely to have a regular source of primary health care, and they used medical and dental care less often (Institute of Medicine 2002). Studies from China and the US have revealed that immunisation of children was positively associated with coverage by health insurance schemes (Arnold 1992; Zhang 1999).

However, for most developing countries and some developed countries which have not achieved universal coverage of health security by a tax-based system or social health insurance, lack of health insurance coverage is still both a social concern and a policy issue. In these countries the particular groups at risk are children, the elderly, women, low-income populations, the rural population, racial or ethnic minorities and immigrants, all of whom are at higher risk of health problems and are more likely to be uninsured. Some researchers have identified that low-income and vulnerable groups are the most likely not to be covered yet are most in need of access to health care and financial protection (Gilson 2000; Habtom 2007; Hsiao 2007).

To explore strategies that have been used to expand coverage, we took all available literature concerning countries that already had a health insurance programme in place but were planning to expand it to vulnerable populations, including children, the elderly, women, low-income individuals, rural population, racial and ethnic minorities, immigrants, populations with chronic diseases and populations with disability. We mapped out and carefully documented all the strategies used to increase coverage, and the categories we identified are outlined in Table 1. These strategies can be divided into two main categories: a) strategies adopted during design; and b) strategies added to programme implementation.

For those strategies adopted during design, the purpose is to improve the design of health insurance schemes by measures such as modifying eligibility criteria to include more vulnerable populations, setting an appropriate premium level or providing subsidies, or improving the content, price and quality of the health care package. For example, in June 1998 in the US the scheme expanded eligibility for public health insurance up to 250% of the Federal poverty level (FPL) through its State Children Health Insurance Program (SCHIP) for children under 19 years old (Aizer 2002). In Kabutare (Rwanda), the local church paid the contributions for about 3000 orphans and widows with their family members (Carrin 2005). In the district of Nouna (Burkina Faso), most of the people took part in the community-based health insurance schemes with the expectation of improvements in quality of care, which the health insurance management team promised during the enrolment campaign (De Allegri 2006).

However, even if a health insurance scheme is well-designed it does not mean that all eligible people will join it. For example, more than 60% of uninsured children were already eligible for Medicaid or SCHIP in 2002 (Jacobson 2007). Thus strategies that specifically aim to improve enrolment into existing insurance schemes are very important. Some researchers have explored the barriers to enrolment of potentially eligible children, such as awareness, financial, administrative and geographic barriers. An interview about children's enrolment in the US SCHIP found that some members of indigenous groups did not know about SCHIP or, if they did know, were still concerned about the potential costs associated with enrolment in the programme, because they were not aware of their eligibility for exemption from premiums and cost-sharing requirements (Langwell 2003). The complexity of the application process can also be a barrier. A survey of parents indicated that although 93.5% had heard of the insurance programmes for their children, only 48.1% thought the application processes were easy (Haley 2007). In addition, the requirement for applicants for health insurance to travel to enrolment sites has proved to be a constraint for families in rural or isolated places (Langwell 2003).

This review assesses the effectiveness of strategies aimed at expanding health insurance coverage for vulnerable populations.

#### **Description of the intervention**

Strategies in this review are defined as measures used to expand health insurance coverage. These strategies can mainly be grouped into the following categories (Meng 2010a).

a) Strategies adopted during design

- Modifying the eligibility criteria: this strategy included legislation or regulations to make uninsured populations eligible for health insurance schemes. For example, in the US, in California's poverty expansion programmes for Medicaid infants are eligible for Medicaid if their parents' income is up to 200% of the FPL; children under 6 years old are eligible if it is up to 133%; for children 6 to 15 years up to 100%; and for children 15 years and older up to 83% of the FPL (Aizer A. 2002.).
- Making the premium affordable: this refers to use of subsidies or setting suitable premium levels to make insurance schemes affordable for eligible populations. For example, in the Philippines, the premium of the National Health Insurance Program (NHIP) for indigent households was covered by a government fund, the cost of the premiums being shared by the local government and the NHIP (Bautista MC 1999.).
- Improving healthcare delivery: this involved improving uptake by the population by covering a wider range of health care, controlling the price of services covered, or improving the quality of health care. For example, by adjusting the copayment, deductible, ceiling or both, the services covered are made affordable for the eligible population. In the US, the 1982 amendments to Medicaid's original rules eliminated costsharing for children (Mann C 2003).

b) Strategies added to programme implementation

- Increasing awareness of schemes: this includes information distribution via television or radio advertisements, telephone hotlines, or through schools or other particular locations to raise awareness of insurance schemes. For example, many states in the US distribute information about SCHIP in venues where target parents and children tend to congregate, including early childhood centres, schools, hospitals and religious institutions (Andrulis 1999).
- Modifying enrolment: this refers to any methods of improving or simplifying the enrolment procedures, including programmes that help families with the paperwork and other aspects of the application; positioning eligibility workers in schools or health facilities; authorising more entities to interview

Strategies for expanding health insurance coverage in vulnerable populations (Review) Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



applicants; and shared eligibility with other insurance or public programmes. For example, the state government of California worked with community-based organisations to provide application assistance to families who were potentially eligible for Healthy Families (California SCHIP) or Medicaid (Buchmueller 2007). Florida's Healthy Start Program has linked eligibility for Medicaid through the school lunch programme, in which children eligible for the school lunch programme are automatically eligible for health insurance (Secretary of Health and Human Services 1998).

 Improving management and organisation of insurance schemes: this refers to strategies that aim to improve the capacity of insurers to manage the insurance schemes, including better information systems and training staff for better and more effective outreach and management. For example, in order to enrol Latino children, many states in the US have supported staff development and training in cultural competency to include appropriate family members (Zambrana 2004).

## Why it is important to do this review

Many strategies for expanding health insurance coverage have been implemented and evaluated. A critical evaluation and systematic summary of the effectiveness of these interventions would help to inform policy makers in adopting interventions for expanding health insurance coverage, particularly as the World Health Organization is recommending increased coverage of social health insurance and other prepayment systems for improving the health financing system in order to achieve universal coverage (WHO 2005).

# OBJECTIVES

To assess the effectiveness of strategies for expanding health insurance coverage in vulnerable populations.

### METHODS

#### Criteria for considering studies for this review

#### **Types of studies**

The following four types of studies were included:

- randomised controlled trials (RCTs);
- non-randomised controlled trials (NRCTs);
- controlled before-after (CBA) studies, provided that:
  - a. pre- and post-intervention periods for the study and control groups were the same,
  - b. the control site was appropriate (no major baseline differences between the study and control groups),
  - c. there were at least two intervention sites and two control sites;
- interrupted time series (ITS) studies, provided that:
- a. there was a clearly defined point in time when the intervention occurred,
- b. there were at least three data points before and three after the intervention.

#### **Types of participants**

•

We included the vulnerable populations who were not covered by any kind of health insurance scheme. Vulnerable populations were defined as children, the elderly, women, low-income individuals, rural populations, racial or ethnic minorities, immigrants, informal sector workers and populations with disability or chronic diseases.

Health insurance is a health financing mechanism which involves the pooling of eligible individuals' contributions to cover all or part of the costs of certain health services for the eligible population (McIntyre 2007). Some health insurance schemes subsidise or exempt contributions for certain eligible subgroups, for example social health insurance usually subsidises the premium for low-income populations (Hsiao 2007). There are three kinds of health insurance: social health insurance, community-based health insurance, and private health insurance (McIntyre 2007). We did not restrict types of health insurance schemes as long as the health insurance scheme was expanding the coverage of vulnerable people.

#### **Types of interventions**

We included both 'strategies added to programme implementation' and 'strategies adopted during design'. We included any interventions that aimed to improve enrolment of vulnerable populations into existing health insurance programmes, including the following.

- Modifying the eligibility criteria: legislation or regulations to make uninsured populations eligible for health insurance schemes.
- Making the premium affordable: subsidies or setting suitable premium levels to make insurance schemes affordable for eligible populations.
- Improving healthcare delivery: improving uptake by the population by covering a wider range of health care, controlling the price of services covered, or improving the quality of health care.
- Increasing awareness of schemes: television or radio advertisements, or information distribution through specific places.
- Modifying enrolment: helping families with the paperwork and the other procedures necessary to apply for health insurance; position of eligibility workers in schools or health facilities; authorising more entities to interview applicants for easier or faster application; shared eligibility with other insurance or public programmes; and other methods for improving application procedures.
- Improving the management and organisation of insurance schemes: improving information systems, and training staff for better management.

#### Types of outcome measures

#### **Primary outcomes**

Enrolment of vulnerable people into health insurance programmes.

#### Secondary outcomes

We also extracted data on other outcomes, including measures of:

- health service utilisation;
- health status;
- attitude or satisfaction of vulnerable population;
- costs of the interventions; and

Strategies for expanding health insurance coverage in vulnerable populations (Review) Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



• any reported adverse effects.

# Search methods for identification of studies

#### **Electronic searches**

We searched the following databases and websites :

- Cochrane Central Register of Controlled Trials (CENTRAL), 2012, Issue 7, part of *The Cochrane Library*. www.thecochranelibrary.com (searched 2 November 2012)
- PubMed(NCBI) (1966 to present) (searched 1 November 2012)
- EMBASE (Elsevier Science)(January 1974 to present) (searched 6 July 2012)
- Global Health (January 1973 to present) (searched 6 July 2012)
- International Bibliography in Social Science (IBSS) (January 1951 to present) (searched 6 July 2012)
- Public Affairs Information Service (PAIS) International (January 1972 to present) (searched 6 July 2012)
- British Library for Development Studies (BLDS) (January 1966 to present) (searched 1 November 2012)
- EconLit (January 1969 to present) (searched 1 November 2012)
- ELDIS (The earliest collecting date to present) (searched 1 November 2012)
- IDEAS (Research Papers in Economics) (January 1927 to present) (searched 1 November 2012)
- ISI-Proceedings (January 1990 to present) (searched 1 November 2012)
- JSTOR (January 1665 to present) (searched 1 November 2012)
- National Technical Information Service (NTIS) (1 January 2008 to present)(searched 1 November 2012)
- Popline (January 1970 to present) (searched 1 November 2012)
- ProQuest Dissertation &Theses Database (January 1637 to present) (searched 1 November 2012)
- OpenGrey (changed from OpenSIGLE, the earliest collecting date to present) (searched 1 November 2012)
- WHO Library Database (WHOLIS) (January 1948 to present) (searched 1 November 2012)
- World Bank--Documents & Reports (the earliest collecting date to present) (searched 2 November 2012)
- China National Knowledge Infrastructure (CHKD-CNKI) (January 1915 to present) (searched 2 November 2012)
- WanFang (January 1988 to present) (searched 3 November 2012)
- PsycINFO (January 1967 to present) (searched 6 July 2012)\*
- PAHO Library Catalogue (the earliest collection date to present) (searched 10 August 2012)\*
- African Index Medicus (the earliest collection date to present) (searched 1 November 2012)\*
- ERIC(January 1966 to present) (searched 1 November 2012)\*
- HERDIN NeON Database (the earliest collection date to present) (searched 1 November 2012)\*
- IndMED (January 1985 to present) (searched 1 November 2012)\*
- LILACS (the earliest collection date to present) (searched 1 November 2012)\*
- Social Science Research Network (SSRN) (January 1994 to present) (searched 1 November 2012)\*
- Thai Index Medicus (the earliest collection date to present) (searched 1 November 2012)\*

\*For these databases, we searched them from 2010 to present for children and from the earliest collection date to present for other vulnerable populations.The other databases were searched for vulnerable populations from 2008 to present.

The PubMed search strategy includes MeSH terms and free-text terms for vulnerable populations, health insurance and coverage. This search strategy was adapted for the other electronic databases using the appropriate controlled vocabulary and free-text terms. For some simple databases and websites in which advanced or expert search methods are not available, we used combinations of free-text terms for searching. The detailed search strategies used for all databases and websites can be found in Appendix 1.

Search strategies for the previous version of this review (Meng 2010b) can be found in Appendix 2.

#### Searching other resources

In addition, we screened the reference lists of all included papers and relevant reviews that were identified. We contacted authors of relevant papers to identify additional studies, including unpublished and ongoing studies. We also carried out a citation search for the included studies via Web of Science to find more potentially relevant studies.

#### Data collection and analysis

#### **Selection of studies**

Titles and abstracts of articles obtained from the searches were screened by at least two authors (LJ, YL, FH, and XW) working independently. We then independently screened the full texts of articles. We resolved any disagreements on inclusion by discussion, with arbitration involving all of the authors.

#### Data extraction and management

At least two authors independently carried out data extraction using a data extraction form. We extracted the following information: study design, type of intervention, site and duration of the intervention, participants, primary and secondary outcomes. We resolved any disagreements by discussion with a third author or the EPOC contact editor. We managed the data in Word.

#### Assessment of risk of bias in included studies

We used the suggested risk of bias criteria for EPOC reviews (EPOC 2013) to assess the risk of bias for objective and subjective outcomes of all included studies. For each criterion, two authors independently described what was reported in the study, commented on the description, and judged the risk of bias. We discussed unresolved disagreements with a third author or the EPOC contact editor.

We summarised the overall risk of bias across criteria for the outcomes of the included studies. For RCTs, NRCTs and CBAs we primarily considered four criteria: baseline outcome measurements; baseline characteristics measurements; incomplete outcome data addressed; and protection against contamination. If these four criteria were all scored 'yes' (met) for the outcome in a study, the summary assessment was that there was a low risk of bias; if one or more key criteria were scored 'unclear' the summary assessment was an unclear risk of bias. If

one or more key criteria were scored 'no', the summary assessment was at high risk of bias.

We assessed the quality of evidence for the outcomes of the included studies using the GRADE approach (GRADE 2008).

#### **Data synthesis**

We grouped study results according to the intervention that was evaluated. For the included studies, we presented results in terms of absolute and relative change. We also calculated absolute change from baseline and the difference in absolute changes from baseline because the baseline data were available (Table 2; Table 3). We calculated the unadjusted risk ratios (RR) with 95% confidence intervals for dichotomous outcomes and mean differences (MD) with 95% confidence intervals for continuous outcomes when these were not reported by the authors. The author of the included trial (Flores 2005) did not report the number of events in the intervention and control groups for the dichotomous outcomes, therefore we calculated the number of events using

reported per cent values and the number of participants in whom the corresponding outcome was measured. Because we only found two studies (Flores 2005; Gordon 2005) reporting the effects of two different interventions, we reported the results for the main outcomes for each of these studies separately.

# RESULTS

#### **Description of studies**

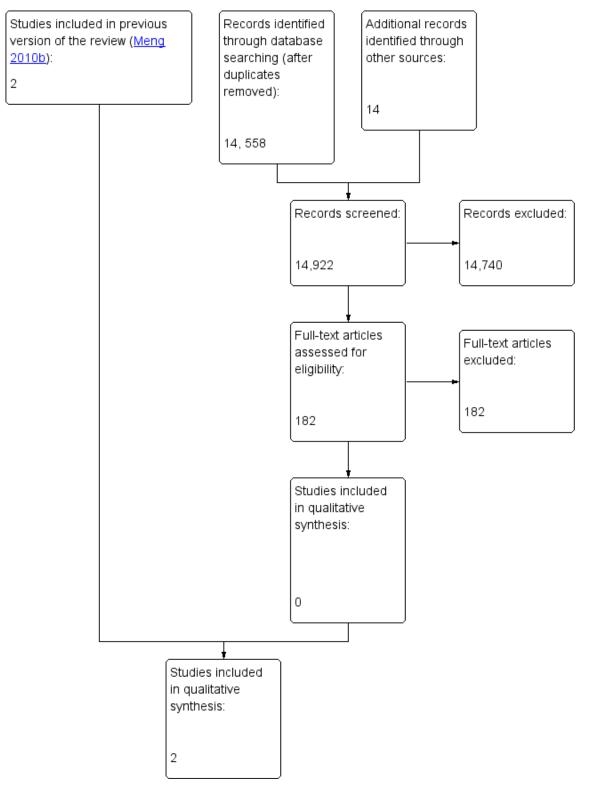
#### **Results of the search**

The search yielded 14,922 records from the electronic databases and websites (after removing duplicates). After screening these titles and abstracts, we identified 182 potentially relevant papers about health insurance coverage of vulnerable people. We examined the full texts of these 182 articles and none met our inclusion criteria. Ultimately no new study was included.

The study flow diagram is presented in Figure 1.



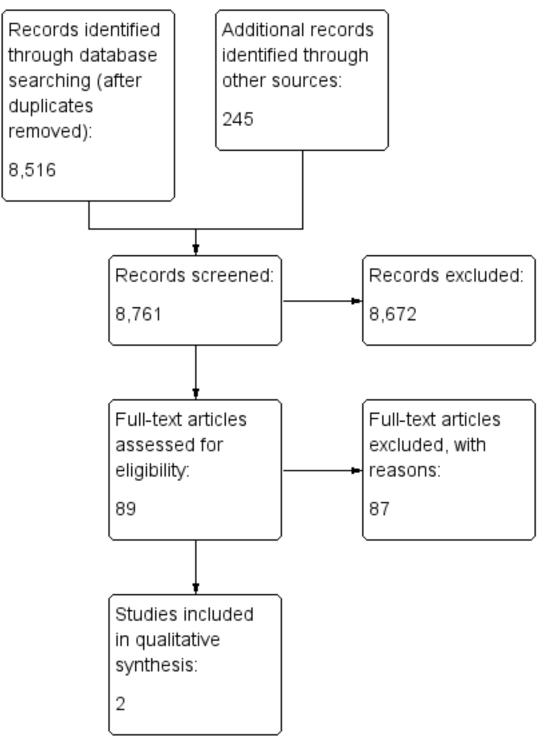
# Figure 1. Study flow diagram.



The study flow diagram that presents the results of the previous search (Meng 2010b) can be found in Figure 2.







#### **Included studies**

# Flores 2005

We included two studies (Flores 2005; Gordon 2005) which took place in the US and targeted children aged 0 to 18 years old. The details of the included studies are summarised in the Characteristics of included studies. This RCT (Flores 2005) took place in an urban community in Boston, US and evaluated a strategy of case management for Latino American children. In this trial, 275 participants were randomly assigned to the intervention (n = 139) and control groups (n = 136). The intervention group were allocated trained case managers who advised on eligibility, helped parents complete the forms, liaised with the state service to expedite decisions, helped negotiate with



the state agency responsible for insurance (acting as an advocate), and appealed when a child was inappropriately deemed ineligible for insurance. The control group did not have case managers and were just contacted monthly for 11 months. Beginning one month after the date of study enrolment, the participants were interviewed by telephone or visited monthly for 11 months to measure the outcomes. Four participants from the intervention group and 14 from the control group were lost prior to the first follow-up contact, so 135 (97%) participants from the intervention group and 122 (90%) from the control group were contacted at least once and assessed for the outcomes 'enrolment into health insurance', 'continuously insured' and 'sporadically insured'. The outcome 'mean time to obtain insurance' was only measured for the participants obtaining insurance (this number was derived from the percentage of participants who obtained insurance and the total number of participants). The outcome 'parental satisfaction with process of obtaining insurance' was only measured in the final (11th) month of follow up (97 in the intervention group, 76 in the control group).

#### Gordon 2005

This NRCT (Gordon 2005), conducted in four US cities, aimed to assess the effect of handing out applications to uninsured children in the emergency department (ED) of hospitals which were considered to be frequented by uninsured children. This trial recruited uninsured children, younger than 18 years, from among the patients visiting the ED into intervention and control group. There were 399 participants who met the inclusion criteria of the trial and were allocated into the intervention or control group. Two hundred and forty-two children (61%) were followed up by both a home interview (interviewing parents or guardians for the child's insurance status) and state follow up (querying state databases to confirm insurance status). Nineteen participants were excluded from the final analysis because they reported receiving other insurance coverage (not Medicaid or SCHIP). The outcome measure of this trial was insurance status of children at about 90 days after the ED visit.

#### **Excluded studies**

The Characteristics of excluded studies table lists the excluded studies and provides reasons for excluding them. Lawler 2005; Gardner 2008; Frenk 2006; Currie 1996; Bitran 2010; Long 2007; Cousineau 2011; Lo Sasso 2004; Hill 1993; Gresenz 2012; Card 2004; Buratto 2004; and Buchmueller 2008 had post-intervention descriptions without controls. In addition, there were beforeafter studies (Cogan 2008; Kenney 2010; Meyer 2004; Prado 2010; Shore-Sheppard 2000; Souares 2010; Thornton 2010), retrospective studies (Atherly 2012; Barnett 2010; Bowblis 2008; Choi 2011), time

series (Dave 2010; Guy 2010; Zimmer 2011), CBA (Sieben 2000), a cluster-RCT (Chen 2009), and a case control study (Leininger 2007). These studies could not control for some confounding factors.

Half of the studies (Table 4) targeted children and the other half targeted the poor (Table 5), patients with chronic diseases (Table 6), pregnant woman (Table 7), the disabled (Table 8), self-employed and informal sector workers (Table 9) and other vulnerable populations (Table 10).

#### **Risk of bias in included studies**

Following the criteria, we have described the summary assessment as below.

#### Flores 2005

The included RCT (Flores 2005) had a low risk of bias. In this study, a computer-generated, stratified randomisation process was applied for allocation where opaque and sealed envelopes were produced for allocation concealment and research assistants who did not participate in any aspect of the preparation of the randomisation schedules opened the envelopes in the presence of the enrolled participants to inform them of their group assignment. Research assistants for the follow-up interview and outcome assessment were also blinded to group assignment at all times. Only participants were informed that some would get a case manager whereas others would not have a case manager and just be contacted monthly. The follow-up rate was high and was reported clearly.

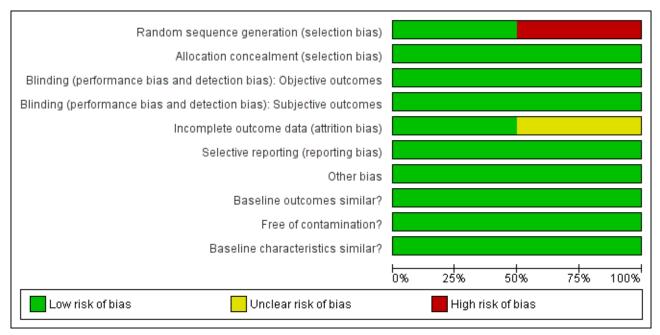
#### Gordon 2005

The non-randomised trial (Gordon 2005) had an unclear risk of bias. This trial was located at inner-city hospitals in four cities in the US. A quasi-randomised allocation method was used in this trial: site staff in the EDs of the hospitals enrolled consecutive uninsured children in control and intervention periods; each control period was followed by a matched intervention period during which the staff handed out state-specific SCHIP applications to parents or guardians of the participating children. Study periods ranged from four to 14 days; control and intervention periods were separated by about a week. The overall follow-up rate of this trial was low, with 61% of included participants completing the follow up for outcome measurement at about 90 days after visiting the ED. The characteristics of missing participants and the follow-up rates for the intervention and control groups were not reported in the article.

A methodological graph and a summary can be found in Figure 3 and Figure 4.



# Figure 3. Methodological quality graph: review authors' judgements about each methodological quality item presented as percentages across all included studies.





Flores 2005       • <th< th=""><th>Random sequence generation (selection bias)</th><th>Allocation concealment (selection bias)</th><th>Blinding (performance bias and detection bias): Objective outcomes</th><th>Blinding (performance bias and detection bias): Subjective outcomes</th><th>Incomplete outcome data (attrition bias)</th><th>Selective reporting (reporting bias)</th><th>Other bias</th><th>Baseline outcomes similar?</th><th>Free of contamination?</th><th>Baseline characteristics similar?</th></th<>	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding (performance bias and detection bias): Objective outcomes	Blinding (performance bias and detection bias): Subjective outcomes	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias	Baseline outcomes similar?	Free of contamination?	Baseline characteristics similar?
	•	•	•	•	•	•	•	•	•	•

Figure 4. Methodological quality summary: review authors' judgements about each methodological quality item for each included study.

# **Effects of interventions**

See: Summary of findings for the main comparison Information and application support compared to no intervention; Summary of findings 2 Handing out applications in emergency departments of hospitals compared to no intervention

#### Health insurance information and application support

The RCT (Flores 2005) evaluated the effect of a communitybased case manager providing insurance information and application assistance. The outcome measures in this study included enrolment into health insurance, continuously insured, sporadically insured, mean time to obtain insurance, and parental satisfaction with the process of obtaining insurance. In summary, children receiving community-based case management when compared to children in the control group:

- are probably more likely to enrol their children into health insurance programmes (moderate quality evidence);
- are probably more likely to continue insuring their children (moderate quality evidence);
- may not be quicker at getting insurance (low quality evidence); and
- may not be more satisfied with the process of enrolment (low quality evidence).

In a multivariate analysis, the authors adjusted for potential confounders (the child's age, family income, parental citizenship, parental employment, and the period of policy change in state

coverage of uninsured children). It was found by transforming the odds ratio (OR) the authors reported to the RR that the intervention group was about 1.6 times more likely than the control group to obtain insurance coverage(OR 7.78, 95% CI 5.20 to 11.64 to RR 1.60, 95% CI 1.53 to 1.65).

# Handing out applications in the emergency department of hospitals

Gordon's non-randomised trial (Gordon 2005) assessed the effectiveness of handing out state-specific SCHIP applications in the emergency departments (ED) of hospitals. The site staff in four hospitals enrolled uninsured children visiting the ED. There were 399 participants who met the inclusion criteria of the trial and were allocated into the intervention or control group. Two hundred and forty-two participants (61%) were followed up by both home interview (interviewing parents or guardians for the children's insurance status) and state follow up (querying state databases to confirm insurance status). Nineteen participants were excluded from the final analysis because they reported receiving other insurance coverage (not Medicaid or SCHIP).

People who were given insurance application forms in the ED of hospitals may have been more likely to enrol their children into health insurance programmes (low quality evidence). Based on 223 participants (115 intervention group, 108 control group), children receiving SCHIP applications in the ED of a hospital were more likely to be insured by Medicaid or SCHIP at about 90 days after visiting the ED (42% versus 28%; RR 1.50, 95% CI 1.03 to 2.18). By adjusting for potential confounders (age, gender, race, if having public assistance), the multivariate analysis showed that children receiving applications were about 2.1 times more likely to be insured than children in the control group, by transforming the OR the authors reported to the RR (OR 3.8, 95% CI 1.7 to 8.6 to RR 2.13, 95% CI 1.42 to 2.75).

No adverse effects were reported in the studies. A possible side effect might be that people could experience the information and support as annoying or unhelpful. However, in the one study that measured parents' satisfaction, people were more satisfied when given information and support.

# DISCUSSION

#### Summary of main results

This review includes two studies on strategies for expanding insurance coverage of children in the US (Flores 2005; Gordon 2005). One study evaluated a strategy adopted during health insurance scheme design, the other assessed a strategy added to programme implementation.

One randomised trial (Flores 2005) evaluated the effects of a community-based case manager who provided health insurance information and application assistance to Latino American children. It provides moderate quality evidence that this outreach intervention improves the enrolment of children into health insurance schemes and keeps them in health insurance, but provides low quality evidence that this intervention could shorten the application time. One non-randomised trial (Gordon 2005) assessed the effect of handing out insurance applications in EDs of hospitals. It provides low quality evidence that this intervention increases enrolment of children into health insurance schemes.

No adverse outcomes were reported and the cost of the interventions was not reported.

#### **Overall completeness and applicability of evidence**

The included studies are both from the US, where children's health insurance is clearly a concern of policy makers and researchers. We identified a great many US studies about children's health insurance coverage. We found some evidence for expanding health insurance for patients with chronic diseases in Chile (Bitran 2010), self-employed people in Colombia (Prado 2010), low-income people in Burkina Faso and Mexico (Frenk 2006; Souares 2010), informal sector workers in Nicaragua (Thornton 2010) but these were observational studies with a high risk bias and did not meet our inclusion criteria.

The first included study (Flores 2005) targeted Latino American children. The intervention in this study was specially designed in one district, and implementation of the intervention needed trained case managers who were bilingual Latina women recruited through job listings posted in the employment offices of local colleges and universities. All these factors may limit the applicability of the evidence from this study to other groups of children in other areas. The second included study targeted all uninsured children visiting four geographically diverse hospital EDs, suggesting that the effects of handing out applications in EDs are more likely to be broadly applicable in the US.

Since the US Congress enacted the SCHIP in 1997 (Flores 2005), federal and state governments both appropriated funds for expanding Medicaid to cover more children or to establish separate health insurance programmes for more children. Furthermore, Medicaid and SCHIP are relatively complicated insurance schemes in terms of eligibility assessment and enrolment procedures, which involve verifying the eligibility status of families who apply for insurance for their children (Carpenter 1998). These special contexts in the studies conducted in the US probably limit the applicability of the evidence to other countries with different insurance schemes. Other key explanatory factors such as the characteristics of different kinds of vulnerable populations and health insurance schemes (insurers, payers, policy) that will influence the effects of strategies should be considered in future update, if enough studies are included.

#### **Quality of the evidence**

The included randomised trial (Flores 2005) has a low risk of bias but only targeted Latino American children, so the evidence based on this study is only indirectly relevant to children generally. In addition, the intervention in this trial is quite specific with specially trained case managers, which may not be relevant, possible, or practical in other places. Overall, therefore, the evidence from this trial for the primary outcomes (enrolment and continuous enrolment) is of moderate quality (Summary of findings for the main comparison). For the two continuous outcomes (mean time to obtain insurance and parental satisfaction) the evidence was downgraded to low quality for imprecision, because the total sample size is not big enough. The non-randomised trial (Gordon 2005) has an unclear risk of bias in terms of its design and implementation, but the sample size of this study is less than the optimal size so the evidence on the effects of handing out application materials in hospital EDs is of low quality (Summary of findings 2).



# Agreements and disagreements with other studies or reviews

There have been several literature reviews (Andrulis 1999; Dunbar 1999; Laschober 2000; Secretary of Health and Human Services 1998; Zambrana 2004) describing the studies and experiences of using strategies for expanding health insurance coverage. However, these reviews did not aim to assess the effectiveness of interventions and they did not transparently appraise the quality of the evidence.

# AUTHORS' CONCLUSIONS

#### **Implications for practice**

Based on the evidence included in this review, the findings suggest that intensive case management, providing insurance information, application assistance and communicating with the insurer to assist with enrolment probably help increase insurance coverage of children in the US. The applicability of these findings to other countries with different health insurance schemes is uncertain.

#### **Implications for research**

There is a dearth of robust studies evaluating the effects of strategies for expanding health insurance coverage in vulnerable populations.

Many observational studies exist, however they do not provide reliable evidence on the effects of strategies to expand health insurance coverage in vulnerable populations. Further research should use well-designed randomised trials or quasi-experimental methods to help evaluate specific strategies. Many other types of strategies are used for expanding health insurance coverage of vulnerable populations, but the effects of those strategies are uncertain. Well-designed evaluations of strategies used by other kinds of health insurance schemes for other vulnerable populations in other countries besides the US are needed.

#### ACKNOWLEDGEMENTS

This review was funded by the Alliance for Health Policy and Systems Research, World Health Organization. Technical support and funding for open access for the review was provided through the Effective Health Care Research Consortium for which Paul Garner is a lead contact and which is funded by UK aid from the UK Government Department for International Development. Particular thanks to Andy Oxman for considerable support at all stages of the review process.

# REFERENCES

#### References to studies included in this review

#### Flores 2005 {published and unpublished data}

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

#### Gordon 2005 {published and unpublished data}

Gordon JA, Emond JA, Camargo CA. The State Children's Health Insurance Program: a multicenter trial of outreach through the emergency department. *American Journal of Public Health* 2005;**95**(2):250-3.

#### References to studies excluded from this review

#### Aizer 2002 {published and unpublished data}

Aizer A. Covering Kids: efforts to increase the health insurance coverage of poor children. University of California, Los Angeles 2002.

#### Aizer 2006 {published and unpublished data}

Aizer A. Public health insurance, program take-up, and child health. Working paper, National Bureau of Economic Research 2006.

#### Atherly 2012 {published and unpublished data}

Atherly A, Dowd BE, Coulam RF, Guy G. The effect of HIFA waiver expansions on uninsurance rates in adult populations. *Health Services Research* 2012;**47**(3):939-62.

#### Bansak 2007 {published and unpublished data}

Bansak C, Raphael S. The effects of state policy design features on take-up and crowd-out rates for the State Children's Health Insurance Program. *Journal of Policy Analysis and Management* 2006;**26**(1):149-75.

#### Barnett 2010 {published and unpublished data}

Barnett H, Maughan H, Pearce PF. Battling the uncompensated care spiral: Outcomes from a single institution assisting uninsured hospitalized patients to obtain health insurance. *Professional Case Management* 2010;**15**(5):280-9.

#### Bitran 2010 {published and unpublished data}

Bitran R, Escobar L, Gassibe P. After Chile's health reform: Increase In coverage and access, decline in hospitalization and death rates. *Health Affairs* 2010;**29**(12):2161-70.

#### Bowblis 2008 {published and unpublished data}

Bowblis JR. The decline in infant and overall death rates, 1878-1913: The role of early sickness insurance programs. *Journal of Economic History* 2008;**70**(1):221-41.

#### Brown 2004 {published and unpublished data}

Brown AM, Glazer G. Enrollment success in state children's health insurance program after free clinic referral. *Journal of Pediatric Health Care* 2004;**18**(3):145-8.

#### Buchmueller 2008 {published and unpublished data}

Buchmueller T, Lo Sasso A, Wong KN. How did SCHIP affect the insurance coverage of immigrant children?. *Health Care Economics and Policy* 2008;**8**:2.

#### Buratto 2004 {published and unpublished data}

Buratto N. Preserving LaCHIP: Maintaining the Gains for Louisiana's Children. *Agenda for Children. New Orleans, LA*. 2004.

#### Card 2004 {published and unpublished data}

Card D, Shore-Sheppard LD. Using discontinuous eligibility rules to identify the effects of the Federal Medicaid expansions on low income children. *Review of Economics and Statistics* 2004;**86**(3):752-66.

#### Carter 2006 {published and unpublished data}

Carter TM. Alabama rural partnerships: addressing the health needs of school children. United States, Alabama, The University of Alabama 2006.

# Chen 2009 {published and unpublished data}

Chen JY, Swonger S, Kominski G, Liu H, Lee JE, Diamant A. Costeffectiveness of insuring the uninsured: the case of Korean American children. *Medical Decision Making* 2009;**29**:51-60.

#### Choi 2011 {published and unpublished data}

Choi M, Sommers BD, McWilliams JM. Children's health insurance and access to care during and after the CHIP expansion period. *Journal of Health Care for the Poor and Underserved* 2011;**22**(2):576-89.

#### Cogan 2008 {published and unpublished data}

Cogan JF, Hubbard RG, Kessler DP. The effect of Medicare coverage for the disabled on the market for private insurance. *Journal of Health Economics* 2008;**29**(3):418-25.

#### Cousineau 2007 {published and unpublished data}

Cousineau MR, Wada EO, Hogan L. Enrolling in Medicaid through the National School Lunch Program: outcome of a pilot project in California schools. *Public Health Reports* 2007;**122**(4):452-60.

#### Cousineau 2011 {published and unpublished data}

Cousineau MR, Stevens GD, Farias A. Measuring the impact of outreach and enrollment strategies for public health insurance in California. *Health Services Research* 2011;**46**(1):319-35.

#### Currie 1996 {published and unpublished data}

Currie J, Gruber J. Saving babies: The efficacy and cost of recent changes in the Medicaid eligibility of pregnant women. *Journal of Political Economy* 1996;**104**(6):1263-96.

#### Dave 2010 {published and unpublished data}

Dave DM, Decker SL, Kaestner R, Simon K. The effect of Medicaid expansions on the health insurance coverage of pregnant women: An analysis using deliveries. *Inquiry* 2010;**47**(4):315-30.



#### Davidoff 2005 {published data only}

Davidoff A, Kenney G, Dubay L. Effects of the State Children's Health Insurance Program expansions on children with chronic health conditions. *Pediatrics* 2005;**116**:e34-e42.

#### **Dutton 2000** {published and unpublished data}

Dutton M, Katz S, Pennington A. Using community groups and student volunteers to enroll uninsured children in Medicaid and children health plus. The Commonwealth Fund 2000.

#### Frenk 2006 {published and unpublished data}

Frenk J, González-Pier E, Gómez-Dantés O, Lezana MA, Knaul FM. Comprehensive reform to improve health system performance in Mexico. *Lancet* 2006;**368**:1524-34.

#### Gardner 2008 {published and unpublished data}

Gardner AL, Mintz PH. Lessons from the field: Expanding health insurance coverage one county at a time. *Health Affairs* 2008;**27**(5):1454-60.

#### Gordon 2001 {published and unpublished data}

Gordon JA, Dupuie TA. Child health insurance outreach through the emergency department: a pilot study. *Academic Emergency Medicine* 2001;**8**(11):1088-90.

#### Gresenz 2012 {published and unpublished data}

Gresenz CR, Edgington SE, Laugesen M, Escarce JJ. Take-up of public insurance and crowd-out of private insurance under recent CHIP expansions to higher income children. *Health Services Research* 2012;**47**(5):1999-2011.

#### Guy 2010 {published and unpublished data}

Guy GP. The Effect of Health Insurance Expansions on Insurance Status, Access to Care, and Labor Market Participation. *United States, Georgia, Emory University* 2010.

#### Hill 1993 {published and unpublished data}

Hill IT, Bartlett L, Brostrom MB. State initiatives to cover uninsured children. *The Future of Children* 1993;**3**(2):142-63.

#### Hill 2008 {published and unpublished data}

Hill I, Dubay L, Kenney GM, Howell EM, Courtot B, Palmer L. Improving coverage and access for immigrant Latino children: the Los Angeles healthy kids program. *Health Affairs* 2008;**27**(2):550-9.

#### Jacobson 2007 {published and unpublished data}

Jacobson M, Buchmueller TC. Can private companies contribute to public programs' outreach efforts? Evidence from California. *Health Affairs* 2007;**26**(2):538-48.

#### Kenney 2010 {published and unpublished data}

Kenney GM, Long SK, Luque A. Health reform In Massachusetts cut the uninsurance rate among children in half. *Health Affairs* 2010;**29**(6):1242-7.

#### Kincheloe 2004 {published and unpublished data}

Kincheloe JR. The determinants of participation in California's Medi-Cal and Healthy Families Programs by eligible children. United States, California, University of California, Los Angeles 2007.

#### Lawler 2005 {published and unpublished data}

Lawler K, Costello AM. Community-based Facilitated Enrollment: Meeting Uninsured New Yorkers Where They Are. *Children's Aid Society, New York, NY. Children's Defense Fund, Washington, DC.* 2005.

#### Lee 2008 {published and unpublished data}

Lee HJ, Tian WH. The State Children's Health Insurance Program: participation and substitution. *The Social Science Journal* 2008;**45**(3):382-400.

#### Leininger 2007 {published and unpublished data}

Leininger LJ. Essays on children's health insurance. *United States, Illinois, The University of Chicago* 2007.

#### Lichtenstein 2005 {published and unpublished data}

Lichtenstein B, Sharma AK, Wheat JR. Health inequity: the plight of uninsured children in a rural Alabama county and the plan to cure it. *Family and Community Health* 2005;**28**(2):156-67.

#### Long 2007 {published and unpublished data}

Long SK, Graves JA, Zuckerman S. Assessing the value of the NHIS for studying changes in state coverage policies: The case of New York. *Health Services Research* 2007;**42**(6):2332-53.

#### Lo Sasso 2004 {published and unpublished data}

Lo Sasso AT, Buchmueller TC. The effect of the State Children's Health Insurance Program on health insurance coverage. *Journal of Health Economics* 2004;**23**(5):1059-82.

#### Mahajan 2005 {published and unpublished data}

Mahajan P, Stanley R, Ross KW, Clark L, Sandberg K, Lichtenstein R. Evaluation of an emergency departmentbased enrollment program for uninsured children. *Annals of Emergency Medicine* 2005;**45**(3):245-50.

#### Meyer 2004 {published and unpublished data}

Meyer CL, Brun C, Yung B, Clasen C, Cauley K, Mase WA. Evaluation of social marketing efforts designed to increase enrollment in the Children's Health Insurance Program (CHIP). *Journal of Nonprofit & Public Sector Marketing* 2004;**12**(2):87-104.

#### Prado 2010 {published and unpublished data}

Prado AG, Panopoulou G. Enrolling the self-employed in mandatory health insurance schemes in Colombia. *Inter-American Development Bank Felipe Herrera Library* 2010.

#### Ray 2006 {published and unpublished data}

Ray J, White M, Cannon P, Bowen C, O'Rourke K. Implementing the Florida KidCare open enrollment communications campaign: a framework for mobilizing community partners to reduce the number of uninsured children. *International Quarterly of Community Health Education* 2006;**26**(4):365-77.

#### **Shore-Sheppard 2000** {published and unpublished data}

Shore-Sheppard LD. The effect of expanding Medicaid eligibility on the distribution of children's health insurance coverage. *Industrial and Labor Relations Review* 2000;**54**(1):59-77.



#### Sieben 2000 {published and unpublished data}

Sieben I, Rosenberg TJ, Bazile Y. The Role of WIC Center and Small Businesses in Enrolling Uninsured Children in Medicaid and Child Health Plus. Medical and Health Research Association of New York City, Inc. 2000.

#### Souares 2010 {published and unpublished data}

Souares A, Savadogo G, Dong H, Parmar D, Sie A, Sauerborn R. Using community wealth ranking to identify the poor for subsidies: a case study of community-based health insurance in Nouna, Burkina Faso. *Health and Social Care in the Community* 2010;**18**(4):363-8.

#### Thornton 2010 {published and unpublished data}

Thornton RL, Hatt LE, Field EM, Islam M, Diaz FS, Gonzalez MA. Social security health insurance for the informal sector in Nicaragua: a randomized evaluation. *Health Economics* 2010;**19 Suppl**:181-206.

#### Wada 2006 {published and unpublished data}

Wada EO, Cousineau MR. Assessing community-based outreach and enrollment activities and outcomes relative to need in Los Angeles County. The Center for Community Health Studies, USC Keck School of Medicine, Department of Family Medicine 2006.

#### Wolfe 2005 {published and unpublished data}

Wolfe B, Scrivner S. The devil may be in the details: how the characteristics of SCHIP programs affect take-up. *Journal of Policy Analysis and Management* 2005;**24**(3):499-522.

#### Ziegenfuss 2008 {published and unpublished data}

Ziegenfuss JK. Encouraging eligible children's participation in public health insurance: the role of national awareness campaigns. United States, Minnesota, University of Minnesota 2008.

#### Zimmer 2011 {published and unpublished data}

Zimmer DM. The effects of the State Children's Health Insurance Program on insurance status and health care utilization of children. *Journal of Family and Economic Issues* 2011;**32**(2):373-83.

## **Additional references**

#### Aizer A. 2002.

Aizer A. The use and effect of public programs on child health and well-being. University of California, Los Angeles 2002.

#### Andrulis 1999

Andrulis DP, Bauer TA, Hopkins S. Strategies to increase enrollment in children's health insurance programs: A guide to outreach, marketing and enrollment in New York and other states. A report of the New York Academy of Medicine. *Journal of Urban Health* 1999;**76**:247-79.

#### Arnold 1992

Arnold PJ, Schlenker TL. The impact of health care financing on childhood immunization practices. *American Journal of Diseases of Children* 1992;**146**:728-32.

#### Bautista MC 1999.

Bautista MC, Yap EC, Soriano ES. Local governments' health financing initiatives: evaluation, synthesis, and prospects for thenational health insurance program in the Philippines. Bethesda, MD: Partnerships for Health Reform (PHR) 1999.

# **Buchmueller 2007**

Buchmueller TC, Jacobson M. Can private companies contribute to public outreach efforts? Evidence from California. *Health Affairs* 2007;**26**:538-48.

#### Carpenter 1998

Carpenter BM, Kavanagh L. Outreach to children: moving from enrollment to ensuring access. Bright Futures in Managed Care Project at the National Institute for Health Care Management, the Maternal and Child Health Bureau, Health Resources and Services Administration, US Department of Health and Human Services 1998.

#### Carrin 2005

Carrin G, Waelkens MP, Criel B. Community-based healthinsurance in developing countries: a study of its contribution tothe performance of health financing systems. *Tropical Medicine and International Health* 2005;**10**:799-811.

#### De Allegri 2006

De Allegri M, Sanon M, Bridges J, Sauerborn R. Understanding consumers' preferences and decision to enroll in communitybasedhealth insurance in rural West Africa. *Health Policy* 2006;**76**:58-71.

#### Dunbar 1999

Dunbar JL, Sloane HI, Mueller CD. Implementation of the State Children's Health Insurance Program: Outreach, enrollment, and provider participation in rural areas. Health Resources and Services Administration, Office of Rural health Policy 1999.

#### EPOC 2013

Effective Practice and Organisation of Care (EPOC). EPOC Resources for review authors. Oslo: Norwegian Knowledge Centre for the Health Services 2013. Available at: http:// epocoslo.cochrane.org/epoc-specific-resources-review-authors.

#### Gilson 2000

Gilson L, Kalyalya D, Kuchler F, et al. The equity impacts of community financing activities in three African countries. *International Journal of Health Planning and Management* 2000;**15**:291-317.

#### **GRADE 2008**

The GRADE working group. Grading quality of evidence and strength of recommendations. *BMJ* 2008;**336**(7653):1106-10.

#### Habtom 2007

Habtom GK, Ruys P. Traditional risk-sharing arrangements andinformal social insurance in Eritrea. *Health Policy* 2007;**80**:218-35.



#### Haley 2007

Haley J, Kenney G. Low-income uninsured children with special health care needs: why aren't they enrolled in public health insurance programs?. *Pediatrics* 2007;**119**:60-8.

#### Hsiao 2007

Hsiao W, Shaw P. Social Health Insurance for Developing Nations. World Bank Institute: WBI Development Studies, 2007.

#### **Institute of Medicine 2002**

Institute of Medicine. Health insurance is a family matter. Report. Washington, DC: National Academies Press 2002.

#### Langwell 2003

Langwell K, Laschober M, Cox D, et al. American Indian and Alaska Native eligibility and enrollment in Medicaid, SCHIP and Medicare. Report. Centers for Medicare & Medicaid Services 2003 December.

#### Laschober 2000

Laschober M, Matthias S, Edder M, Quinn R. Review of the literature of evaluations of outreach for public health insurance and selected other programs. Barents Group LL, Washington, DC 2000.

#### Mann C 2003

Mann C, Rowland D, Garfield R. Historical overview of children's health care coverage. *Future of Children* 2003;**13**:31-53.

#### McIntyre 2007

McIntyre D. Learning from experience: health care financing in low- and middle-income countries. Global Forum for Health Research 2007.

# CHARACTERISTICS OF STUDIES

**Characteristics of included studies** [ordered by study ID]

#### Meng 2010a

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 and Planning 2010:czq038.

#### Secretary of Health and Human Services 1998

Secretary of Health and Human Services. Report to the President: Interagency Task Force on Children's Health Insurance Outreach. Washington, DC: Health Care Financing Administration June 1998.

#### WHO 2005

WHO. Sustainable health financing, universal coverage and social health Insurance. Ninth plenary meeting, Eighth report 2005.

#### Zambrana 2004

Zambrana RE, Carter-Pokras O. Improving health insurance coverage for Latino children: a review of barriers, challenges and State strategies. *Journal of the National Medical Association* 2004;**96**:508-23.

#### Zhang 1999

Zhang X, Wang L, Zhu X, Wang K. Knowledge, attitude and practice survey on immunization service delivery in Guangxi and Gansu, China. *Social Science & Medicine* 1999;**49**:1125–7.

### References to other published versions of this review

#### Meng 2010b

Qingyue Meng, Beibei Yuan, Liying Jia, Jian Wang, Paul Garner. Outreach strategies for expanding health insurance coverage in children. *Cochrane Database of Systematic Reviews* 2010, Issue 8. [DOI: 10.1002/14651858.CD008194.pub2]

Methods	RCT
Participants	0 to 18 years old, uninsured (for ≥ 3 months) Latino children and their parents from 2 communities in the US; 139 in intervention and 136 in control Recruited from May 2002 to September 2003
Interventions	<b>Intervention:</b> increasing information and providing application assistance (community-based trained case managers provided information on programme eligibility, helped families complete insurance ap plications, acted as a family liaison with Medicaid/SCHIP, and assisted in maintaining coverage) <b>Control:</b> no information or application assistance (no case manager)
Outcomes	Health insurance coverage: determined in interview (began 1 month after date of study) with the par ent and confirmed through inspection of the coverage notification letter received by the family Continuously coverage: insured continuously through 11-month follow up Sporadically insured: obtaining insurance but then losing coverage at any time during the 11-month follow up Days to obtaining coverage: interval between date of the participant's recruitment and the date when they reported obtaining coverage



\_

Flores 2005 (Continued)

# Parental satisfaction with the process of obtaining coverage

Notes

**Risk of bias** 

Risk of blas		
Bias	Authors' judgement	Support for judgement
Random sequence genera- tion (selection bias)	Low risk	Computer-generated, stratified randomisation process
Allocation concealment (selection bias)	Low risk	Sequentially numbered, opaque, sealed envelopes were produced for each community site
Blinding (performance	Low risk	The primary outcomes are objective
bias and detection bias) Objective outcomes		Research assistants who did not participate in any aspect of preparation of randomisation schedules opened the envelopes in the presence of enrolled participants, to inform them of their group assignment
		Research assistants for follow-up interview and outcome measurement were also blinded to group assignment at all times
		Participants knew they would be in the intervention or control group after al- location
Blinding (performance	Low risk	Parental satisfaction is subjective
bias and detection bias) Subjective outcomes		Research assistants who did not participate in any aspect of preparation of the randomisation schedules opened the envelopes in the presence of enrolled participants to inform them of their group assignment
		Research assistants for the follow-up interview and outcome measurement were also blinded to group assignment at all times
		Participants knew they were in the intervention or control group after alloca- tion
Incomplete outcome data (attrition bias) All outcomes	Low risk	Loss to follow up is clearly explained. There was a slight but statistically signifi- cant difference in subjects lost to follow up before follow-up interviews (3% of the intervention group versus 9% of the control group: P = 0.04)
Selective reporting (re- porting bias)	Low risk	Every outcome in the Methods section is reported
Other bias	Low risk	No other bias was found
Baseline outcomes simi- lar?	Low risk	All the participants in the intervention and control group were uninsured
Free of contamination?	Low risk	The individuals were randomised and all participants knew they would be in the intervention or control group. For parents in the intervention group, case managers provided information on health insurance and assistance in obtain- ing insurance. It was impossible for parents in the control group to get assis- tance from case managers, however it was possible that some parents in the control group could get some information on insurance and its application from parents in the intervention groups if they were neighbours or knew each other. However, this potential contamination could not change the effect of the intervention.

Strategies for expanding health insurance coverage in vulnerable populations (Review)



# Flores 2005 (Continued)

Baseline characteristics Low risk similar?

No significant differences between the 2 groups in 5 characteristics. Some differences in the number of parents employed full-time, and recruitment time of participants between intervention and control group

Methods	NRCT					
Participants	Patients aged 18 years or younger visiting the Emergency Department (ED) of 4 inner-city hospitals in 4 US cities during 2001 to 2002: New York City, NY; Baton Rouge, Louisiana; Chicago, Ill; and Miami, Flori- da Children's accompanying family member self-reported the children without any insurance; no insur- ance status being confirmed by hospitals' administrative database Exclusions: children presenting to the ED in acute distress, children admitted to the hospital or leaving the ED without treatment or against advice, children having repeat visits 399 in both intervention and control groups were recruited					
Interventions		gout applications in the ED (site staff in the ED handed out state-specific SCHIP ent or guardian of participating children) on				
Outcomes	Medicaid or SCHIP-insu	ured status at 90 days				
Notes	_					
Risk of bias						
Bias	Authors' judgement	Support for judgement				
Random sequence genera- tion (selection bias)	High risk	Quasi-randomisation method used: time was separated into control and inter- vention periods (4 to 14 days per period) and each control period was followed by a matched intervention period during which visiting patients meeting the inclusion criteria were recruited into intervention groups				
Allocation concealment (selection bias)	Low risk	Allocation unit was study period: patients visiting in the intervention or con- trol period were allocated to the corresponding intervention or control group. Each study period ranged from 4 to 14 days; each control period was followed by a matched intervention period; control and intervention periods were sepa- rated by about a week				
Blinding (performance	Low risk	The outcome 'insurance status' is objective				
Dias and detection bias) Dijective outcomes No information on whether site staff measuring outcomes in follow the group assignment of children; no information on whether parti knew they were in the intervention or control group after allocation these could not influence the judgement of objective outcome						
Blinding (performance bias and detection bias) Subjective outcomes	Low risk	No subjective outcomes				
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	399 were recruited in both intervention and control group; 242 (61%) complet- ed follow up, but there was no information on the differences in follow-up rate between the intervention and control group; and no information on the char- acteristics of missing subjects				

Strategies for expanding health insurance coverage in vulnerable populations (Review)



223 (115 in intervention group; 108 in control group) were used for analysis be-

#### Gordon 2005 (Continued)

		cause 19 (8%) subjects were excluded for reporting receiving other insurance (not Medicaid or SCHIP)
Selective reporting (re- porting bias)	Low risk	Every outcome in the Methods section is reported
Other bias	Low risk	No other bias was found
Baseline outcomes simi- lar?	Low risk	All the participants in intervention and control group were uninsured
Free of contamination?	Low risk	Allocation unit is study period, and control and intervention periods were sep- arated by about a week, so it was impossible for subjects in the control periods to receive SCHIP applications
Baseline characteristics similar?	Low risk	There were no significant differences in demographic characteristics among control and intervention groups

CCT = controlled clinical trial; ED = emergency department; RCT = randomised controlled trial; SCHIP = State Children Health Insurance Program.

# Characteristics of excluded studies [ordered by study ID]

Study	Reason for exclusion
Aizer 2002	Modelling study using longitudinal data to evaluate multiple policies across multiple jurisdictions without controlling for potential confounders across jurisdictions
Aizer 2006	Modelling study using longitudinal data before and after interventions, but not available for re- analysis
Atherly 2012	Retrospective cohort study
Bansak 2007	Modelling study using longitudinal data to evaluate multiple policies across multiple jurisdictions without controlling for potential confounders across jurisdictions
Barnett 2010	A retrospective, medical record review study
Bitran 2010	Post-intervention description and lack of control
Bowblis 2008	Retrospective cohort study
Brown 2004	Post-intervention description and lack of control
Buchmueller 2008	Post-intervention description and lack of control
Buratto 2004	Post intervention description and lack of control
Card 2004	Time series study
Carter 2006	Longitudinal repeated measurements after interventions, but no measurements before interven- tions and no control group
Chen 2009	Cluster-RCT, but only one site in each comparison group

Strategies for expanding health insurance coverage in vulnerable populations (Review)



Study	Reason for exclusion
Choi 2011	Retrospective cohort study
Cogan 2008	Not comparative, before-after study
Cousineau 2007	Post-intervention description and lack of control
Cousineau 2011	Non-comparative, descriptive study
Currie 1996	Non-comparative, descriptive study
Dave 2010	Time series from 1985 to 1996, no clear intervention time point
Davidoff 2005	Controlled before-after study, but the baseline was very different between the treatment groups and comparison groups
Dutton 2000	Post-intervention survey and lack of control
Frenk 2006	Longitudinal surveys and lack of control
Gardner 2008	Post-intervention description and lack of control
Gordon 2001	Prospective observational study after intervention and no control group
Gresenz 2012	Post-intervention description and lack of control
Guy 2010	Time series post-intervention, no data before intervention
Hill 1993	Post-intervention description and lack of control
Hill 2008	Analysed longitudinal data after intervention and lack of control
Jacobson 2007	Post-intervention description and lack of control
Kenney 2010	Controlled before-after study with only one intervention site
Kincheloe 2004	Cross-sectional study
Lawler 2005	Post-intervention descriptive study
Lee 2008	Modelling study using longitudinal data to evaluate multiple policy characteristics without control- ling for possible confounding factors
Leininger 2007	Case-control study
Lichtenstein 2005	Qualitative study
Lo Sasso 2004	Observational study, not comparative
Long 2007	Non-comparative, descriptive study
Mahajan 2005	Post-intervention description and absence of control
Meyer 2004	Qualitative study
Prado 2010	Before and after intervention in Colombia, but lack of control

Strategies for expanding health insurance coverage in vulnerable populations (Review)



Study	Reason for exclusion
Ray 2006	Qualitative study
Shore-Sheppard 2000	Before and after intervention, but lack of control
Sieben 2000	Choice of control sites is not appropriate because there were significant baseline differences be- tween participants from intervention and control sites for most characteristics, such as race/eth- nicity, birthplace, language, employment status and baseline insurance coverage. The data are not enough for re-analysis
Souares 2010	Before-after study and absence of control
Thornton 2010	Before and after intervention, but lack of control
Wada 2006	Post-intervention description and absence of control
Wolfe 2005	Analysed pool of 2-year data to evaluate multiple insurance policy characteristics with potential confounding factors
Ziegenfuss 2008	Modelling study using longitudinal data before and after interventions, but not available for re- analysis
Zimmer 2011	Time series study. Two data points before intervention, three data points after intervention

# DATA AND ANALYSES

# Comparison 1. Awareness and application support versus no intervention

Outcome or subgroup title	No. of studies	No. of partici- pants	Statistical method	Effect size
1 Enrolment	1	257	Risk Ratio (M-H, Fixed, 95% CI)	1.68 [1.44, 1.96]
2 Continuous enrolment	1	257	Risk Ratio (M-H, Fixed, 95% CI)	2.59 [1.95, 3.44]
3 Sporadic enrolment	1	257	Risk Ratio (M-H, Fixed, 95% CI)	0.66 [0.41, 1.05]
4 Mean time to obtain insurance	1	200	Mean Difference (IV, Fixed, 95% CI)	-47.30 [-73.98, -20.62]
5 Parental satisfaction with process of enrolment	1	173	Mean Difference (IV, Fixed, 95% CI)	-1.07 [-1.42, -0.72]

# Analysis 1.1. Comparison 1 Awareness and application support versus no intervention, Outcome 1 Enrolment.

Study or subgroup	Experimental	Control		F	lisk Rati	0		Weight	<b>Risk Ratio</b>
	n/N	n/N		м-н,	Fixed, 9	5% CI			M-H, Fixed, 95% CI
Flores 2005	130/135	70/122				-+		100%	1.68[1.44,1.96]
Total (95% CI)	135	122				•		100%	1.68[1.44,1.96]
Total events: 130 (Experimen	ntal), 70 (Control)								
Heterogeneity: Not applicabl	le								
Test for overall effect: Z=6.49	(P<0.0001)								
	Favo	urs experimental	0.2	0.5	1	2	5	Favours control	

# Analysis 1.2. Comparison 1 Awareness and application support versus no intervention, Outcome 2 Continuous enrolment.

Study or subgroup	Experimental	Control		R	isk Ratio	<b>b</b>		Weight	Risk Ratio
	n/N	n/N		м-н,	Fixed, 95	5% CI			M-H, Fixed, 95% CI
Flores 2005	106/135	37/122						100%	2.59[1.95,3.44]
Total (95% CI)	135	122				•		100%	2.59[1.95,3.44]
Total events: 106 (Experiment	al), 37 (Control)								
Heterogeneity: Not applicable	2								
Test for overall effect: Z=6.59(I	P<0.0001)								
	Favo	urs experimental	0.2	0.5	1	2	5	Favours control	

# Analysis 1.3. Comparison 1 Awareness and application support versus no intervention, Outcome 3 Sporadic enrolment.

Study or subgroup	Experimental	Control		Risk	Ratio		Weight	<b>Risk Ratio</b>
	n/N	n/N		M-H, Fixe	d, 95% CI			M-H, Fixed, 95% CI
Flores 2005	24/135	33/122			-		100%	0.66[0.41,1.05]
Total (95% CI)	135	122			-		100%	0.66[0.41,1.05]
Total events: 24 (Experimental), 33 (	Control)							
Heterogeneity: Not applicable								
Test for overall effect: Z=1.77(P=0.08	)					L.		
	Favo	urs experimental	0.2	0.5	2	5	Favours control	

# Analysis 1.4. Comparison 1 Awareness and application support versus no intervention, Outcome 4 Mean time to obtain insurance.

Study or subgroup	Expe	erimental	с	ontrol		Mea	n Differer	nce		Weight	Mean Difference
	N	Mean(SD)	Ν	Mean(SD)		Fiz	xed, 95% (	CI			Fixed, 95% CI
Flores 2005	130	87.5 (68)	70	134.8 (102.4)	_		.			100%	-47.3[-73.98,-20.62]
Total ***	130		70		-					100%	-47.3[-73.98,-20.62]
			Favours	experimental	-100	-50	0	50	100	Favours con	trol

Strategies for expanding health insurance coverage in vulnerable populations (Review)



Study or subgroup	Experimental			Control		Mean Difference				Weight	Mean Difference
	Ν	Mean(SD)	N	Mean(SD)		F	ixed, 95% (	CI			Fixed, 95% CI
Heterogeneity: Not applicable											
Test for overall effect: Z=3.47(P=0)											
			Favour	s experimental	-100	-50	0	50	100	Favours contro	l

# Analysis 1.5. Comparison 1 Awareness and application support versus no intervention, Outcome 5 Parental satisfaction with process of enrolment.

Study or subgroup	Expe	erimental	с	ontrol		Me	an Differe	nce		Weight	Mean Difference
	Ν	Mean(SD)	Ν	Mean(SD)		F	ixed, 95%	CI			Fixed, 95% CI
Flores 2005	97	1.3 (0.8)	76	2.4 (1.4)			+			100%	-1.07[-1.42,-0.72]
Total ***	97		76			•	•			100%	-1.07[-1.42,-0.72]
Heterogeneity: Not applicable											
Test for overall effect: Z=5.99(P<0.0	0001)				1	1					
			Favours	experimental	-5	-2.5	0	2.5	5	Favours control	

# Comparison 2. Handing out applications versus no intervention

Outcome or subgroup title	No. of studies	No. of partici- pants	Statistical method	Effect size
1 Enrolment	1	223	Risk Ratio (M-H, Fixed, 95% CI)	1.50 [1.03, 2.18]

### Analysis 2.1. Comparison 2 Handing out applications versus no intervention, Outcome 1 Enrolment.

Study or subgroup	Experimental	Control		F	lisk Ratio			Weight	<b>Risk Ratio</b>
	n/N	n/N		м-н,	Fixed, 95	% CI			M-H, Fixed, 95% Cl
Gordon 2005	48/115	30/108				<b>+</b>		100%	1.5[1.03,2.18]
Total (95% CI)	115	108						100%	1.5[1.03,2.18]
Total events: 48 (Experimental), 30	) (Control)								
Heterogeneity: Not applicable									
Test for overall effect: Z=2.14(P=0.0	03)								
	Favo	urs experimental	0.2	0.5	1	2	5	Favours control	

# ADDITIONAL TABLES

#### Table 1. Strategies to expand health insurance

Strategies	Contents
Improving design of health insurance schemes	<ul><li>Modifying the eligibility criteria</li><li>Making the premium affordable</li></ul>

# Table 1. Strategies to expand health insurance (Continued)

	Improving health care delivery
Improving implementation of insurance schemes (outreach strategies)	<ul> <li>Increasing awareness of schemes and benefits</li> <li>Modifying enrolment</li> <li>Improving management and organization of insurance schemes</li> </ul>

# Table 2. Effect of awareness and application support

Study	Outcome measure	Absolute change from baseline in control group	Absolute change from baseline in intervention group	Difference in absolute change from baseline	Absolute change (post)	Relative percentage change (post)
Flores 2005	Enrolment	57%	96%	39%	39%	68.4%
2003	Continuous enrolment	30%	78%	48%	48%	160%
	Sporadic enrolment	_	_	_	-9%	-33.3%
	Mean time to obtain insurance	_	-	_	-47.3	-35.1%
	Parental satisfaction with process of enrolment	_	_	_	-1.07	-44.6%

# Table 3. Effect of handing out applications in emergency department of hospitals

Study	Outcome measure	Absolute change from baseline in control group	Absolute change from baseline in in- tervention group	Difference in ab- solute change from baseline	Absolute change (post)	Relative percentage change (post)
Gordon 2005	Enrol- ment	28%	42%	14%	14%	50%

# Table 4. Characteristics of excluded studies - for children

Study	Methods	Participants	Intervention	Outcomes
Chen 2009	Non-ran- domised con-	Korean American children in kindergarten through fifth grade,	1) outreach (moderate intervention group)	1) application rate 2) enrolment
	trolled trial: Two interven- tion group and a control group	at 3 elementary schools in Los An- geles, California	2) application assistance (intensive intervention group)	
Sieben	Non-ran-	low-income parents with children	1) outreach	1) enrolment
2000	domised con- trolled trial	uninsured at three neighbourhood WIC sites in South Brooklyn(inter-	2) education	2) awareness of Medic-
		vention group) and three WIC sites in Queens	3) enrolment assistance	aid and CHP

Strategies for expanding health insurance coverage in vulnerable populations (Review)

Atherly 2012	Retrospective cohort study	individuals with incomes below 200 percent of the federal pover-	1) expanded eligibility for public in- surance	insurance coverage rate
		ty level (FPL) in six HIFA (Health In- surance Flexibility and Account- ability) states (intervention group) and in non-HIFA states in US	2) subsidising	
Buch- mueller	Post-interven- tion descrip-	children who are less than 18 years old in non-native families and na-	1) adjust the income eligibility limits	the increase of enrol- ment rate
2008	tion and lack of control	tive families(migrant children) in US	2) simplifying the application and en- rolment process	
Buratto 2004	Post-interven- tion descrip-	uninsured children under age 19 in Louisiana, US	the LaCHIP Program	increased enrolment
	tion and lack of control	Louisiana, oo	1) programmatic and procedural re- forms and simplifications	
			2) Spanish and Vietnamese applica- tions and language assistance	
			3) expanded Community CARE pro- gram linking children to a "medical home"	
tion tion	Post-interven- tion descrip-	1) low-income children under 6 in US	1) OBRA 1989:	increase in Medicaid coverage
	tion and lack of control	2) children born after September 30, 1983 with family income be- low the AFDC income threshold,	the "133 percent" expansion covering children under the age of six	
			2) OBRA 1990:	
		regardless of family structure	the "100 percent" expansion cover- ing children born after September 30, 1983	
Choi 2011	Retrospective cohort study;	all civilian non-institutionalised children, ages 1 to 18 years in US	raise income thresholds for eligibility	1) insurance coverage for children from dif- ferent income-level families
				2) insurance coverage for children from dif- ferent racial and eth- nic
Gresenz 2012	Post-interven- tion descrip-	157,315 children in families with incomes between 200% and 400%	1) increased their income eligibility threshold for CHIP	1) take up public cov- erage
	tion and lack of control	of the FPL in US	2) a variety of program modifications intended to enhance take-up	2) drop private cover- age
				3) the number of unin sured children
Hill 1993	Post-interven- tion descrip-	low-income children in U.S.	expand eligibility based upon age or income	1) the number of chil- dren enrolled
	tion and lack of control			2) the utilization of service

# Table 4. Characteristics of excluded studies – for children (Continued)

Leininger 2007	Case-control study.	<ol> <li>adolescents in families with incomes between 50-100% FPL living in expansion states, U.S.</li> <li>children ages 6-13 in families with incomes between 50-100% FPL living in these same states US</li> </ol>	1) extend eligibility to older chil- dren(18-year-old) 2) increase the income thresholds	<ol> <li>public coverage</li> <li>private coverage</li> <li>the decline of uninsured</li> </ol>
Meyer 2004	Before and af- ter study	uninsured children in low-income working families, in US	Outreach activities: 1) broadcast media 2) print media 3) group education 4) direct assistance to persons eligible for CHIP	the percentage change in CHIP enrol- ment of eligibles
Lo Sasso 2004	Post interven- tion descrip- tion and lack of control	uninsured children in low-income families in US	<ol> <li>expand public insurance eligibili- ty(from 133% to 185% of FPL)</li> <li>new programs:15 states created a separate SCHIP program, and 17 states implemented a combination program</li> </ol>	the increased percent- age of children eligible
Shore- Sheppard 2000	Before and af- ter study	children under 15 from low-in- come families, in US	introduced a series of laws to expand Medicaid eligibility	<ol> <li>1) changes in insur- ance coverage across the income distribu- tion</li> <li>2) changes in insur-</li> </ol>
				ance coverage by re- gion 3) the distribution of
				coverage 4) an equalization of coverage levels across regions
Zimmer 2011	Interrupted time series	children between ages 0 and 15 in two-parent households with differ- ent income level in US	some flexibility in implementing in- come requirements(from 133% to 200% of FPL) and benefit structures,	1) number of children leave the ranks of the uninsured
			different from Medicaid	2) the percentage of children with public insurance
				3) percentage points of publicly insured
Cousineau 2011	Post-interven- tion descrip-	uninsured children in California, US	application assistant program:	new enrolments for all three programs

Table 4. C	<b>haracteristics o</b> f tion and lack of control	f excluded studies – for children	<ul> <li>(Continued)</li> <li>1) 3 technology-based approaches, include Health-e-App, One-e-App, and county data systems</li> <li>2) non-technology-based approach- es: Mass Media Campaign; Provider In-reach; Community Health Work- ers; School Based Programs; Match- ing Public Insurance</li> </ul>	
Kenney 2010	Controlled before-after study with on- ly 1 interven- tion site and 5 comparison sites	children ages 0–18 in Massachu- setts and 5 states (CT, ME, NH, RI, VT) in the New England, US	the expansion of MassHealth: the state's Medicaid program, to children with family incomes of up to 300 per- cent of the federal poverty level-an increase from 200% of the poverty level prior to health reform	uninsurance rates

# Table 5. Characteristics of excluded studies - for the poor

Study	Methods	Participants	Intervention	Outcomes
Long 2007	Post-inter- vention de-	low-income adults in U.S.	1) family Health Plus (FHP)	1) changes in eligi- bility
2007 Vention de- scription, and lack of control		on, ck of	Expand public coverage to parents with incomes up to 150% of the Federal Poverty Level (FPL) and to childless adults with in- comes up to 100% of the FPL.	2) changes in insur ance coverage
			2)healthy New York (HNY)	
			Reduce premiums for private coverage through a reinsurance mechanism that covers most of the expenses of high-cost en- rollees	
Souares 2010	Before and after study	low-income residents in Burkina Faso	subsiding the identified poorest	the enrolment rate
Guy 2010	Time series	low-income childless adults	1) expand Medicaid to individuals up to 133 percent of FPL. 2) premiums and subsidy	<ol> <li>probability of be ing insured</li> <li>access to medica care</li> </ol>

# Table 6. Characteristics of excluded studies - for patients

Study	Methods	Participants	Intervention	Outcomes
Barnett 2010	A retro- spective study	uninsured patients with chronic ill, in US	financial counselling services	secure health insurance coverage



# Table 6. Characteristics of excluded studies – for patients (Continued)

Bitran 2000	Post-in- terven- tion de- scription and lack of control	patients with chronic diseases, in Chile	launch AUGE law, which con- ferred the following four guaran- tees (access, quality, opportuni- ty or timeliness, financial protec- tion) on social health insurance beneficiaries	<ol> <li>all coverage rates increased considerably.</li> <li>hospitalisation rates and case-fatality rate</li> <li>medical leave</li> <li>patients' satisfaction</li> </ol>
Bowblis 2008	Retro- spective cohort study	population over the age of 15 that participated in a sickness insurance scheme in Austria, Belgium, Denmark, France, Germany, and Sweden (treat- ment group) and in Finland, Nether- lands, Norway, Switzerland, and the UK (control group)	<ol> <li>1) expand compulsory sickness insurance to families (German)</li> <li>2) implement subsidized volun- tary insurance (Belgium, Den- mark, France and Sweden)</li> </ol>	death rate (overall, in- fant and non-infant death rates)

# Table 7. Characteristics of excluded studies - for pregnant women

Study	Methods	Participants	Intervention	Outcomes
Currie	Post-inter-	15 <sup>~</sup> 44-year old women in the CPS,	extend Medicaid benefits to	1) the percentage of eligible
	vention de- scription,	in US	some groups of pregnant women who were not on	2) Health outcomes
	and lack of AFDC control	3) The cost effectiveness of Medicaid eligibility changes		
Dava	Time series	1) pregnant women aged 18 to 39	created avenues for pregnant	1) Medicaid coverage
2010	study	2) single men ages 25 to 64 who have incomes below 200% of the FPL and are privately insured (con- trol group)	women to qualify for Medic- aid at higher levels of income (from 133% to 185% FPL)	2) private insurance coverage

Table 8.	<b>Characteristics of</b>	excluded studies -	for the disabled
----------	---------------------------	--------------------	------------------

Study	Methods	Participants	Intervention	Outcomes
Cogan 2008	Before and after study	1) the disabled 2) non-disabled individ- uals with high expected costs	the extension of Medicare in 1973 to disabled individuals receiving SSDI (Social Security Disability Insurance)	1) an additional percent of the population through the Social Se- curity Disability Insurance pro- gram
				2) increase in private insurance coverage

Study	Methods	Participants	Intervention	Outcomes
Prado 2010	Before and after study	self-employed in Colombia	launched a set of measures (decree 1703 and Law 797) aimed at enrolling the self- employed, reducing evasion and address- ing fraudulent enrolment	increased enrolment rates among the self-employed
Thornton 2010	Before and after	the informal sector workers,	design randomly assigned individuals to treatment arms with differing prices and	1) the number of sample enrolled in the insurance scheme
study		in Nicaragua	enrolment procedures	2) Effect of insurance: utilization and ex penditures
				3) Effect of insurance: family planning and other services
Frenk	Post-in-	uninsured Mex-	1) stewardship:	1) the number of insured families
2006	terven- tion de- scription,	icans who are self-employed, unemployed, or	monitoring, performance evaluation, and regulation of the entire health system	2) increase <i>Seguro Popular</i> coverage in two dimensions: horizontal and vertica
	and lack of control	out of the work force	2) finance public-health activities	3) Evolution of financial imbalances
			3) strengthen the supply of high-quality health services	
			4) improve service delivery	

#### Table 9. Characteristics of excluded studies - for workers

#### Table 10. Characteristics of excluded studies - for other vulnerable population

Study	Methods	Participants	Intervention	Outcomes
Gardner 2008	Post-interven- tion description and lack of con- trol	uninsured populations (including children, child care workers, farm workers, In-Home Supportive Services (IHSS) workers, taxi drivers, and low-in- come working adults and so on)	Implement activities to ex- pand outreach, enrolment, retention, and utilization (OERU)	increased enrolment in new and existing programs
Lawler 2005	Post-interven- tion description and lack of con- trol	"hard-to-reach" New Yorkers who have historically been left out of public health insurance (including children, teens, immigrants and uninsured workers)	<ol> <li>locally tailored outreach</li> <li>step-by-step assistance through the enrolment maze</li> </ol>	the num- ber of new- ly enrolled

#### APPENDICES

# **Appendix 1. Search strategies**

#### 1. African Index Medicus (01/11/2012, 0 retrieved)

#### For children (01/01/2009 - 01/11/2012, 0 retrieved)

#1 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or (young and people) or (young and person) or (young and persons) or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) [Key Word]



#2 ((health and insurance) or (health and financing) or (medical and insurance) or Medicaid or medicare or (medical and scheme) or (medical and schemes) or (community and based and health and organization) or (community and based and health and organization) or (community and based and health and organizations) or (community and health and planning) or (community and health and finance and organization) or (community and health and finance and organization) or (community and health and finance and organizations) or (community and financing) or (community and self-financing) or (mutual and health and organization) or (mutual and health and organization) or (mutual and health and organizations) or (mutual and health and care) or (mutual and health and association) or (mutual and health and associations) or mutuelles or (prepayment and insurance and organization) or (prepayment and insurance and organization) or (cooperative and medical and scheme) or (cooperative and medical and schemes) or (cooperative and medical and schemes) or (prepaid and health and care) or (prepaid and health and plans) or (prepayment and plan) or (prepayment and plan) or (prepayment and plans) or (prepayment and plans) or (prepayment and scheme) or (cots and sharing) or (third and party and payments) or (blue and shield) or (blue and cross) or (managed and care and programs) or (managed

#### #3 #1 and #2

#### For others (The earliest collecting date - 01/11/2012, 0 retrieved)

#1 (aged OR elderly OR (senior and citizen) OR (senior and citizens) OR senium OR (old and people) OR female OR females OR women OR woman OR poverty OR (the and poor) OR indigence or indigent OR self-employed OR (informal and sector) OR (informal and sectors) OR low-income OR unemployed OR (rural and population) OR (rural and populations) OR (rural and worker) OR (rural and workers) OR (rural and community) OR (rural and society) OR (agricultural and worker) OR (agricultural and workers) OR (agricultural and labor) OR (agricultural and labors) OR agrarian OR (farm and worker) OR (farm and workers) OR farmer OR farmers OR farmworker OR farmworkers OR (minority and groups) OR (residential and mobility) OR emigration OR immigration OR emigrant OR immigrant OR emigrants OR immigrants OR (minority and ethnic and group) OR (innority and ethnic and groups) OR (chronic and patient) OR (chronic and patients) OR (chronically and ill) OR (chronically and sick) OR (long and stay and patient) OR (long and stay and patients) OR (long and term and patient) OR (long and term and patients) OR (disabled and persons) OR handicapped OR (disabled and person) OR (people and with and disability) OR (person and with and disability) OR (persons and with and disability) OR (vulnerable and populations) OR (vulnerable and population) OR disadvantaged) [Key Word]

#2 ((health and insurance) or (health and financing) or (medical and insurance) or Medicaid or medicare or (medical and scheme) or (medical and schemes) or (community and based and health and organization) or (community and based and health and organizations) or (community and health and planning) or (community and health and finance and organization) or (community and health and finance and organization) or (community and health and finance and organization) or (community and health and finance and organizations) or (community and financing) or (community and self-financing) or (mutual and health and organization) or (mutual and health and organization) or (mutual and health and organizations) or (mutual and health and care) or (mutual and health and association) or (mutual and health and associations) or (cooperative and medical and scheme) or (cooperative and medical and schemes) or (cooperative and medical and scheme) or (cooperative and medical and schemes) or (prepaid and health and care) or (prepaid and health and plans) or (prepaid and health and care) or (prepayment and plans) or (prepayment and plan) or (prepayment and plans) or (prepayment and plans) or (prepayment and plans) or (blue and schemes) or (third and party and payment) or (third and party and payments) or (blue and programs) or (cost and sharing) or (risk and pooling) or (blue and shield) or (blue and cross) or (managed and care and programs) or (managed and care and program) or (sickness and insurance)) [Key Word]

#### #3 #1 and #2

#### 2. BLDS (01/01/2008 - 01/11/2012, 40 retrieved)

#1 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR selfemployed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND health insurance : IN KEYWORDS AND [yr,st-numeric=2008-2012]

#2 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR self-employed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND medical scheme : IN KEYWORDS AND [yr,st-numeric=2008-2012]

#3 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR selfemployed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND medical schemes : IN KEYWORDS AND [yr,st-numeric=2008-2012]



#4 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR self-employed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND community based health organization : IN KEYWORDS AND [yr,stnumeric=2008-2012]

#5 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR self-employed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND community health planning : IN KEYWORDS AND [yr,stnumeric=2008-2012]

#6 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR selfemployed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND community financing : IN KEYWORDS AND [yr,st-numeric=2008-2012]

#7 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR selfemployed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND cost sharing : IN KEYWORDS AND [yr,st-numeric=2008-2012]

#8 (child OR children OR adolescent OR adolescents OR infant OR infants OR juvenile OR newborns OR student OR students OR young people OR teen OR minor OR minors OR neonates OR youth OR elderly OR female OR females OR women OR poverty OR the poor OR selfemployed OR informal sector OR low-income OR unemployed OR rural population OR rural workers OR rural community OR rural society OR agricultural workers OR agricultural labor OR agrarian OR farm workers OR farmer OR farmers OR minority groups OR emigration OR immigration OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR disabled persons OR handicapped OR vulnerable population OR disadvantaged) AND risk pooling : IN KEYWORDS AND [yr,st-numeric=2008-2012]

# 3. CENTRAL ( Cochrane Library ,01/01/2007- 02/11/2012, 288 retrieved)

#1 MeSH descriptor Child explode all trees

- #2 MeSH descriptor Infant explode all trees
- #3 MeSH descriptor Minors explode all trees
- #4 MeSH descriptor Adolescent explode all trees
- #5 MeSH descriptor Students explode all trees
- #6 MeSH descriptor aged explode all trees
- #7 MeSH descriptor women explode all trees
- #8 MeSH descriptor poverty explode all trees
- #9 MeSH descriptor poverty Areas explode all trees
- #10 MeSH descriptor rural population explode all trees
- #11 MeSH descriptor minority groups explode all trees
- #12 MeSH descriptor residential mobility explode all trees
- #13 MeSH descriptor disabled persons explode all trees
- #14 MeSH descriptor vulnerable populations explode all trees

Strategies for expanding health insurance coverage in vulnerable populations (Review)

Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



#15 MeSH descriptor emigration and immigration explode all trees

#16 (child or children or adolescent\* or kid\* or infant\* or minor\* or young NEXT people or young NEXT person\* or teenager\* or teen? or juvenile? or newborn\* or neonate\* or elderly or aged or senior NEXT citizen or senior NEXT citizens or senium or old NEXT people or female or females or woman or women or the NEXT poor or indigen\* or self-employed or informal NEXT sector\* or low-income or unemployed or rural NEXT population? or rural NEXT worker\* or rural NEXT community or rural NEXT society or agricultural NEXT worker\* or agricultural NEXT worker\* or agricultural NEXT worker\* or agricultural NEXT worker\* or farmer\* or farmworker\* or emigration or immigration emigrant or immigrant or emigrants or immigrants or minority NEXT ethnic NEXT group or minority NEXT ethnic NEXT groups or chronic NEXT patient or chronic NEXT patients or chronically NEXT ill or chronically NEXT sick or long NEXT stay NEXT patient or long NEXT term NEXT populations or people NEXT with NEXT disability\* or person NEXT with NEXT disability or persons NEXT with NEXT disability or vulnerable NEXT population or vulnerable NEXT population or vulnerable NEXT populations or disadvantaged)

#17 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16)

#18 MeSH descriptor Insurance, Major Medical explode all trees

#19 MeSH descriptor National Health Programs explode all trees

#20 MeSH descriptor Medicare explode all trees

#21 MeSH descriptor Insurance explode all trees

#22 MeSH descriptor Blue Cross Blue Shield Insurance Plans explode all trees

#23 MeSH descriptor Medically Uninsured explode all trees

#24 (health\* NEAR/3 insur\* or medical\* NEAR/3 insur\* or uninsur\* or medicare or medicaid or insur\* NEAR/3 program\* or (cost NEXT cover\*) NEAR/3 program\* or (cost NEXT recover\*) NEAR/3 program\* or reimburs\* NEAR/3 program\*)

#25 (#18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24)

#26 (#17 AND #25), from 2007 to 2012

#27 (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or 'take part in' or 'taking part in' or 'took part in' or 'taken part in' or 'takes part in' or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#### #28 (#26 AND #27), from 2007 to 2012

# 4. EconLit (01/01/2008 - 01/11/2012, 348 retrieved)

#1 TI=( child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR "young people" OR "young person" OR "young persons" OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths) OR AB=( child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR "young people" OR "young person" OR "young person" OR "young people" OR "young person" OR student OR students OR "young people" OR "young person" OR "young person" OR "young people" OR "young person" OR "young person" OR "young people" OR "young person" OR minors OR neonates OR youth OR youths) OR SU=( child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juveniles OR newborn OR newborns OR student OR students OR "young people" OR "young person" OR "young persons" OR teenager OR teenagers OR teen OR kids OR infant OR infants OR juveniles OR newborn OR adolescents OR kid OR kids OR infant OR infants OR juveniles OR newborn OR newborns OR student OR students OR "young people" OR "young person" OR "young persons" OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonates OR youth OR or "young person" OR "young persons" OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonates OR teenagers OR teen OR "young persons" OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonates OR neonates OR youth OR youths)

#2 TI=(elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR woman OR women OR poverty OR "the poor" OR indigent OR indigence OR self-employed OR "informal sector" OR "informal sectors" OR low-income OR unemployed OR handicapped OR "disabled person" OR "disabled persons" OR "people with disability\*" OR "person with disability" OR "persons with disability" OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR immigrant OR emigrants OR immigrants OR "minority ethnic group" OR "minority ethnic groups" OR "chronic patient" OR "chronic patients" OR "chronically ill" OR "chronically sick" OR "long stay patient" OR "long stay patients" OR "long term patient" OR "long term patients" OR "vulnerable population" OR "vulnerable populations" OR disadvantaged OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "rural community" OR "rural society" OR "agricultural worker" OR agricultural workers" OR agrarian OR "farm worker" OR "farm workers" OR farmer OR farmworker OR farmworker OR farmworkers) OR AB=(elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR woman OR women OR poverty OR "the poor" OR indigent OR indigence OR self-employed OR "informal sector" OR "informal sectors" OR low-income OR unemployed OR handicapped OR "disabled person" OR "disabled persons" OR "people with disability\*" OR "person with disability" OR "persons with disability" OR "minority groups" OR "disabled persons" OR "people with disability\*" OR "informal sectors" OR low-income OR unemployed OR handicapped OR "disabled person" OR "disabled persons" OR "people with disability\*" OR "person with disability" OR "persons with disability" OR "minority groups" OR "disabled persons" OR "people with disability\*" OR "person with disability" OR "persons with disability" OR "minority groups" OR "residential mobility" OR emigration OR emigrant OR immigrant OR immigrant OR emigrants OR immigr



"chronically ill" OR "chronically sick" OR "long stay patient" OR "long stay patients" OR "long term patient" OR "long term patients" OR "vulnerable population" OR "vulnerable populations" OR disadvantaged OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "rural community" OR "rural society" OR "agricultural worker" OR "agricultural workers" OR "agricultural labor" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR farmer OR farmers OR farmworker OR farmworkers) OR SU=(elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR woman OR women OR poverty OR "the poor" OR indigent OR indigence OR self-employed OR "informal sector" OR "informal sectors" OR low-income OR unemployed OR handicapped OR "disabled person" OR "disabled persons" OR "people with disability\*" OR "person with disability" OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR immigrant OR "informal sector" OR "information OR emigrant OR immigrant OR "information" OR "chronic patients" OR "chronic patients" OR "information OR emigrant OR immigrant OR immigrants OR "minority ethnic group" OR "minority ethnic groups" OR "chronic patient" OR "chronic patients" OR "chronic patients" OR "chronic patients" OR "information" OR "rural populations" OR "rural worker" OR "agricultural workers" OR "agricultural workers" OR "agricultural workers" OR "agricultural oR "chronic patients" OR "chronic patients" OR "chronic patients" OR "numinority ethnic group" OR "long stay patients" OR "long term patients" OR "long term patients" OR "chronic patients" OR "rural worker" OR "rural workers" OR "rural populations" OR "rural worker" OR "agricultural workers" OR "rural workers" OR "r

#3 TI=("health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plans" OR "prepaid health plan" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payments party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "blue cross" OR "managed care programs" OR "managed care program" OR "sickness insurance") OR AB=("health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plans" OR "prepaid health plan" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "blue cross" OR "managed care programs" OR "managed care program" OR "sickness insurance") OR SU=("health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "communitybased health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plans" OR "prepaid health plan" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "blue cross" OR "managed care programs" OR "managed care program" OR "sickness insurance")

#4 TI=(coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering) OR AB=(coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering) OR SU=(coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering)

#5 (#1 OR #2) AND #3 AND #4

# 5. ELDIS (01/01/2008 - 01/11/2012, 259 retrieved)

(health insurance or health financing or medical insurance or Medicaid or medicare or medical scheme\* or community based health organization\* or community health planning or community health finance organization\* or

community financing or community self-financing or mutual health organization\* or mutual health care or mutual health association\* or mutuelles or prepayment insurance organization\* or cooperative medical scheme\* or cooperative medical system\* or prepaid health care or prepaid health plan\* or prepayment plan\* or prepayment scheme\* or third-party payment\* or third-party payer\* or third party payment\* or third party payer\* or cost sharing or risk pooling or blue shield or blue cross or managed care program\* or sickness insurance): All fields

# 6. EMBASE (03/01/2008 - 06/07/2012, 6097 retrieved)

#1 exp child/ or exp adolescent/ or exp newborn/ or exp student/ or (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or 'young people' or 'young person' or 'young persons' or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths).ti, ab.

#2 exp aged/ or exp senescence/ or exp female/ or exp poverty/ or exp unemployment/ or exp rural population/ or exp minority group/ or exp migration/ or exp immigration/ or exp disabled person/ or exp vulnerable population/ or exp high risk population/ or (elderly or aged or 'senior citizen' or 'senior citizens' or senium or 'old people' or female or females or woman or women or 'the poor' or indigen\* or self-employed or 'informal sector' or 'informal sectors' or low-income or unemployed or 'rural population' or 'rural populations' or 'rural worker' or 'rural workers' or 'rural community' or 'rural society' or 'agricultural worker' or 'agricultural workers' or 'agricultural labor' or 'agricultural labors' or agrarian or 'farm worker' or 'farm workers' or farmer or farmers or farmworker or farmworkers or emigrant or migration or immigrantion or immigrant or emigrants or immigrants or 'minority ethnic group' or 'long term patient' or 'long stay patient' or 'long stay patients' or 'long term patient' or 'long term patients' or handicapped or 'disabled person' or 'disabled persons' or 'people with disability\*' or 'person with disability' or 'persons with disability' or 'vulnerable population' or 'vulnerable populations' or disadvantaged).ti,ab.

#3 exp insurance/ or exp Medicare/ or ('health insurance' or 'health financing' or 'medical insurance' or Medicaid or 'medical scheme' or 'medical schemes' or 'community based health organization' or 'community based health organizations' or 'community-based health organization' or 'community-based health organizations' or 'community health planning' or 'community health finance organization' or 'community health finance organizations' or 'community financing' or 'community self-financing' or 'mutual health organization' or 'mutual health organizations' or 'mutual health care' or 'mutual health association' or 'mutual health associations' or 'cooperative medical schemes' or 'cooperative medical system' or 'cooperative medical systems' or 'prepaid health care' or 'prepaid health plans' or 'prepaid health plan' or 'prepayment plans' or 'prepayment scheme' or 'prepayment schemes' or 'third-party payer' or 'third party payer' or 'third party payer' or 'third party payers' or 'cost sharing' or 'risk pooling' or 'blue shield' or 'managed care programs' or 'managed care program' or 'sickness insurance' or medicare or BlueCross).ti,ab.

#4 (coverage or cover or covering or covered or covers or 'participat\*' or join or joins or joining or joined or 'enrol\*' or 'recruit\*' or membership or memberships or 'eligib\*' or 'entitl\*' or 'take part in' or 'taking part in' or 'took part in' or 'taken part in' or 'takes part in' or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering).ti,ab.

#5 Randomized controlled trial/ or (random\$ or experiment\$ or (time adj series) or pre test or pretest or post test or posttest or impact or intervention\$ or chang\$ or evaluat\$ or effect? or compar\$ or control\$).tw.

#6 #5 not Nonhuman

#7 (#1 or #2) and #3 and #4 and #6

#8 limit #7 to yr="2008 -Current"

# 7. ERIC (01/11/2012, 1078 retrieved)

# For children (01/01/2009 - 01/11/2012, 115 retrieved)

#1 KW= (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths)

#2 KW=(health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community health financing or mutual health organization or mutual health organizations or mutual health association or mutual health associations or mutual health association or prepayment insurance organization or prepayment plans or prepayment scheme or prepayment plans or prepayment or third-party payer or third-party payment or third



payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance)

#3 KW= (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registration or registrations or registered or registering)

### #4 #1 and #2 and #3

# For others (pre-1966 - 01/11/2012, 963 retrieved)

#1 KW=(aged OR elderly OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR women OR woman OR poverty OR "the poor" OR indigen\* OR self-employed OR "informal sector" OR "informal sectors" OR low-income OR unemployed OR rural population OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "rural community" OR "rural society" OR "agricultural worker" OR "agricultural workers" OR "agricultural labor" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR farmer OR farmers OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration and immigration OR emigrant OR immigrant OR emigrants OR immigrants OR "long stay patient" OR "long stay patients" OR "long stay patients" OR "long stay patients" OR "long term patient" OR "long term patients" OR disabled persons OR handicapped OR "disabled person" OR "disabled persons" OR "vulnerable populations" OR disadvantaged)

#2 KW=(health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community health finance organizations or mutual health organizations or mutual health organizations or mutual health organizations or mutual health association or mutual health associations or mutual health associations or mutual health associations or mutual health associations or cooperative medical scheme or cooperative medical scheme or cooperative medical scheme or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance)

#3 KW= (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#### #4 #1 and #2 and #3

# 8. Global health (05/01/2008 - 06/07/2012, 1060 retrieved)

#1 exp children/ OR exp adolescents/ OR exp infants/ OR exp students/ OR exp youth/ OR (child or children or adolescent or adolescents or minor or minors or infant or infants or student or students or kid or kids or teenager or teenagers or teen or teens or youth or youths or juvenile or juveniles or newborn or newborns or neonate or neonates or young people or young person or young persons).ti,ab.

#2 exp elderly/ or exp females/ or exp women/ or exp rural women/ or exp poverty/ or exp low income groups/ or exp rural population/ or exp farm workers/ or exp minorities/ or exp urban rural migration/ or exp migration/ or exp rural urban migration/ or exp rural rural migration/ or exp immigration/ or exp people with disabilities/ or (elderly or aged or senior citizen or senior citizens or senium or old people or female or females or woman or women or the poor or indigen\* or self-employed or informal sector or informal sectors or low-income or unemployed or rural population or rural populations or rural worker or rural workers or rural community or rural society or agricultural worker or agricultural workers or agricultural labor or agricultural labors or agrarian or farm worker or farm workers or farmer or farmers or farmworker or farmworkers or emigrant or migration or immigrantion or immigrant or emigrants or immigrants or minority ethnic group or minority ethnic groups or chronic patient or chronic patients or chronically ill or chronically sick or long stay patient or long stay patients or long term patient or long term patients or handicapped or disabled person or disabled persons or people with disability\* or person with disability or persons with disability or vulnerable population or vulnerable populations or disadvantaged).ti,ab.

#3 exp insurance/ or exp health insurance/ or exp third party payments/ or exp Medicare/ or (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community health planning or community health finance organization or community health finance organizations or community self-financing or mutual health organization or mutual health organization or mutual health organizations or mutual health associations or mutual health association or mutual health organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical system or cooperative medical systems or prepayment schemes or third-party payment



or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care program or managed care programs or sickness insurance or medicare or BlueCross).ti,ab.

#4 (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering).ti,ab.

#5 (#1 or #2) and #3 and #4

#6 limit 5 to yr="2008 -Current"

### 9. HERDIN NeON Database (01/11/2012, 0 retrieved)

# For children (01/01/2009 - 01/11/2012, 0 retrieved)

#1 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths): Keywords (All fields)

#2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health association or mutual health association or mutual health association or mutual health association or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): Keywords (All fields)

### #3 #1 AND #2

### For others (the earliest collecting date - 01/11/2012, 0 retrieved)

#1(aged OR elderly OR senior citizen OR senior citizens OR senium OR old people OR female OR females OR women OR woman OR poverty OR the poor OR indigen OR indigene OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society OR agricultural worker OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmers OR farmworkers OR farmworkers OR minority groups OR residential mobility OR emigration immigration OR emigrant OR immigrant OR emigrants OR minority ethnic group OR minority ethnic groups OR chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR disabled persons OR handicapped OR disabled person OR people with disability OR person with disability OR persons with disability OR vulnerable populations OR vulnerable populations OR vulnerable populations OR vulnerable population OR disadvantaged): Keywords (All fields)

#2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health association or mutual health association or mutual health association or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): Keywords (All fields)

# #3 #1 AND #2

# 10. IBSS (05/01/2008 - 06/07/2012, 268 retrieved)

#1 KW=(child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young people" OR "young person" OR "young persons" OR elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR woman OR women OR poverty OR "the poor" OR indigen\* OR "self-employed" OR "informal sectors" OR "informal sectors" OR low-income OR unemployed OR "rural population" OR "rural populations" OR "rural worker"



OR "rural workers" OR "rural community" OR "rural society" OR "agricultural worker" OR "agricultural workers" OR "agricultural labor" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR farmer OR farmers OR farmworker OR farmworkers OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR immigrant OR emigrants OR immigrants OR "minority ethnic group" OR "minority ethnic groups" OR "chronic patient" OR "chronic patient" OR "chronic patients" OR "chronic patients" OR "chronic patients" OR "long stay patients" OR "long stay patients" OR "long term patient" OR "long term patients" OR "disabled persons" OR handicapped OR "disabled persons" OR "people with disability" OR "person with disability" OR "persons with disability" OR "vulnerable population" OR "vulnerable populations" OR disadvantaged)

#2 KW=("health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health plan" OR "prepaid health plan" OR "prepayment plan" OR "prepayment plans" OR "prepayment schemes" OR "comes" OR "third-party payer" OR "third party payment" OR "third party payers" OR "third par

#3 KW=(coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering)

### #4 #1 AND #2 AND #3

# 11. IDEAS (01/01/2008 - 01/11/2012, 59 retrieved)

#1 (child | adolescent | minor | infant | kid | student | teenager | teen | youth | juvenile | newborn | neonate | "young people" | "young person") + ("health insurance" | "health financing" | "medical insurance" | Medicaid | Medicare | "medical scheme" | "community based health organization" | "community health planning" | "community health finance organization" | "community financing" | "community selt-financing") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#2 (child | adolescent | minor | infant | kid | student | teenager | teen | youth | juvenile | newborn | neonate | "young people" | "young person") + ("mutual health organization" | "mutual health care" | "mutual health organization" | mutuelles | "prepayment insurance organization" | "cooperative medical scheme" | "cooperative medical system" | "prepaid health care" | "prepaid health plan") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#3 (child | adolescent | minor | infant | kid | student | teenager | teen | youth | juvenile | newborn | neonate | "young people" | "young person") + ("prepayment plan" | "prepayment scheme" | "third- party payment" | "third-party payer" | "third party payment" | "third party payer" | "cost sharing" | "risk pooling" | "blue shield" | "blue cross" | "managed care program" | "sickness insurance ") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#4 (aged | elderly | "senior citizen" | senium | "old people" | female | woman | poverty | "the poor" | indigent | self-employed | "informal sector" | low-income | unemployed | "people with disability" | "person with disability")+ ("health insurance" | "health financing" | "medical insurance" | Medicaid | Medicare | "medical scheme" | "community based health organization" | "community health planning" | "community health financing") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#5 ("rural population" | senium | "rural worker" | "rural community" | "rural society" | "agricultural worker" | "agricultural labor" | agrarian |"farm worker" | farmer | farmworker | handicapped | "vulnerable population" | disadvantaged)+ ("health insurance" | "health financing" | "medical insurance" | Medicaid | Medicare | "medical scheme" | "community based health organization" | "community health planning" | "community health finance organization" | "community financing" | "community selt-financing")+(cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#6 ("minority groups" | "residential mobility" | emigrant | immigrant | "minority ethnic group" | "chronic patient" | "chronically ill" | "chronically sick" | "long stay patient" | "long term patient" | "disabled person")+ ("health insurance" | "health financing" | "medical insurance" | Medicaid | Medicare | "medical scheme" | "community based health organization" | "community health planning" | "community health finance organization" | "community financing" | "community selt-financing") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#7 (aged | elderly | "senior citizen" | senium | "old people" | female | woman | poverty | "the poor" | indigent | self-employed | "informal sector" | low-income | unemployed | "people with disability" | "person with disability")+ ("mutual health organization" | "mutual health care" | "mutual health organization" | mutuelles | "prepayment insurance organization" | "cooperative medical scheme" | "cooperative

medical system" | "prepaid health care" | "prepaid health plan") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#8 ("rural population" | senium | "rural worker" | "rural community" | "rural society" | "agricultural worker" | "agricultural labor" | agrarian |"farm worker" | farmer | farmworker | handicapped | "vulnerable population" | disadvantaged)+ ("mutual health organization" | "mutual health care" | "mutual health organization" | mutuelles | "prepayment insurance organization" | "cooperative medical scheme" | "cooperative medical system" | "prepaid health care" | "prepaid health plan") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#9 ("minority groups" | "residential mobility" | emigrant | immigrant | "minority ethnic group" | "chronic patient" | "chronically ill" | "chronically sick" | "long stay patient" | "long term patient" | "disabled person")+ ("mutual health organization" | "mutual health care" | "mutual health organization" | mutuelles | "prepayment insurance organization" | "cooperative medical scheme" | "cooperative medical system" | "prepaid health care" | "prepaid health plan") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#10 (aged | elderly | "senior citizen" | senium | "old people" | female | woman | poverty | "the poor" | indigent | self-employed | "informal sector" | low-income | unemployed | "people with disability" | "person with disability")+ ("prepayment plan" | "prepayment scheme" | "third-party payment" | "third-party payer" | "third party payment" | "third party payer" | "cost sharing" | "risk pooling" | "blue shield" | "blue cross" | "managed care program" | "sickness insurance ") +(cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#11 ("rural population" | senium | "rural worker" | "rural community" | "rural society" | "agricultural worker" | "agricultural labor" | agrarian |"farm worker" | farmer | farmworker | handicapped | "vulnerable population" | disadvantaged)+ ("prepayment plan" | "prepayment scheme" | "third- party payment" | "third-party payer" | "third party payment" | "third party payer" | "cost sharing" | "risk pooling" | "blue shield" | "blue cross" | "managed care program" | "sickness insurance ") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter | register | membership)

#12 ("minority groups" | "residential mobility" | emigrant | immigrant | "minority ethnic group" | "chronic patient" | "chronically ill" |
"chronically sick" | "long stay patient" | "long term patient" | "disabled person")+ ("prepayment plan" | "prepayment scheme" | "thirdparty payment" | "third-party payer" | "third party payment" | "third party payer" | "cost sharing" | "risk pooling" | "blue shield" | "blue
cross" | "managed care program" | "sickness insurance ") + (cover | participate | join | enroll | recruit | "take part in" | eligible | entitle | enter)

#13 ("minority groups" | "residential mobility" | emigrant | female | immigrant | "minority ethnic group" | "chronic patient" | "chronically ill" | "chronically sick" | "long stay patient" | "long term patient" | "disabled person")+ ("prepayment plan" | "prepayment scheme" | "thirdparty payment" | "third-party payer" | "third party payment" | "third party payer" | "cost sharing" | "risk pooling" | "blue shield" | "blue cross" | "managed care program" | "sickness insurance") + (membership | register)

#14 (#1 | #2 | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 | #12 | #13)

# 12. IndMED (01/11/2012, 136 retrieved)

# For children (01/04/2009 - 01/11/2012, 15 retrieved)

#1 (child\$ or adolescent\$ or minor\$ or infant\$ or student\$ or kid\$ or teenager\$ or teen\$ or youth\$ or juvenile\$ or newborn\$ or neonate\$ or (young and people) or (young and person\$)): IN KEYWORDS

#2 (health and insurance) or (health and financing) or (medical and insurance) or Medicaid or Medicare or (medical and scheme\$) or (community and based and health and organization\$) or (community-based and health and organization\$) or (community and health and planning) or (community and health and finance and organization\$) or (community and financing) or (community and self-financing) or (mutual and health organization\$) or (mutual and health and care) or (mutual and health and association\$) or mutuelles or (prepayment and insurance and organization\$) or (cooperative and medical and scheme\$) or (cooperative and medical and scheme\$) or (prepaid and health and care) or (prepaid and health and plan\$) or (prepayment and plan\$) or (prepayment and plan\$) or (prepayment and plan\$) or (blue and scheme\$) or (third-party and pay\$) or (third and party and pay\$) or (cost and sharing) or (risk and pooling) or (blue and shield) or (blue and cross) or (managed and care and program\$) or (sickness and insurance)): IN KEYWORDS

#3 (2009 or 2010 or 2011 or 2012): IN YEAR

#4 #1 AND #2 AND #3

# For others (the earliest collecting date - 01/11/2012, 122 retrieved)

#1 (elderly or aged or (senior and citizen\$) or senium or (old and people) or female\$ or woman or women or (the and poor) or indigen\$ or self-employed or (informal and sector\$) or low-income or unemployed or (rural and population\$) or (rural and worker\$) or (rural and community) or (rural and society) or (agricultural and worker\$) or (agricultural and labor\$) or agrarian or (farm and worker\$) or farmer \$ or farmworker\$ or emigration or immigration or emigrant\$ or immigrant\$ or (minority and ethnic and group\$) or (chronic and patient



\$) or (chronically and ill) or (chronically and sick) or (long and stay and patient\$) or (long and term and patient\$) or handicapped or (disabled and person\$) or (people and disability\$) or (person and disability) or (persons and disability) or (vulnerable and population\$) or disadvantaged)): IN KEYWORDS

#2 ((health and insurance) or (health and financing) or (medical and insurance) or Medicaid or Medicare or (medical and scheme\$) or (community and based and health and organization\$) or (managed and care and program\$) or (community-based and health and organization\$) or (community and health and planning) or (community and health and finance and organization\$) or (community and financing) or (community and self-financing) or (mutual and health organization\$) or (mutual and health and care) or (mutual and health and care) or (mutual and health and association\$) or mutuelles or (prepayment and insurance and organization\$) or (cooperative and medical and scheme\$) or (cooperative and medical and system\$) or (prepaid and health and care) or (prepaid and health and plan\$) or (prepayment and plan\$) or (prepayment and plan\$) or (cost and sharing) or (risk and pooling) or (blue and shield) or (sickness and insurance)): IN KEYWORDS

### #3 #1 AND #2

# 13. ISI-Proceedings (01/01/2008 - 01/11/2012, 2559 retrieved)

#1 ts=child OR ts=children OR ts=adolescent\$ OR ts=kid OR ts=kids OR ts=infant\$ OR ts= juvenile\$ OR ts=newborn\$ OR ts=student\$ OR ts="young people" OR ts="young person" OR ts="young persons" OR ts=teenager\$ OR ts=teen\$ OR ts=minor\$ OR ts=neonate\$ OR ts="school enrollment" OR ts="school enrollments" OR ts=youth\$ OR ts=aged OR ts=elderly OR ts="senior citizen" OR ts="senior citizens" OR ts=senium OR ts="old people" OR ts=female\$ OR ts=women OR ts=woman OR ts=poverty OR ts="the poor" OR ts=indigen\$ OR ts="self-employed" OR ts="informal sector" OR ts="informal sectors" OR ts="low-income" OR ts=unemployed OR ts="rural population" OR ts="rural populations" OR ts="rural worker" OR ts="rural workers" OR ts="rural community" OR ts="rural society" OR ts="agricultural worker" OR ts="agricultural workers" OR ts="agricultural labor" OR ts="agricultural labors" OR ts=agrarian OR ts="farm worker" OR ts="farm workers" OR ts=farmer\$ OR ts=farmworker\$ OR ts="minority groups" OR ts="residential mobility" OR ts=emigration OR ts=immigration OR ts=emigrant\$ OR ts=immigrant\$ OR ts="minority ethnic group" OR ts="long stay patients" OR ts="long term patient" OR ts="chronically ill" OR ts="chronically sick" OR ts="long stay patient" OR ts="long stay patients" OR ts="long term patient" OR ts="long term patients" OR ts="disabled persons" OR ts="long stay patients" OR ts="long term patient" OR ts="long term patients" OR ts="gerson with disability" OR ts="people with disability" OR ts="people with disabilities" OR ts="person with disability" OR ts="people with disability" OR ts="people with disabilities" OR ts="long term patients" OR ts="long term patient" OR ts="ruralpeople term patients" OR ts="long term patients" OR ts="long term patient" OR ts="long term patients" OR ts="long term patient" OR ts="long term patient" OR ts="long term patients" OR ts="long term patients" OR ts="long term patients" OR ts="long term patient" OR ts="long term patient" OR ts="long term patients" OR ts="long term patients" OR ts="long term patients" OR ts="long

#2 ts="health insurance" OR ts="health financing" OR ts="medical insurance" OR ts=Medicaid OR ts=medicare OR ts="medical scheme" OR ts="medical schemes" OR ts="community based health organization" OR ts="community health planning" OR ts="community health finance organization" OR ts="community health finance organization" OR ts="community financing" OR ts="community health finance organization" OR ts="community financing" OR ts="community self-financing" OR ts="mutual health organization" OR ts="mutual health organization" OR ts="mutual health care" OR ts="cooperative medical scheme" OR ts="cooperative medical scheme" OR ts="cooperative medical scheme" OR ts="cooperative medical schemes" OR ts="cooperative medical system" OR ts="cooperative medical systems" OR ts="prepaid health care" OR ts="prepaid health plan" OR ts="prepaid health plan" OR ts="prepaid health plan" OR ts="prepaid health plan" OR ts="third-party payment" OR ts="third-party payer" OR ts="third party payer" OR ts

#3 ts=coverage OR ts=cover OR ts=covering OR ts=covered OR ts=covers OR ts=participat\$ OR ts=join OR ts=join oR ts=joining OR ts=joined OR ts=enrol\$ OR ts=recruit\$ OR ts=membership\$ OR ts=eligib\$ OR ts=entitl\$ OR ts="take part in" OR ts="taking part in" OR ts="took part in" OR ts="taken part in" OR ts="takes part in" OR ts=enter OR ts=entering OR ts=entered OR ts=enters OR ts=register OR ts=registers OR ts=registration OR ts=registrations OR ts=registered OR ts=registering

#### #4 #1 AND #2 AND #3

# 14. JSTOR (22/12/2007-01/11/2012, 33 retrieved)

#1 ti:("health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organization" OR "community based health organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health organizations" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical systems" OR "cooperative medical systems" OR "prepaid health care" OR "prepayment plans" OR "prepayment scheme" OR "prepayment plans" OR "third-party payer" OR "third party payers" OR "third party payers" OR "third party payers" OR "blue shield" OR "blue cross" OR "managed care programs" OR "managed care program" OR "schemes insurance") OR ab:("health insurance" OR "health financing" OR "health financing" OR "managed care programs" OR "sickness insurance") OR ab:("health insurance" OR "health financing" OR "health financin



"medical insurance" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community health finance organization" OR "mutual health organizations" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR "mutual health care" organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepayment plans" OR "prepayment plans" OR "prepayment plans" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payer" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payers" OR "third party payers" OR "blue shield" OR "blue cross" OR "managed care programs" OR "managed care program"

#2 ti: (coverage OR cover OR covering OR enrol\* OR membership OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR recruit\* OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering) OR ab: (coverage OR cover OR covering OR covered OR covers OR participat\* OR eligib\* OR entitl\* OR take part in OR took part in OR entor OR recruit\* OR membership OR enter OR entering OR enters OR registration OR join OR joins OR joining OR joined oR memberships OR "taking part in" OR "taken part in" OR "takes part in" OR entered OR register OR registers OR registers OR registrations OR registered OR registering)

#3 ti:(child& OR adolescent& OR kid& OR infant& OR juvenile& OR newborn& OR student& OR "young people" OR "young person" OR "young persons" OR teenager& OR teen& OR minor& OR neonate& OR youth&) OR ab:(child& OR adolescent& OR kid& OR infant& OR juvenile& OR newborn& OR student& OR "young people" OR "young person" OR "young persons" OR teenager& OR teen& OR minor& OR neonate& OR youth&) OR ab:(child& OR adolescent& OR kid& OR infant& OR juvenile& OR newborn& OR student& OR "young people" OR "young person" OR "young persons" OR teenager& OR teen& OR minor& OR neonate& OR youth&)

#4 ti:(elderly OR aged OR "senior citizen&" OR senium OR "old people" OR female& OR woman& OR poverty OR "the poor" OR indigent OR indigence OR self-employed OR "informal sector&" OR low-income OR unemployed OR handicapped OR "disabled person&" OR "people with disability" OR "person& with disability" OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant& OR immigrant& OR "minority ethnic group&" OR "chronic patient&" OR "chronically ill" OR "chronically sick" OR "long stay patient&" OR "long term patient&" OR "vulnerable population&" OR disadvantaged OR "rural population&" OR agrarian OR "farm worker&" OR "rural community" OR "rural society" OR agricultural worker" OR "agricultural workers" OR "agricultural labor&" OR agrarian OR "farm worker&" OR farmer& OR farmworker&) OR ab: (elderly OR aged OR "senior citizen&" OR senium OR "old people" OR female& OR woman& OR poverty OR "the poor" OR indigent OR indigent OR indigence OR self-employed OR "informal sector&" OR low-income OR unemployed OR handicapped OR "disabled person&" OR "people with disability&" OR "person& with disability" OR "minority groups" OR "residential mobility" OR emigration OR immigrant& OR "people OR "informal sector&" OR low-income OR unemployed OR handicapped OR "disabled person&" OR "people with disability&" OR "person& with disability" OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant& OR "minority ethnic group&" OR "chronic patient&" OR "chronically ill" OR "rural worker&" OR "agricultural worker" OR "agricultural workers" OR "agricul

#5 #1 AND #2 AND (#3 OR #4)

# 15. LILACS (01/11/2012, 1007 retrieved)

# For children (05/04/2009 - 01/11/2012, 39 retrieved)

#1 (child\$ or adolescent\$ or minor\$ or infant\$ or student\$ or teen\$ or youth\$ or juvenile\$ or newborn\$ or (young and people) or (young and person\$) or nino\$ or crianca or infantil or lactante or lactente or (recien\$ and nacido\$) or (recem\$ and nascido\$) or neonat\$ or baby or babies or kid\$ or toddler\$): In Field [Words]

#2 ((health\$ and insurance\$) or (medical\$ and insurance\$) or (insurance\$ and program\$) or (seguro and medico\$) or (seguro and salud) or (seguro and saude)) and ((Pt RANDOMIZED CONTROLLED TRIAL OR Pt CONTROLLED CLINICAL TRIAL OR Mh RANDOMIZED CONTROLLED TRIALS OR Mh RANDOM ALLOCATION OR Mh DOUBLE-BLIND METHOD OR Mh SINGLE-BLIND METHOD OR Pt MULTICENTER STUDY) OR ((time and series) or random\$ or intervention\$ or control\$ or evaluat\$ or effect\$ or compare\$ or chang\$ or experiment\$ or impact) or ((tw ensaio or tw ensayo or tw trial) and (tw azar or tw acaso or tw placebo or tw control\$ or tw aleat\$ or tw random\$ or (tw duplo and tw cego) or (tw doble and tw ciego) or (tw double and tw blind)) and tw clinic\$)) AND NOT ((CT ANIMALS OR MH ANIMALS OR CT RABBITS OR CT MICE OR MH RATS OR MH PRIMATES OR MH DOGS OR MH RABBITS OR MH SWINE) AND NOT (CT HUMAN AND CT ANIMALS)): In Field [Words]

#3 (2009 or 2010 or 2011 or 2012): In Field [Country, year publication]

#4 #1 and #2 and #3

# For others (the earliest collecting date - 01/11/2012, 968 retrieved)

#1 ((health\$ and insurance\$) or (medical\$ and insurance\$) or (insurance\$ and program\$) or (seguro and medico\$) or (seguro and salud) or (seguro and saude)) : In Field [Words]

#2 (elderly or aged or (senior and citizen\$) or senium or (old and people) or female\$ or woman or women or (the and poor) or indigen\$ or self-employed or (informal and sector\$) or low-income or unemployed or (rural and population\$) or (rural and worker\$) or (rural and community) or (rural and society) or (agricultural and worker\$) or (agricultural and labor\$) or agrarian or (farm and worker\$) or farmer \$ or farmworker\$ or emigration or immigration or emigrant\$ or immigrant\$ or (minority and ethnic and group\$) or (chronic and patient \$) or (chronically and ill) or (chronically and sick) or (long and stay and patient\$) or (long and term and patient\$) or handicapped or (disabled and person\$) or (people and disability\$) or (person and disability) or (persons and disability) or (vulnerable and population\$) or disadvantaged): In Field [Words]

#3 ((Pt RANDOMIZED CONTROLLED TRIAL OR Pt CONTROLLED CLINICAL TRIAL OR Mh RANDOMIZED CONTROLLED TRIALS OR Mh RANDOM ALLOCATION OR Mh DOUBLE-BLIND METHOD OR Mh SINGLE-BLIND METHOD OR Pt MULTICENTER STUDY) OR ((time and series) or random \$ or intervention\$ or control\$ or evaluat\$ or effect\$ or compare\$ or chang\$ or experiment\$ or impact) or ((tw ensaio or tw ensayo or tw trial) and (tw azar or tw acaso or tw placebo or tw control\$ or tw aleat\$ or tw random\$ or (tw duplo and tw cego) or (tw doble and tw ciego) or (tw double and tw blind)) and tw clinic\$)) AND NOT ((CT ANIMALS OR MH ANIMALS OR CT RABBITS OR CT MICE OR MH RATS OR MH PRIMATES OR MH DOGS OR MH RABBITS OR MH SWINE) AND NOT (CT HUMAN AND CT ANIMALS)): In Field [Words]

# 16. NTIS (01/01/2008 - 01/11/2012, 18 retrieved)

#1 (health insurance OR health financing OR medical insurance OR Medicaid OR medicare OR blue cross OR medical scheme OR medical schemes OR community based health organization OR community health finance organization OR community health finance organization OR community health finance organization OR mutual health care OR mutual health association OR mutual health associations OR mutual health organization OR prepayment insurance organizations OR cooperative medical scheme OR cooperative medical system OR cooperative medical systems OR prepaid health care OR prepaid health plans OR prepaid health plan OR prepayment plan OR prepayment plans OR prepayment scheme OR prepayment schemes OR third-party payment OR third party payer OR third party payer OR third party payer OR third party payers OR cost sharing OR risk pooling OR blue shield OR managed care programs OR managed care program OR sickness insurance).ti

#2 (health insurance OR health financing OR medical insurance OR Medicaid OR medicare OR blue cross OR medical scheme OR medical schemes OR community based health organization OR community based health organizations OR community-based health organization OR community health planning OR community health finance organization OR community health finance organization OR mutual health organizations OR community financing OR community self-financing OR mutual health organization OR mutual health organization OR mutual health care OR mutual health association OR mutual health associations OR mutual health care OR mutual health association OR mutual health associations OR mutual health organizations OR cooperative medical scheme OR cooperative medical schemes OR cooperative medical system OR cooperative medical systems OR prepaid health care OR prepaid health plans OR prepaid health plan OR prepayment plans OR prepayment scheme OR prepayment schemes OR third-party payment OR third-party payer OR third party payer OR third-party payers OR third party payers OR cost sharing OR risk pooling OR blue shield OR managed care programs OR managed care program OR sickness insurance), keyword.

# #3 #1 OR #2

# 17. OpenGrey( changed form OpenSIGLE) (08/01/2008 - 01/11/2012, 0 retrieved)

#1 (tittle: child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR young people OR young person OR young persons OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths OR aged OR elderly OR senior citizen OR senior citizens OR senium OR old people OR female OR females OR women OR woman OR poverty OR the poor OR indigene or indigence OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society OR agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmers OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration OR immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR disabled persons OR handicapped OR disabled person OR people with disability OR person with disability OR persons with disability OR vulnerable populations OR vulnerable population OR disadvantaged) OR (abstract: child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR young people OR young person OR young persons OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths OR aged OR elderly OR senior citizen OR senior citizens OR senium OR old people OR female OR females OR women OR woman OR poverty OR the poor OR indigene or indigence OR self-employed OR informal sector OR informal sectors OR lowincome OR unemployed OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society OR agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmers OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration OR immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR disabled



persons OR handicapped OR disabled person OR people with disability OR person with disability OR persons with disability OR vulnerable populations OR vulnerable population OR disadvantaged)

#2 (tittle: "health insurance" OR "medical insurance" OR "health financing" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payments" OR "third-party payer" OR "third-party payers" OR "cost sharing" OR "risk pooling" OR "Blue Shield" OR "Blue Cross" OR "managed care program" OR "managed care programs" OR "sickness insurance") OR (abstract: "health insurance" OR "medical insurance" OR "health financing" OR Medicaid OR Medicare OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "thirdparty payment" OR "third-party payments" OR "third-party payer" OR "third-party payers" OR "cost sharing" OR "risk pooling" OR "Blue Shield" OR "Blue Cross" OR "managed care program" OR "managed care programs" OR "sickness insurance")

#3 (cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR regist\*) OR (abstract:cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR regist\*) OR (title:cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR regist\*) OR (title:cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in"

#4 #1 AND #2 AND #3

# 18. PAIS (06/01/2008 - 06/07/2012, 263 retrieved)

#1 KW=child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young people" OR "young person" OR "young persons" OR elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR woman OR women OR poverty OR "the poor" OR indigen\* OR "self-employed" OR "informal sector" OR "informal sectors" OR low-income OR unemployed OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "rural community" OR "rural society" OR "agricultural worker" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR farmer OR farmers OR farmworker OR farmworkers OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR immigrants OR immigrants OR "minority ethnic groups" OR "long stay patients" OR "long stay patients" OR "long term patient" OR "long term patients" OR "disabled persons" OR "unerable population" OR "vulnerable populations" OR "populations" OR "vulnerable populations" OR "vuln

#2 KW="health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community health planning" OR "community health finance organization" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health organization" OR "mutual health organization" OR "mutual health care" OR "mutual health care" OR "mutual health association" OR "cooperative medical schemes" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health plan" OR "prepaid health plan" OR "prepayment plan" OR "prepayment plan" OR "prepayment plans" OR "prepayment schemes" OR "third-party payer" OR "third-party payer" OR "third-party payers" OR "third-party payers" OR "third party payments" OR "blue shield" OR "managed care program" OR "managed care program" OR



#3 KW=coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering

#4 #1 AND #2 AND #3

**19.** Popline (26/12/2007-01/11/2012, 85 retrieved)

Subject: (child / children / adolescent / adolescents / kid / kids / infant / infants / juvenile / juveniles / newborn / newborns / student / students / young people / young person / young persons / teenager / teenagers / teen / teens / minor / minors / neonate / neonates / youth / youths / aged / elderly / senior citizen / senior citizens / senium / old people / female / females / women / woman / poverty / the poor / indigen\* / self-employed / informal sector / informal sectors / low-income / unemployed / rural population / rural populations / rural worker / rural workers / rural community / rural society / agricultural worker / agricultural workers / agricultural labor / agricultural labors / agrarian / farm worker / farm workers / farmer / farmers / farmworker / farmworkers / minority groups / residential mobility / emigration / immigration / emigrant / immigrant / emigrants / immigrants / minority ethnic group / minority ethnic groups / chronic patient / chronic patients / chronically ill / chronically sick / long stay patient / long stay patients / long term patient / long term patients / handicapped / disabled person / disabled persons / people with disability\* / person with disability / persons with disability / vulnerable populations / vulnerable population / disadvantaged) & (health insurance / health financing / medical insurance / Medicaid / medical scheme / medical schemes / community based health organization / community based health organizations / community-based health organization / community-based health organizations / community health planning / community health finance organization / community health finance organizations / community financing / community self-financing / mutual health organization / mutual health organizations / mutual health care / mutual health association / mutual health associations / mutuelles / prepayment insurance organization / prepayment insurance organizations / cooperative medical scheme / cooperative medical schemes / cooperative medical system / cooperative medical systems / prepaid health care / prepaid health plans / prepaid health plan / prepayment plan / prepayment plans / prepayment scheme / prepayment schemes / third-party payment / third-party payer / third party payment / third party payer / third-party payments / thirdparty payers / third party payments / third party payers / cost sharing / risk pooling / Blue Shield / managed care programs / managed care program / sickness insurance/ Medicare / Blue Cross) & (coverage / cover / covering / covered / covers / participat\* / join / joins / joining / joined / enrol\* / recruit\* / membership / memberships / eligib\* / entitl\* / take part in / taking part in / took part in / taken part in / takes part in / enter / entering / entered / enters / register / registers / registration / registrations / registered / registering)

# 20. ProQuest Dissertation & Theses Database (08/01/2008 - 01/11/2012, 436 retrieved)

#1 (child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR" young people "OR "young person" OR "young persons") AND ("health insurance" OR" health financing "OR" medical insurance "OR "Medicaid" OR medicare OR" blue cross" OR "medical scheme" OR "medical schemes "OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan "OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer "OR "third party payment" OR "third party payer" OR" third-party payments" OR" third-party payers "OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "managed care program" OR "managed care programs" OR "sickness insurance") AND (cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR regist\*) TI .AB

#2 (elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR women OR woman OR poverty OR "the poor" OR indigen\* OR self-employed OR "informal sector" OR "informal sectors" OR "low-income" OR unemployed OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "rural community" OR "rural society" OR "agricultural workers" OR "agricultural labors" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm worker" OR farmer OR farmers OR farmworker OR farmworkers OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR emigrants OR immigrants OR "minority ethnic group" OR "minority ethnic groups" OR "chronic patients" OR "long term patients" OR "chronically ill" OR "chronically sick" OR "long stay patient" OR "long stay patients" OR "long term patients" OR "persons with disability" OR vulnerable populations OR "vulnerable population" OR disadvantaged) AND ("health financing" OR "medical insurance" OR "Medicaid" OR medicare OR "blue cross" OR "community-based health organization" OR "community based health organization" OR "community health finance organization" OR "community health financing" OR "community health financing" OR "community financing" OR "community health financing" OR "mutual health care" OR "mutual health care" OR "mutual health association" OR "mutual health organization" OR "mutual health organization" OR "community health financing" OR "mutual health care" OR "mutual health care" OR "mutual health association" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR "mutual health organizations" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR "mutual health care" OR "mutu



"prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical systems" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plans" OR "prepayment plans" OR "prepayment schemes" OR "prepayment schemes" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third-party payers" OR "third-party payers" OR "third-party payers" OR "third party payments" OR "third party payments" OR "third party payments" OR "third-party payers" OR "third party payments" OR "third party payments" OR "third party payments" OR "third party payments" OR "third party payers" OR "third party payments" OR "third party payments" OR "third party payers" OR "th

#3 #1 OR #2

### 21. PsycINFO (06/07/2012, 3083 retrieved)

### For children (02/04/2009 - 06/07/2012, 300 retrieved)

#1 child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or "young people" or "young person" or "young persons" or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths

#2 "health insurance" or "health financing" or "medical insurance" or Medicaid or "medical scheme" or "medical schemes" or "community based health organization" or "community based health organizations" or "community-based health organization" or "community based health organizations" or "community health planning" or "community health finance organizations" or "community financing" or "community self-financing" or "mutual health organization" or "mutual health organizations" or "mutual health care" or "mutual health association" or "mutual health associations" or "mutual health care" or "mutual health associations" or "cooperative medical scheme" or "cooperative medical schemes" or "cooperative medical systems" or "cooperative medical systems" or "prepayment care" or "prepayment care" or "prepayment scheme" or "prepayment schemes" or "third-party payers" or "third party payers" or "third party payers" or "third party payers" or "networks payer" or "health payers" or "networks payers" or "sckness insurance" or Bluecross

#3 coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or "take part in" or "taking part in" or "took part in" or "taken part in" or "takes part in" or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering

### #4 #1 AND #2 AND #3

### For others (the earliest collecting date - 06/07/2012, 3003 retrieved)

#1 elderly OR aged OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR woman OR women OR poverty OR "the poor" OR indigen\* OR self-employed OR "informal sector" OR "informal sectors" OR "low-income" OR unemployed OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "rural community" OR "rural society" OR "agricultural worker" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR "agricultural nobelity" OR "farm worker" OR "farm workers" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR "farm workers" OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR immigrants OR immigrants OR "minority ethnic group" OR "minority ethnic groups" OR "chronic patient" OR "chronic patient" OR "long term patients" OR "long term patients" OR "long term patients" OR "disabled persons" OR "groups" OR "people with disability" OR "person with disability" OR "vulnerable populations" OR "vulnerable population" OR disadvantaged

#2 "health insurance" or "health financing" or "medical insurance" or Medicaid or "medical scheme" or "medical schemes" or "community based health organization" or "community based health organizations" or "community-based health organizations" or "community health planning" or "community health finance organization" or "community health planning" or "community health finance organization" or "mutual health organizations" or "mutual health organizations" or "mutual health organizations" or "mutual health organizations" or "mutual health care" or "mutual health association" or "mutual health organizations" or "mutual health care" or "mutual health association" or "mutual health organizations" or "mutual health care" or "mutual health associations" or "cooperative medical scheme" or "cooperative medical schemes" or "cooperative medical schemes" or "cooperative medical schemes" or "cooperative medical schemes" or "prepaid health plan" or "prepaid health plans" or "prepayment plans" or "prepayment plan" or "prepayment plan" or "prepayment plans" or "third-party payer" or "third-party payers" or "third party payer" or "third party payer" or "third-party payers" or "third party payers" or "sickness insurance" or Medicare or Bluecross

#3 coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or "take part in" or "taking part in" or "took part in" or "taken part in" or "takes part in" or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering



#### #4 #1 AND #2 AND #3

### 22. PubMed (17/12/2007-01/11/2012, 2507 retrieved)

#1: child[MH] OR adolescent[MH] OR minors[MH] OR infant[MH] OR students[MH] OR child[TIAB] OR children[TIAB] OR adolescen\*[TIAB] OR minor[TIAB] OR minors[TIAB] OR infant[TIAB] OR infants[TIAB] OR students[TIAB] OR students[TIAB] OR kid[TIAB] OR kids[TIAB] OR teen\*[TIAB] OR youth[TIAB] OR youths[TIAB] OR juvenile[TIAB] OR juveniles[TIAB] OR newborn[TIAB] OR newborns[TIAB] OR newborns[TIAB] OR newborns[TIAB] OR memores[TIAB] OR "young people"[TIAB] OR "young person"[TIAB] OR "young persons"[TIAB] OR "school enrollments"[TIAB] OR "school enrollments"[TIAB]

#2: aged[MH] OR elderly[TIAB] OR aged[TIAB] OR "senior citizen"[TIAB] OR "senior citizens"[TIAB] OR senium[TIAB] OR "old people"[TIAB] OR female[TIAB] OR females[TIAB] OR women[MH] OR woman[TIAB] OR women[TIAB] OR poverty[MH] OR "the poor"[TIAB] OR indigen\*[TIAB] OR self-employed[TIAB] OR "informal sector"[TIAB] OR "informal sectors"[TIAB] OR indigen\*[TIAB] OR self-employed[TIAB] OR "informal sector"[TIAB] OR "informal sectors"[TIAB] OR "rural worker"[TIAB] OR unemployed[TIAB] OR rural population[MH] OR "rural population"[TIAB] OR "rural populations"[TIAB] OR "rural workers"[TIAB] OR "rural workers"[TIAB] OR "rural community"[TIAB] OR "rural society"[TIAB] OR "agricultural worker"[TIAB] OR "agricultural workers"[TIAB] OR "agricultural workers"[TIAB] OR "agricultural abors"[TIAB] OR "agricultural labor"[TIAB] OR "agricultural labors"[TIAB] OR farm workers"[TIAB] OR farm workers"[TIAB] OR farm workers"[TIAB] OR farmers[TIAB] OR farmworker[TIAB] OR farmworkers[TIAB] OR farmers[TIAB] OR farm workers"[TIAB] OR minority groups[MH] OR residential mobility[MH] OR emigration and immigration[MH] OR emigration[TIAB] OR "minority ethnic groups"[TIAB] OR "chronic patient"[TIAB] OR "chronic patients"[TIAB] OR "chronically sick"[TIAB] OR "long stay patients"[TIAB] OR "chronic patients"[TIAB] OR "long stay patients"[TIAB] OR "long stay patients"[TIAB] OR "long stay patients"[TIAB] OR "long term patients"[TIAB] OR "people with disability\*"[TIAB] OR "person with disability"[TIAB] OR "persons with disability"[TIAB] OR "populations"[TIAB] OR "persons with disability"[TIAB] OR "sensitive populations"[TIAB] OR "

### #3:#1 OR #2

#4 : financing, government[MH] OR insurance [MH] OR "health insurance"[TIAB] OR "health financing"[TIAB] OR "medical insurance"[TIAB] OR Medicaid[MH] OR Medicaid[TIAB] OR Medicare[MH] OR Medicare[TIAB] OR "medical scheme"[TIAB] OR "community based health organization"[TIAB] OR "community-based health organization"[TIAB] OR "community health finance organizations"[TIAB] OR "medical schemes"[TIAB] OR "community based health organizations"[TIAB] OR "medical schemes"[TIAB] OR "community based health organizations"[TIAB] OR "medical schemes"[TIAB] OR "community based health organizations"[TIAB] OR "community health finance organizations"[TIAB] OR "community financing"[TIAB] OR "community financing"[TIAB] OR "mutual health organizations"[TIAB] OR "mutual health organizations"[TIAB] OR "mutual health organizations"[TIAB] OR "mutual health care"[TIAB] OR "mutual health associations"[TIAB] OR "mutual health associations"[TIAB] OR "cooperative medical scheme"[TIAB] OR "cooperative medical schemes"[TIAB] OR "cooperative medical system"[TIAB] OR "cooperative medical systems"[TIAB] OR "prepayment insurance organizations"[TIAB] OR "cooperative medical systems"[TIAB] OR "prepayment government plans"[TIAB] OR "prepayment plans"[TIAB] OR "third-party payments"[TIAB] OR "third-party payers"[TIAB] OR "third party payers"[TIAB] OR "

#5 : coverage[TIAB] OR cover[TIAB] OR covering[TIAB] OR covered[TIAB] OR covers[TIAB] OR participat\*[TIAB] OR join[TIAB] OR joins[TIAB] OR joining[TIAB] OR joined[TIAB] OR enrol\*[TIAB] OR recruit\*[TIAB] OR membership[TIAB] OR memberships[TIAB] OR eligib\*[TIAB] OR entitl\*[TIAB] OR "take part in"[TIAB] OR "taking part in"[TIAB] OR "took part in"[TIAB] OR "taken part in"[TIAB] OR "takes part in"[TIAB] OR enter[TIAB] OR entering[TIAB] OR entered[TIAB] OR enters[TIAB] OR register[TIAB] OR registers[TIAB] OR registration[TIAB] OR registrations[TIAB] OR registered[TIAB] OR registering[TIAB]

### #6:#3 AND #4 AND #5

#7: randomized controlled trial[PT] OR random\*[TIAB] OR intervention\*[TIAB] OR control[TIAB] OR controll[TIAB] OR controls[TIAB] OR controls[TIAB] OR controlls[TIAB] OR controlls[TIAB] OR controlls[TIAB] OR controlld[TIAB] OR controlld[TIAB]

#8: "Animals" [MH] AND "Humans" [MH]

- #9: "Animals"[MH]
- #10:#9NOT#8
- #11: #7 NOT #10
- #12:#6 AND #11

#13: #12 AND ("2007/12/17"[PDAT]: "2012/07/10"[PDAT])



### 23. SSRN (01/11/2012, 65 retrieved)

## For children (04/06/2009 - 01/11/2012, 10 retrieved)

#1 Title, Abstract, Abstract ID & Keywords:(child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR "young people" OR "young person" OR "young persons" OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths) AND "health insurance"

#2 With The Exact Phrase:"medical insurance";"health financing"; Medicaid; Medicare; "medical scheme"; "medical schemes"; "community based health organization"; "community based health organizations"; "community based health organizations"; "community health planning";"community health finance organization"; "community health finance"; "mutual health organizations"; "community financing"; "community self-financing"; "mutual health organization"; "mutual health organizations"; "mutual health care"; "mutual health association"; "mutual health associations"; mutual health care"; "mutual health association"; "cooperative medical scheme"; "cooperative medical schemes"; "cooperative medical schemes"; "cooperative medical systems"; "prepayment plans"; "prepayment scheme"; "prepayment schemes"; "third-party payment"; "third-party payments"; "third-party payers"; "cost sharing"; "risk pooling"; "blue shield"; "blue cross"; "managed care program"; "managed care programs"; "sickness insurance"

### For others (the earliest collecting date - 01/11/2012, 55 retrieved)

#1 Title, Abstract, Abstract ID & Keywords: (aged OR elderly OR "senior citizen" OR "senior citizens" OR senium OR "old people" OR female OR females OR women OR woman OR poverty OR "the poor" OR indigene or indigence OR self-employed OR "informal sector" OR "informal sectors" OR low-income OR unemployed OR "rural population" OR "rural populations" OR "rural worker" OR "rural workers" OR "agricultural workers" OR "agricultural labors" OR "agricultural labors" OR "agricultural labors" OR agrarian OR "farm worker" OR "farm workers" OR farmer OR farmers OR farmworker OR farmworkers OR "minority groups" OR "residential mobility" OR emigration OR immigration OR emigrant OR immigrant OR emigrants OR immigrants OR "minority ethnic group" OR "long stay patients" OR "long term patient" OR "long term patients" OR "disabled persons" OR handicapped OR "disabled person" OR "people with disability" OR "person with disability" OR "persons with disability" OR "vulnerable populations" OR "vulnerable population" OR disadvantaged) AND "health insurance"

#2 With The Exact Phrase:"medical insurance";"health financing"; Medicaid; Medicare; "medical scheme"; "medical schemes"; "community based health organization"; "community based health organizations"; "community based health organizations"; "community health planning";"community health finance organization"; "community health finance,"; "mutual health organizations"; "community financing"; "community self-financing"; "mutual health organization"; "mutual health organizations"; "mutual health care"; "mutual health association"; "mutual health associations"; mutual health care"; "mutual health association"; "cooperative medical scheme"; "cooperative medical schemes"; "cooperative medical schemes"; "cooperative medical systems"; "cooperative medical schemes"; "prepayment plans"; "prepayment plans"; "prepayment schemes"; "third-party payment"; "third-party payments"; "third-party payers"; "cost sharing"; "risk pooling"; "blue shield"; "blue cross"; "managed care program"; "managed care programs"; "sickness insurance"

# 24. Thai Index Medicus (01/11/2012, 0 retrieved)

# For children (01/01/2010 - 01/11/2012, 0 retrieved)

#1 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths): Keywords (All)

#2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): Keywords (All)

#3 #1 AND #2



### For others (the earliest collecting date - 01/11/2012.6, 0 retrieved)

#1(aged OR elderly OR senior citizen OR senior citizens OR senium OR old people OR female OR females OR women OR woman OR poverty OR the poor OR indigen OR indigene OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society OR agricultural worker OR agricultural worker OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmer OR farmers OR farmworker OR farmority groups OR residential mobility OR emigration immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups OR chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR disabled persons OR handicapped OR disabled person OR people with disability OR person with disability OR persons with disability OR vulnerable populations OR vulnerable populations OR vulnerable population OR disadvantaged): Keywords (All)

#2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): Keywords (All)

#### #3 #1 AND #2

## 25. WHOLIS (04/01/2008-01/11/2012, 4 retrieved)

#1 Subject (child OR adolescent OR minors OR infant OR students OR aged OR female OR women OR poverty OR rural population OR minority groups OR residential mobility OR emigration and immigration OR disabled persons OR vulnerable populations) OR Title (child\$ OR adolescent\$ OR minor\$ OR infant\$ OR student\$ OR kid\$ OR teenager\$ OR teen\$ OR youth\$ OR juvenile\$ OR newborn\$ OR neonate\$ OR 'young people' OR 'young person\$' OR elderly OR aged OR 'senior citizen\$' OR senium OR 'old people' OR female\$ OR wom?n OR 'the poor' OR indigen\$ OR self-employed OR 'informal sector\$' OR low-income OR unemployed OR 'rural population\$' OR 'rural worker\$' OR 'rural community' OR 'rural society' OR 'agricultural worker\$' OR 'agricultural labor\$' OR agrarian OR 'farm worker\$' OR farmworker \$ OR emigration OR immigration OR emigrant\$ OR immigrant\$ OR 'minority ethnic group\$' OR 'chronic patient\$' OR 'chronically ill' OR 'chronically sick' OR 'long stay patient\$' OR 'long term patient\$' OR handicapped OR 'disabled person\$' OR 'people with disability\$' OR 'person? with disability' OR 'vulnerable population\$' OR disadvantaged) OR Words or Phrase (child\$ OR adolescent\$ OR minor\$ OR infant \$ OR student\$ OR kid\$ OR teenager\$ OR teen\$ OR youth\$ OR juvenile\$ OR newborn\$ OR neonate\$ OR 'young people' OR 'young person\$' OR elderly OR aged OR 'senior citizen\$' OR senium OR 'old people' OR female\$ OR wom?n OR 'the poor' OR indigen\$ OR self-employed OR 'informal sector\$' OR low-income OR unemployed OR 'rural population\$' OR 'rural worker\$' OR 'rural workers' OR 'rural community' OR 'rural society' OR 'agricultural worker\$' OR 'agricultural labor\$' OR agrarian OR 'farm worker\$' OR farmer\$ OR farmworker\$ OR emigration OR immigration OR emigrant\$ OR immigrant\$ OR 'minority ethnic group\$' OR 'chronic patient\$' OR 'chronically ill' OR 'chronically sick' OR 'long stay patient\$' OR 'long term patient\$' OR handicapped OR 'disabled person\$' OR 'people with disability\$' OR 'person\$ with disability' OR 'vulnerable population\$' OR disadvantaged)

#2 Subject (financing, government OR insurance OR Medicare) OR Title ('health insurance' OR 'health financing' OR 'medical insurance' OR Medicaid OR Medicare OR 'medical scheme\$' OR 'community based health organization\$' OR 'community-based health organization \$' OR 'community health planning' OR 'community health finance organization\$' OR 'community financing' OR 'community self-financing' OR 'mutual health organization\$' OR 'mutual health care' OR 'mutual health care' OR 'mutual health care' OR 'prepayment insurance organization\$' OR 'cooperative medical scheme\$' OR 'cooperative medical system\$' OR 'prepaid health care' OR 'prepaid health plan\$' OR 'prepayment plan\$' OR 'prepayment scheme\$' OR 'third-party pay\$' OR 'third party pay\$' OR 'cost sharing' OR 'risk pooling' OR 'blue shield' OR 'blue cross' OR 'managed care program\$' OR 'sickness insurance') OR Words or Phrase ('health insurance' OR 'health financing' OR 'medical insurance' OR Medicaid OR Medicare OR 'medical scheme\$' OR 'community health finance organization\$' OR 'community based health organization\$' OR 'community-based health organization\$' OR 'community health planning' OR 'community based health organization\$' OR 'community-based health organization\$' OR 'community health planning' OR 'community health finance organization\$' OR 'community financing' OR 'community self-financing' OR 'mutual health organization\$' OR 'cooperative medical scheme\$' OR 'mutual health care' OR 'mutual health association\$' OR mutuelles OR 'prepayment insurance organization\$' OR 'cooperative medical scheme\$' OR 'mutual health care' OR 'prepaid health care'

#3 Publication year: 2008.01.04-present

#4 #1 AND #2 AND #3

#### 26. World Bank(28/12/2007-02/11/2012, 186 retrieved)



#1 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) AND (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#2 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) AND (community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registrations or registered or registering)

#3 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) AND (mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registration or registrations or registered or registering)

#4 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) AND (cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or thirdparty payer) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#5 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) AND (third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registrations or registered or registering)

#6 (agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmers OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration and immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups) AND (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#7 (agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmer OR farms OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration and immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups) AND (community-based health organizations or community health planning or community health finance organization or community health finance organizations or community self-financing or mutual health organization or mutual health organizations) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registrations or registered or registering)

#8 (agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmers OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration and immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups) AND (mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system) AND (coverage or cover or



covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#9 (agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmers OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration and immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups) AND (cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#10 (agricultural worker OR agricultural workers OR agricultural labor OR agricultural labors OR agrarian OR farm worker OR farm workers OR farmer OR farmer OR farmworker OR farmworkers OR minority groups OR residential mobility OR emigration and immigration OR emigrant OR immigrant OR emigrants OR immigrants OR minority ethnic group OR minority ethnic groups) AND (third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cover or covering or risk pooling or blue shield or managed care programs or managed care program or sickness insurance) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registered or registering)

#11 (aged OR elderly OR senior citizen OR senior citizens OR senium OR old people ORfemale OR females OR women OR women OR poverty OR the poor OR indigen\* OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society) AND (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#12 (aged OR elderly OR senior citizen OR senior citizens OR senium OR old people ORfemale OR females OR women OR women OR poverty OR the poor OR indigen\* OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society) AND (community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#13 (aged OR elderly OR senior citizen OR senior citizens OR senium OR old people ORfemale OR females OR women OR women OR poverty OR the poor OR indigen\* OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society) AND (mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#14 (aged OR elderly OR senior citizen OR senior citizens OR senium OR old people ORfemale OR females OR women OR women OR poverty OR the poor OR indigen\* OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society) AND (cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#15 (aged OR elderly OR senior citizen OR senior citizens OR senium OR old people ORfemale OR females OR women OR women OR poverty OR the poor OR indigen\* OR self-employed OR informal sector OR informal sectors OR low-income OR unemployed OR rural population OR rural population OR rural populations OR rural worker OR rural workers OR rural community OR rural society) AND (third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance) AND (coverage or cover or covering or covered



or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#16 (chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR vulnerable populations OR vulnerable population OR vulnerable populations OR disadvantaged) AND (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#17 (chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR vulnerable populations OR vulnerable population OR vulnerable populations OR disadvantaged) AND (community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#18 (chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR vulnerable populations OR vulnerable population OR vulnerable populations OR disadvantaged) AND (mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#19 (chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR vulnerable populations OR vulnerable population OR vulnerable populations OR disadvantaged) AND (cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or registers or registration or registered or registering)

#20 (chronic patient OR chronic patients OR chronically ill OR chronically sick OR long stay patient OR long stay patients OR long term patient OR long term patients OR vulnerable populations OR vulnerable population OR vulnerable populations OR disadvantaged) AND (third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#21 (disabled persons OR handicapped OR disabled person OR disabled persons OR people with disability\* OR person with disability OR persons with disability) AND (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#22 (disabled persons OR handicapped OR disabled person OR disabled persons OR people with disability\* OR person with disability OR persons with disability) AND (community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#23 (disabled persons OR handicapped OR disabled person OR disabled persons OR people with disability\* OR person with disability OR persons with disability) AND (mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organizations or cooperative medical scheme or cooperative medical system) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or

Strategies for expanding health insurance coverage in vulnerable populations (Review)

Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or entered or entered or register or registers or registration or registrations or registered or registering)

#24 (disabled persons OR handicapped OR disabled person OR disabled persons OR people with disability\* OR person with disability OR persons with disability) AND (cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#25 (disabled persons OR handicapped OR disabled person OR disabled persons OR people with disability\* OR person with disability OR persons with disability) AND (third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance) AND (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registration or registrations or registered or registering)

# 27. WanFang (01/01/2008-03/11/2012, 456 retrieved)

#1 Subject:(弱势群体+儿童+青少年+青年+少年+婴幼儿+婴儿+幼儿+新生儿+未成年+老年人+妇女+穷人+贫困人口+贫困人群+个体经 营者+自由职业者

+非正式行业+低收入者+低收入人群+低收入人口+失业者+失业人群+失业人口+农村人口+乡村人口+农村居民+乡村居民+农民+农民 工+少数民族+移民人口

+移民人群+迁居人口+移居人口+流动人口+慢性病患者+慢性病病人+长期卧床患者+长期卧床病人+久病患者+残疾人+脆弱人群)

#2 Subject:(健康保险+医疗保险+疾病保险+医疗保障+社会保险+卫生筹资+医疗补助+医疗救助+社区卫生+社区卫生筹资机构+社区 筹资+预付式保险+互助医疗

+合作医疗+第三方支付+费用分摊+风险分摊+蓝盾保险+新型农村合作医疗制度+养老保险制度)

#3 Subject:(覆盖+加入+参加+登记+注册+参保)

#4 Subject:(干预+控制+评估)

#51\*2\*3\*4\*5

# 28. China National Knowledge Infrastructure (CHKD-CNKI) (01/01/2008-02/11/2012, 130 retrieved)

(SU=儿童 OR SU=青少年 OR SU=青年 OR SU=少年 OR SU=婴幼儿 OR SU=婴儿 OR SU=幼儿 OR SU=新生儿 OR SU=学生 OR SU=未成年 OR SU=老年人

OR SU=妇女 OR SU=穷人 OR SU=贫困 OR SU=个体经营 OR SU=自由职业 OR SU=非正式行业 OR SU=低收入 OR SU=失业 OR SU=农村 OR SU=乡村 OR SU=农民

OR SU=农民工 OR SU=少数民族 OR SU=移民 OR SU=迁居 OR SU=移居 OR SU=流动人口 OR SU=流动人群 OR SU=慢性病 OR SU=长期卧床 OR SU=久病患者

OR SU=残疾人 OR SU=脆弱人群 OR SU=弱势群体) AND (SU=健康保险 OR SU=医疗保险 OR SU=疾病保险 OR SU=医疗保障 OR SU=社会 保险 OR SU=卫生筹资

OR SU=医疗补助 OR SU=医疗救助 OR SU=社区卫生 OR SU=社区卫生筹资机构 OR SU=社区筹资 OR SU=预付式保险 OR SU=互助医疗 OR SU=合作医疗

OR SU=第三方支付 OR SU=费用分摊 OR SU=风险分摊 OR SU=蓝盾保险 OR SU=新型农村合作医疗制度 OR SU=养老保险制度) AND (SU= 覆盖 OR SU=加入 OR SU=参加 OR SU=登记 OR SU=注册 OR SU=参保) AND (SU=干预 OR SU=控制 OR SU=评估) AND YE=2008-2012

#### Appendix 2. Search strategies for the previous review (Meng 2010b)

### SEARCH STRATEGIES

### 1. EPOC Register (CENTRAL, Cochrane Library ) (30 June 2009, 94 retrieved)

#1 MeSH descriptor Child explode all trees

#2 MeSH descriptor Infant explode all trees

Strategies for expanding health insurance coverage in vulnerable populations (Review) Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



#3 MeSH descriptor Minors, this term only

#4 MeSH descriptor Adolescent, this term only

#5 (child or children or adolescent\* or kid\* or infant\* or minor\* or young NEXT people or young NEXT person\* or teenager\* or teen\*):ti,ab

#6 (#1 OR #2 OR #3 OR #4 OR #5)

#7 MeSH descriptor Insurance explode all trees

#8 MeSH descriptor Medically Uninsured, this term only

#9 MeSH descriptor National Health Programs explode all trees

#10 MeSH descriptor Medicare explode all trees

#11 (health\* NEAR/3 insur\* or medical\* NEAR/3 insur\* or uninsur\* or medicare or medicaid or insur\* NEAR/3 program\* or (cost NEXT cover\*) NEAR/3 program\* or (cost NEXT recover\*) NEAR/3 program\* or reimburs\* NEAR/3 program\*):ti,ab

#12 (#7 OR #8 OR #9 OR #10 OR #11)

#13 (#6 AND #12)

#14 (sr-epoc)

#15 (#13 AND #14)

### 2. CENTRAL (2 April 2009, 192 retrieved)

#1 exp child/ or exp adolescent/ or exp minors/ or exp infant/ or exp students/ or (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or 'young people' or 'young person' or 'young persons' or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths).ti,ab.

#2 exp financing, government/ or exp insurance/ or ('health insurance' or 'health financing' or 'medical insurance' or Medicaid or 'medical scheme' or 'medical schemes' or 'community based health organization' or 'community based health organizations' or 'community based health organizations' or 'community health finance organizations' or 'community financing' or 'community self-financing' or 'mutual health organizations' or 'mutual health organizations' or 'mutual health care' or 'mutual health association' or 'mutual health associations' or 'mutual health associations' or 'cooperative medical scheme' or 'prepayment insurance organization' or 'prepayment insurance organizations' or 'cooperative medical scheme' or 'cooperative medical system' or 'cooperative medical systems' or 'prepaid health care' or 'prepaid health plan' or 'prepayment plan' or 'prepayment plans' or 'prepayment scheme' or 'prepayment schemes' or 'third-party payers' or 'third party payment' or 'third party payers' or 'third party payers' or 'blue shield' or 'managed care programs' or 'man

#3 (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or 'take part in' or 'taking part in' or 'took part in' or 'taken part in' or 'takes part in' or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering).ti,ab.

#4 1 and 2 and 3

3. PubMed (26 January 2010, 2098 retrieved)

#1 child[MH]

#2 adolescent[MH]

#3 minors[MH]

#4 infant[MH]

#5 students[MH]

#6 child[TIAB] OR children[TIAB]

#7 adolescent[TIAB] OR adolescents[TIAB]

Strategies for expanding health insurance coverage in vulnerable populations (Review)

Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



#8 minor[TIAB] OR minors[TIAB]

#9 infant[TIAB] OR infants[TIAB]

#10 student[TIAB] OR students[TIAB]

- #11 kid[TIAB] OR kids[TIAB]
- #12 teenager[TIAB] OR teenagers[TIAB]
- #13 teen[TIAB] OR teens[TIAB]
- #14 youth[TIAB] OR youths[TIAB]
- #15 juvenile[TIAB] OR juveniles[TIAB]
- #16 newborn[TIAB] OR newborns[TIAB]
- #17 neonate[TIAB] OR neonates[TIAB]
- #18 "young people"[TIAB]
- #19 "young person"[TIAB] OR "young persons"[TIAB]

#20 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19

- #21 financing, government[MH]
- #22 insurance[MH]
- #23 "health insurance"[TIAB]
- #24 "health financing"[TIAB]
- #25 "medical insurance"[TIAB]
- #26 Medicaid[TIAB]
- #27 "medical scheme"[TIAB] OR "medical schemes"[TIAB]
- #28 "community based health organization" [TIAB] OR "community based health organizations" [TIAB]
- #29 "community-based health organization" [TIAB] OR "community-based health organizations" [TIAB]
- #30 "community health planning"[TIAB]
- #31 "community health finance organization" [TIAB] OR "community health finance organizations" [TIAB]
- #32 "community financing"[TIAB]
- #33 "community self-financing"[TIAB]
- #34 "mutual health organization" [TIAB] OR "mutual health organizations" [TIAB]
- #35 "mutual health care"[TIAB]
- #36 "mutual health association" [TIAB] OR "mutual health associations" [TIAB]
- #37 mutuelles[TIAB]
- #38 "prepayment insurance organization" [TIAB] OR "prepayment insurance organizations" [TIAB]
- #39 "cooperative medical scheme" [TIAB] OR "cooperative medical schemes" [TIAB]
- #40 "cooperative medical system" [TIAB] OR "cooperative medical systems" [TIAB]
- #41 "prepaid health care"[TIAB]
- #42 "prepaid health plans" [TIAB] OR "prepaid health plan" [TIAB]



#43 "prepayment plan"[TIAB] OR "prepayment plans"[TIAB]

- #44 "prepayment scheme"[TIAB] OR "prepayment schemes"[TIAB]
- #45 "third-party payment" [TIAB] OR "third-party payer" [TIAB] OR "third party payment" [TIAB] OR "third party payer" [TIAB]
- #46 "third-party payments" [TIAB] OR "third-party payers" [TIAB] OR "third party payments" [TIAB] OR "third party payers" [TIAB]
- #47 "cost sharing"[TIAB] OR "risk pooling"[TIAB]
- #48 "blue shield"[TIAB]
- #49 "managed care programs"[TIAB] OR "managed care program"[TIAB]
- #50 "sickness insurance"[TIAB]

#51 #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50

- #52 coverage[TIAB] OR cover[TIAB] OR covering[TIAB] OR covered[TIAB] OR covers[TIAB]
- #53 participat\*[TIAB]
- #54 join[TIAB] OR joins[TIAB] OR joining[TIAB] OR joined[TIAB]
- #55 enrol\*[TIAB]
- #56 recruit\*[TIAB]
- #57 membership[TIAB] OR memberships[TIAB]
- #58 eligib\*[TIAB]
- #59 entitl\*[TIAB]
- #60 "take part in"[TIAB] OR "taking part in"[TIAB] OR "took part in"[TIAB] OR "taken part in"[TIAB] OR "takes part in"[TIAB]
- #61 enter[TIAB] OR entering[TIAB] OR entered[TIAB] OR enters[TIAB]
- #62 register[TIAB] OR registers[TIAB] OR registration[TIAB] OR registrations[TIAB] OR registered[TIAB] OR registering[TIAB]
- #63 #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62
- #64 #20 AND #51 AND #63

#65 randomized controlled trial[PT] OR random\*[TIAB] OR intervention\*[TIAB] OR control[TIAB] OR controls[TIAB] OR controls[TIAB] OR controls[TIAB] OR controls[TIAB] OR controlls[TIAB] OR controlls[TIAB] OR controlls[TIAB] OR controlld[TIAB] OR controlld[TIAB]

#66 "Animals" [MH] NOT ("Animals" [MH] AND "Humans" [MH])

#67 #65 NOT #66

#68 #64 AND #67

4. EMBASE (1 April 2009, 1877 retrieved)

#1 exp child/ OR exp adolescent/ OR exp newborn/ OR exp student/ OR (child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR 'young people' OR 'young person' OR 'young persons' OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths).ti,ab.

#2 exp insurance/ OR ('health insurance' OR 'health financing' OR 'medical insurance' OR Medicaid OR 'medical scheme' OR 'medical schemes' OR 'community based health organization' OR 'community based health organization' OR 'community based health organizations' OR 'community health finance organization' OR 'community financing' OR 'community self-financing' OR 'mutual health organization' OR 'mutual health organization' OR 'mutual health organization' OR 'mutual health organizations' OR 'mutual health care' OR 'mutual health care' OR 'mutual health organizations' OR 'cooperative medical scheme' OR 'cooperative medical systems' OR 'prepaid health care' OR 'prepaid health plans' OR 'prep



health plan' OR 'prepayment plan' OR 'prepayment plans' OR 'prepayment scheme' OR 'prepayment schemes' OR 'third-party payment' OR 'third-party payer' OR 'third-party payer' OR 'third-party payers' OR 'third party payers'

#3 (coverage OR cover OR covering OR covered OR covers OR "participat\*" OR join OR joins OR joining OR joined OR "enrol\*" OR "recruit\*" OR membership OR memberships OR "eligib\*" OR "entitl\*" OR 'take part in' OR 'taking part in' OR 'took part in' OR 'taken part in' OR 'takes part in' OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering).ti,ab.

#4 Randomized controlled trial/ OR (random\$ OR experiment\$ OR (time adj series) OR pre test OR pretest OR post test OR posttest OR impact OR intervention\$ OR chang\$ OR evaluat\$ OR effect? OR compar\$ OR control\$).tw.

#5 #4 NOT Nonhuman/

#6 #1AND #2 AND #3 AND #5

# 5. PsycINFO (2 April 2009, 481 retrieved)

1 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or "young people" or "young person" or "young persons" or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths):Keywords OR (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or "young people" or "young persons" or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths):Keywords OR (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or "young people" or "young person" or "young persons" or teenagers or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths):Abstract

2 ("health insurance" or "health financing" or "medical insurance" or Medicaid or "medical scheme" or "medical schemes" or "community based health organization" or "community based health organizations" or "community-based health organization" or "communitybased health organizations" or "community health planning" or "community health finance organization" or "community health finance organizations" or "community financing" or "community self-financing" or "mutual health organization" or "mutual health organizations" or "mutual health care" or "mutual health association" or "mutual health associations" or mutuelles or "prepayment insurance organization" or "prepayment insurance organizations" or "cooperative medical scheme" or "cooperative medical schemes" or "cooperative medical system" or "cooperative medical systems" or "prepaid health care" or "prepaid health plans" or "prepaid health plan" or "prepayment plan" or "prepayment plans" or "prepayment scheme" or "prepayment schemes" or "third-party payment" or "thirdparty payer" or "third party payment" or "third party payer" or "third-party payments" or "third-party payers" or "third party payments" or "third party payers" or "cost sharing" or "risk pooling" or "blue shield" or "managed care programs" or "managed care program" or "sickness insurance"):Keywords OR ("health insurance" or "health financing" or "medical insurance" or Medicaid or "medical scheme" or "medical schemes" or "community based health organization" or "community based health organizations" or "community-based health organization" or "community-based health organizations" or "community health planning" or "community health finance organization" or "community health finance organizations" or "community financing" or "community self-financing" or "mutual health organization" or "mutual health organizations" or "mutual health care" or "mutual health association" or "mutual health associations" or mutuelles or "prepayment insurance organization" or "prepayment insurance organizations" or "cooperative medical scheme" or "cooperative medical schemes" or "cooperative medical system" or "cooperative medical systems" or "prepaid health care" or "prepaid health plans" or "prepaid health plan" or "prepayment plan" or "prepayment plans" or "prepayment scheme" or "prepayment schemes" or "third-party payment" or "third-party payer" or "third party payment" or "third party payer" or "third-party payments" or "third-party payers" or "third party payments" or "third party payers" or "cost sharing" or "risk pooling" or "blue shield" or "managed care programs" or "managed care program" or "sickness insurance"):Abstract

3 (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or "take part in" or "taking part in" or "took part in" or "taken part in" or "takes part in" or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering):Keywords OR (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or memberships or eligib\* or entitl\* or "take part in" or "took part in" or "taken part in" or "takes part in" or enter or entered or enters or registers or registrations or registered or registering):Keywords OR (coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or memberships or eligib\* or entitl\* or "take part in" or "took part in" or "taken part in" or "takes part in" or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering):Abstract

#### 4 1 and 2 and 3

# 6. ERIC (2 April 2009, 887 retrieved)

1 KW=(child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths)

2 KW=(health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community-based health organization or community-based health

organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance)

3 KW=(coverage or cover or covering or covered or covers or participat\* or join or joins or joining or joined or enrol\* or recruit\* or membership or memberships or eligib\* or entitl\* or take part in or taking part in or took part in or taken part in or takes part in or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

4 1 and 2 and 3

### 7. PAIS (2 April 2009, 373 retrieved)

#1 KW=child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles? OR newborn OR newborns OR neonate OR neonates OR young people OR young person OR young persons

#2 KW=health insurance OR health financing OR medical insurance OR Medicaid OR medical scheme OR medical schemes OR community based health organization OR community based health organizations OR community-based health organization OR community based health organizations OR community health planning OR community health finance organization OR mutual health finance organizations OR community financing OR community self-financing OR mutual health organization OR mutual health organizations OR mutual health care OR mutual health association OR mutual health associations OR mutuelles OR prepayment insurance organization OR prepayment insurance organizations OR cooperative medical scheme OR cooperative medical schemes OR cooperative medical system OR cooperative medical systems OR prepaid health care OR prepaid health plan OR prepaid health plans OR prepayment plan OR prepayment plans OR prepayment scheme OR prepayment schemes OR third-party payment OR third party payer OR third party payment OR third party payer OR third-party payments OR third-party payers OR third party payers OR cost sharing OR risk pooling OR blue shield OR managed care program OR managed care programs OR sickness insurance

#3 KW=coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR take part in OR taking part in OR took part in OR taken part in OR takes part in OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering

#### #4 #1 AND #2 AND #3

#### 8. IBSS (2 April 2009, 82 retrieved)

#1 exp adolescents/ OR exp students/ OR exp children/ OR exp youth/ OR exp adolescence/ OR (child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR young people OR young person OR young persons OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths).ab,ti.

#2 exp insurance/ OR (health insurance OR health financing OR medical insurance OR Medicaid OR medical scheme OR medical schemes OR community based health organization OR community based health organizations OR community-based health organization OR community-based health organizations OR community health planning OR community health finance organization OR community health finance organizations OR community financing OR community self-financing OR mutual health organization OR mutual health organizations OR mutual health care OR mutual health association OR mutual health associations OR mutuelles OR prepayment insurance Organization OR prepayment insurance organizations OR cooperative medical scheme OR cooperative medical schemes OR cooperative medical system OR cooperative medical systems OR prepaid health care OR prepaid health plans OR prepaid health plan OR prepayment plan OR prepayment plans OR prepayment scheme OR prepayment schemes OR third-party payer OR third party payment OR third party payer OR third-party payments OR third-party payers OR cost sharing OR risk pooling OR blue shield OR managed care programs OR managed care program OR sickness insurance) .ab,ti.

#3 (coverage OR cover OR covering OR covered OR covers OR "participat\*" OR join OR joins OR joining OR joined OR "enrol\*" OR "recruit\*" OR membership OR memberships OR "eligib\*" OR "entitl\*" OR take part in OR taking part in OR took part in OR taken part in OR takes part in OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registered OR registering ).ab,ti.

# #4 #1 AND #2 AND #3

9. WHOLIS (6 April 2009, 15 retrieved)

1 subject "child OR adolescent OR minors OR infant OR students" OR title "child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR 'young people' OR 'young person' OR 'young persons'" OR words or phrase "child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonate OR juveniles OR newborn OR newborns OR neonate OR youth OR youths OR juveniles OR newborn OR newborns OR neonate OR neonate OR juveniles OR newborn OR newborns OR neonate OR neonate OR juveniles OR newborn OR newborns OR neonate OR youth OR youths OR juveniles OR newborn OR newborns OR neonate OR neonate OR juveniles OR newborn OR newborns OR neonate OR neonate OR is the teenager OR teenager OR teenager OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juveniles OR newborn OR newborns OR neonate OR neonate OR is the teenager OR teenager OR teenager OR teenager OR teenager OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juveniles OR newborn OR newborns OR neonate OR neonate OR is the teenager OR teenage

2 subject "financing, government OR insurance " OR title "'health insurance' OR 'health financing'OR 'medical insurance' OR Medicaid OR 'medical scheme' OR 'medical schemes' OR 'community based health organization' OR 'community based health organizations' OR 'community-based health organization' OR 'community-based health organizations' OR 'community health planning' OR 'community health finance organization' OR 'community health finance organizations' OR 'community financing' OR 'community self-financing' OR 'mutual health organization' OR 'mutual health organizations' OR 'mutual health care' OR 'mutual health association' OR 'mutual health associations' OR mutuelles OR 'prepayment insurance organization' OR 'prepayment insurance organizations' OR 'cooperative medical scheme' OR 'cooperative medical schemes' OR 'cooperative medical system' OR 'cooperative medical systems' OR 'prepaid health care' OR 'prepaid health plan' OR 'prepaid health plans' OR 'prepayment plan' OR 'prepayment plans' OR 'prepayment scheme' OR 'prepayment schemes' OR 'third-party payment' OR 'third-party payer' OR 'third party payment' OR 'third party payments' OR 'third-party payers' OR 'third party payments' OR 'third party payers' OR 'cost sharing' OR 'risk pooling' OR 'blue shield' OR 'managed care program' OR 'managed care programs' OR 'sickness insurance'" OR words or phrase "'health insurance' OR 'health financing'OR 'medical insurance' OR Medicaid OR 'medical scheme' OR 'medical schemes' OR 'community based health organization' OR 'community based health organizations' OR 'community-based health organization' OR 'community-based health organizations' OR 'community health planning' OR 'community health finance organization' OR 'community health finance organizations' OR 'community financing' OR 'community self-financing' OR 'mutual health organization' OR 'mutual health organizations' OR 'mutual health care' OR 'mutual health association' OR 'mutual health associations' OR mutuelles OR 'prepayment insurance organization' OR 'prepayment insurance organizations' OR 'cooperative medical scheme' OR 'cooperative medical schemes' OR 'cooperative medical system' OR 'cooperative medical systems' OR 'prepaid health care' OR 'prepaid health plan' OR 'prepaid health plans' OR 'prepayment plan' OR 'prepayment plans' OR 'prepayment scheme' OR 'prepayment schemes' OR 'third-party payment' OR 'third-party payer' OR 'third party payment' OR 'third party payer' OR 'third-party payments' OR 'third-party payers' OR 'third party payments' OR 'third party payers' OR 'cost sharing' OR 'risk pooling' OR 'blue shield' OR 'managed care program' OR 'managed care programs' OR 'sickness insurance' "

# 31 AND 2

# 10. Global Health (3 April 2009, 472 retrieved)

1 exp children/ OR exp adolescents/ OR exp infants/ OR exp students/ OR exp youth/ OR (child or children or adolescent or adolescents or minor or minors or infant or infants or student or students or kid or kids or teenager or teenagers or teen or teens or youth or youths or juvenile or juveniles or newborn or newborns or neonate or neonates or young people or young person or young persons).ti,ab.

2 exp insurance/ OR exp health insurance/ OR exp third party payments/ OR (health insurance OR health financing OR medical insurance OR Medicaid OR medical scheme OR medical schemes OR community based health organization OR community based health organizations OR community based health organization OR community health planning OR community health finance organization OR community health finance organizations OR community financing OR community self-financing OR mutual health organization OR mutual health organizations OR mutual health association OR mutual health associations OR prepayment insurance organizations OR cooperative medical system OR cooperative medical systems OR prepayment scheme OR prepaid health plan OR prepayment plan OR prepayment plans OR prepayment plans OR prepayment oR third party payer OR third-party payers OR third-party payers OR third party payments OR third-party payers OR cost sharing OR risk pooling OR blue shield OR managed care program OR managed care programs OR sickness insurance).ti,ab.

3 (coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR take part in OR taking part in OR took part in OR taken part in OR takes part in OR enter OR entering OR entered OR enters OR register OR registers OR registration OR registrations OR registered OR registering).ti,ab.

### 4 1 AND 2 AND 3

# 11. World Bank - Documents & Reports (11 April 2009, 22 retrieved)

With the exact phrase: health insurance; health financing; medical insurance; Medicaid ; medical scheme ; community based health organization; community health planning; community health finance organization; community financing; community self-financing; mutual health organization; mutual health care ; mutual health association; mutuelles; prepayment insurance organization; cooperative medical scheme; cooperative medical system; prepaid health care; prepaid health plan; prepayment plan; prepayment scheme; third-party payment; third-party payer; third party payment; third party payer; cost sharing; risk pooling; blue shield; managed care program ; sickness insurance



### 12. Popline (6 April 2009, 652 retrieved)

SUBJECT: (child / children / adolescent / adolescents / kid / kids / infant / infants / juvenile / juveniles / newborn / newborns / student / students / young people / young person / young persons / teenager / teenagers / teen / teens / minor / minors / neonate / neonates / youth / youths) & (health insurance / health financing / medical insurance / Medicaid /? medical scheme / medical schemes / community based health organization / community based health organizations / community-based health organization / community based health planning / community health finance organization / community health financing / mutual health organization / community health finance organizations / community financing / community self-financing / mutual health organization / mutual health organizations / mutual health care / mutual health association / mutual health associations / mutuelles / prepayment insurance organization / prepayment insurance organizations / cooperative medical scheme / cooperative medical schemes / cooperative medical scheme / prepayment plan / prepayment plan / prepayment scheme / prepayment scheme / prepayment schemes / third-party payment / third party payers / third party payment / third party payers / covering / covered / covers / participat\* / join / joins / joining / joined / enrol\* / recruit\* / memberships / eligib\* / entitl\* / take part in /? taking part in / took part in / taken part in / takes part in / enter / entering / entered / enters / registers / registers / registers / registered / registering)

### 13. JSTOR (4 April 2009, 207 retrieved)

1 (ti:(child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young people" OR "young person" OR "young persons") OR ab:(child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborn OR newborns OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young people" OR "young person" OR "young persons"))

2 (ti:(insurance OR "health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "thirdparty payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "managed care program" OR "managed care programs" OR "sickness insurance") OR ab:( insurance OR "health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "managed care program" OR "managed care programs" OR "sickness insurance"))

3 (ti:( coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "taken part in" OR "taken part in" OR enter OR entered OR entered OR register\* OR registration OR registrations) OR ab:( coverage OR cover OR covering OR covered OR covers OR participat\* OR joining OR joined OR enrol\* OR recruit\* OR memberships OR eligib\* OR entitl\* OR join OR joining OR joining OR participat\* OR register\* OR registration OR registrations) OR ab:( coverage OR cover OR covering OR covered OR covers OR participat\* OR join OR joining OR joining OR joined OR enrol\* OR recruit\* OR membership OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR enter OR entering OR entered OR entered OR enters OR registrations))

### 4 1 AND 2 AND 3

### 14. EconLit (3 April 2009, 213 retrieved)

#1 KW=(child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or 'young people' or 'young person' or 'young persons' or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths)

#2 KW=('health insurance' or 'health financing' or 'medical insurance' or Medicaid or 'medical scheme' or 'medical schemes' or 'community based health organization' or 'community based health organizations' or 'community-based health organization' or 'community-based health organiza

based health organizations' or 'community health planning' or 'community health finance organization' or 'community financing' or 'community self-financing' or 'mutual health organization' or 'mutual health organizations' or 'mutual health association' or 'mutual health associations' or 'mutual health care' or 'mutual health association' or 'mutual health associations' or 'mutual health care' or 'mutual health association' or 'mutual health associations' or 'mutual health care' or 'mutual health associations' or 'cooperative medical scheme' or 'cooperative medical schemes' or 'cooperative medical system' or 'cooperative medical scheme' or 'prepayment plans' or 'prepayment plan' or 'prepayment plans' or 'prepayment scheme' or 'prepayment schemes' or 'third-party payment' or 'third-party payer' or 'third-party payments' or 'third-party payers' or 'third party payers' or 'third party payers' or 'cost sharing' or 'risk pooling' or 'blue shield' or 'managed care programs' or 'managed care program' or 'sickness insurance')

#3 KW=(coverage or cover or covering or covered or covers or "participat\*" or join or joins or joining or joined or "enrol\*" or "recruit\*" or membership or memberships or "eligib\*" or "entitl\*" or 'take part in' or 'taking part in' or 'took part in' or 'taken part in' or 'takes part in' or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#4 #1 and #2 and #3

### **15. SSRN** (4 June 2009, 22 retrieved)

#1 (child OR children OR adolescent OR adolescents OR kid OR kids OR infant OR infants OR juvenile OR juveniles OR newborn OR newborns OR student OR students OR young people OR young person OR young persons OR teenager OR teenagers OR teen OR teens OR minor OR minors OR neonate OR neonates OR youth OR youths) AND health insurance

#2 With The Exact Phrase: "medical insurance"; "health financing"; Medicaid; "medical scheme"; "medical schemes"; "community based health organization"; "community based health organizations"; "community-based health organizations"; "community health planning"; "community health finance organization"; "community health finance organizations"; "community health finance organizations"; "community health financing"; "community health financing"; "mutual health organization"; "mutual health organizations"; "mutual health care"; "mutual health associations"; "cooperative medical schemes"; "cooperative medical schemes"; "cooperative medical systems"; "cooperative medical systems"; "prepayment plans"; "prepayment plans"; "prepayment plans"; "prepayment schemes"; "third-party payment"; "third-party payers"; "third-party payers"; "cost sharing"; "risk pooling"; "blue shield"; "managed care program"; "managed care programs"; "sickness insurance"

### 16. IDEAS (6 April 2009, 56 retrieved)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" health insurance " |" medical insurance ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" health financing " | Medicaid|" medical scheme ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate | youth) + (" community based health organization " |" community-based health organization ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" community health planning " |" community health finance organization ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" community financing " |" community self-financing ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" mutual health organization "|" mutual health care ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" mutual health association "| mutuelles) + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" prepayment insurance organization "|? " cooperative medical scheme ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" cooperative medical system " | " prepaid health care ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" prepaid health plan "| " prepayment plan ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" prepayment scheme "| " third-party payment ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

Strategies for expanding health insurance coverage in vulnerable populations (Review)

Copyright © 2019 The Authors. Cochrane Database of Systematic Reviews published by John Wiley & Sons, Ltd. on behalf of The Cochrane Collaboration.



(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" third-party payer " | " third party payment ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" third party payer "|" cost sharing ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" risk pooling "| " blue shield ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

(child | children | adolescent | kid | infant | juvenile | newborn | student | teenager | teen | minor | neonate| youth) + (" managed care program " | " sickness insurance ") + (coverage | cover | participat | enroll | eligible | entitl | register | membership)

# 17. ELDIS (11 April 2009, 916 retrieved)

1 child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR young person OR young persons

2 health insurance OR health financing OR medical insurance OR Medicaid OR medical scheme OR medical schemes OR community based health organization OR community based health organizations OR community-based health organization OR community-based health organizations OR community health planning OR community health finance organization OR community health finance organizations OR community financing OR community self-financing OR mutual health organization OR mutual health organizations OR mutual health care OR mutual health association OR mutual health associations OR mutuelles OR prepayment insurance organization OR prepayment insurance organizations OR cooperative medical scheme OR cooperative medical schemes OR cooperative medical system OR cooperative medical systems OR prepaid health care OR prepaid health plan OR prepaid health plans OR prepayment plan OR prepayment plans OR prepayment scheme OR prepayment schemes OR third-party payment OR third-party payer OR third party payment OR third party payers OR third-party payments OR third-party payers OR third party payments OR third party payers OR cost sharing OR risk pooling OR blue shield OR managed care program OR managed care programs OR sickness insurance

### 31 AND 2

# 18. BLDS (4 April 2009, 10 retrieved)

1 (child\* or adolescent\* or kid\* or infant\* or juvenile\* or newborn\* or student\* or young people or young person or young persons or teen\* or minor\* or neonate\* or youth\*) in All fields

2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): in All fields

#### 31 AND 2

# 19. OpenSIGLE (12 April 2009, 1 retrieved)

1 (child OR children OR adolescent\* OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager\* OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young people" OR "young person" OR "young persons") OR (abstract:child OR children OR adolescent\* OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager\* OR teen OR teens OR youth OR youths OR juveniles OR newborn OR newborns OR neonates OR "young person" OR infant OR teenager\* OR teen OR teens OR youth OR youths OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young person" OR "young person" OR "young persons") OR (title:child OR children OR adolescent\* OR minor OR minors OR infants OR student OR students OR kids OR teenager\* OR teen OR teens OR youth OR youths OR persons") OR (title:child OR children OR adolescent\* OR minor OR minors OR infants OR student OR students OR kids OR teenager\* OR teen OR teens OR youth OR youths OR juveniles OR newborn OR newborns OR minors OR infants OR student OR students OR kids OR teenager\* OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young persons") OR "young persons" OR "young persons") OR "young persons" OR "young persons" OR "young persons" OR neonate OR neonates OR "young persons") OR teenager\* OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR neonates OR "young persons" OR "young persons") OR "young persons" OR "young persons") OR "young persons") OR "young persons" OR "young persons") OR "youn

2 ("health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community health planning" OR "community health finance organization" OR "community health finance organization" OR "community health finance organization" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR "competitive medical scheme" OR "



medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third party payment" OR "third party payment" OR "third-party payments" OR "third-party payments party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "managed care program" OR "managed care programs" OR "sickness insurance") OR (abstract: "health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "third-party payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "managed care program" OR "managed care programs" OR "sickness insurance") OR (title:"health insurance" OR "health financing" OR "medical insurance" OR Medicaid OR "medical scheme" OR "medical schemes" OR "community based health organization" OR "community based health organizations" OR "community-based health organization" OR "community-based health organizations" OR "community health planning" OR "community health finance organization" OR "community health finance organizations" OR "community financing" OR "community self-financing" OR "mutual health organization" OR "mutual health organizations" OR "mutual health care" OR "mutual health association" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organizations" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical system" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR "prepayment plan" OR "prepayment plans" OR "prepayment scheme" OR "prepayment schemes" OR "thirdparty payment" OR "third-party payer" OR "third party payment" OR "third party payer" OR "third-party payments" OR "third-party payers" OR "third party payments" OR "third party payers" OR "cost sharing" OR "risk pooling" OR "blue shield" OR "managed care program" OR "managed care programs" OR "sickness insurance")

3 (cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR regist\*) OR (abstract:cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR regist\*) OR (title:cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership\* OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" OR OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taking part in" OR "took part in" OR "taken part in" OR "takes part in" O

4 1 AND 2 AND 3

# 20. NTIS (3 April 2009, 549 retrieved)

#1 KW=(child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or 'young people' or 'young person' or 'young persons' or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths)

#2 KW=('health insurance' or 'health financing' or 'medical insurance' or Medicaid or 'medical scheme' or 'medical schemes' or 'community based health organization' or 'community based health organizations' or 'community-based health organization' or 'community based health organizations' or 'community health planning' or 'community health finance organization' or 'community health finance organizations' or 'community financing' or 'community self-financing' or 'mutual health organization' or 'mutual health organizations' or 'mutual health care' or 'mutual health association' or 'mutual health associations' or mutuelles or 'prepayment insurance organization' or 'prepayment insurance organizations' or 'cooperative medical scheme' or 'cooperative medical schemes' or 'cooperative medical system' or 'cooperative medical systems' or 'prepaid health care' or 'prepaid health plans' or 'prepaid health plan' or 'prepayment plan' or 'prepayment plans' or 'prepayment scheme' or 'third-party payment' or 'third-party payer' or 'third party payment' or 'third party payer' or 'third-party payments' or 'third-party payers' or 'cost sharing' or 'risk pooling' or 'blue shield' or 'managed care programs' or 'managed care program' or 'sickness insurance')

#3 KW=(coverage or cover or covering or covered or covers or "participat\*" or join or joins or joining or joined or "enrol\*" or "recruit\*" or membership or memberships or "eligib\*" or "entitl\*" or 'take part in' or 'taking part in' or 'took part in' or 'taken part in' or 'takes part in' or enter or entering or entered or enters or register or registers or registration or registrations or registered or registering)

#4 #1 and #2 and #3

#### 21. ProQuest Dissertation & Theses Database (5 April 2009, 644 retrieved)

(child OR children OR adolescent OR adolescents OR minor OR minors OR infant OR infants OR student OR students OR kid OR kids OR teenager OR teenagers OR teen OR teens OR youth OR youths OR juvenile OR juveniles OR newborn OR newborns OR neonate OR



neonates OR young people OR young person OR young persons) AND (insurance OR health insurance OR health financing OR medical insurance OR Medicaid OR medical scheme OR medical schemes OR "community based health organization" OR "community based health organizations" OR "community based health organizations" OR "community based health organizations" OR "community health finance organizations" OR "community health finance organization" OR "community health finance organizations" OR community financing OR community self-financing OR "mutual health organization" OR "mutual health organizations" OR "mutual health association" OR "mutual health organizations" OR "mutual health associations" OR mutuelles OR "prepayment insurance organization" OR "prepayment insurance organization" OR "cooperative medical systems" OR "cooperative medical scheme" OR "cooperative medical schemes" OR "cooperative medical systems" OR "cooperative medical systems" OR "prepaid health care" OR "prepaid health plan" OR "prepaid health plans" OR prepayment plan OR prepayment plans OR prepayment schemes OR third-party payment OR third-party payer OR "third party payment" OR "third party payer" OR third-party payments OR third-party payers OR "third party payers" OR cost sharing OR risk pooling OR blue shield OR "managed care program" OR "managed care programs" OR sickness insurance) AND (cover\* OR participat\* OR join OR joins OR joining OR joined OR enrol\* OR recruit\* OR membership OR memberships OR enter OR entering OR entered OR enters OR eligib\* OR entitl\* OR "take part in" OR "taken part in" OR "taken part in" OR "taken part in" OR "taken part in" OR regist\*)

### 22. ISI Proceedings (5 April 2009, 1507 retrieved)

#1 ts=child OR ts=children OR ts=adolescent\$ OR ts=adolescence OR ts=kid\$ OR ts=infant\$ OR ts= juvenile\$ OR ts=newborn\$ OR ts=student \$ OR ts="young people" OR ts="young person\$" OR ts=teenager\$ OR ts=teen\$ OR ts=minor\$ OR ts=neonate\$ OR ts=youth\$

#2 ts="health insurance" OR ts="health financing" OR ts="medical insurance" OR ts=Medicaid OR ts="medical scheme\$" OR ts="community based health organization\$" OR ts="community health planning" OR ts="community health finance organization\$" OR ts="community financing" OR ts="community self-financing" OR ts="mutual health organization\$" OR ts="mutual health care" OR ts="mutual health association\$" OR ts=mutuelles OR ts="prepayment insurance Organization\$" OR ts="cooperative medical scheme\$" OR ts="cooperative medical system\$" OR ts="prepaid health care" OR ts="prepaid health plan\$" OR ts="prepaid health care" OR ts="prepayment scheme\$" OR ts="third-party payment\$" OR ts="third-party payer\$" OR ts="third-party payer\$" OR ts="third-party payer\$" OR ts="mutual scheme\$" OR ts="risk pooling" OR ts="blue shield" OR ts="managed care program\$" OR ts="sickness insurance"

#3 ts=cover\* OR ts=participat\* OR ts=join\* OR ts=enrol\* OR ts=recruit\* OR ts=membership\$ OR ts=eligib\* OR ts=entitl\* OR ts="take part in" OR ts="take part in" OR ts="takes part in" OR ts=takes part in" OR ts="takes part

#### #4 #1 AND #2 AND #3

#### 23. PAHO Library Catalogue (6 January 2010, 66 retrieved)

1 children [Subject descriptor] and health insurance [Subject descriptor]

2 children [Subject descriptor] and health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organization or community based health organization or community-based health organization or community health planning or community health finance organization or community health planning or community health finance organization or mutual health organizations or community self-financing or mutual health organization or mutual health organizations or mutual health association or mutual health association or mutual health associations or mutual health associations or mutual health association or mutual health association or mutual health association or mutual health association or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payers or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance [Words]

3 child or adolescent or kid or infant or juvenile or newborn or student or young people or young person or teen or minor or neonate or youth [Words] and health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payer or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance [Words]

4 health and insurance and coverage

### 5 1 OR 2 OR 3 OR 4



### 24. African Index Medicus (5 April 2009, 3 retrieved)

1 (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or (young and people) or (young and person) or (young and persons) or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths) [Key Word]

2 ((health and insurance) or (health and financing) or (medical and insurance) or Medicaid or (medical and scheme) or (medical and scheme) or (medical and schemes) or (community and based and health and organization) or (community and based and health and organizations) or (community and health and planning) or (community and health and finance and organization) or (community and health and finance and organization) or (community and health and finance and organization) or (community and health and finance and organizations) or (community and financing) or (community and self-financing) or (mutual and health and organization) or (mutual and health and organizations) or (mutual and health and care) or (mutual and health and association) or (mutual and health and associations) or mutuelles or (prepayment and insurance and organization) or (prepayment and insurance and organization) or (cooperative and medical and scheme) or (cooperative and medical and schemes) or (cooperative and medical and schemes) or (prepaid and health and care) or (prepaid and health and plans) or (prepayment and plan) or (prepayment and plans) or (prepayment and plans) or (prepayment and plans) or (prepayment and scheme) or (cots and sharing) or (third and party and payments) or (blue and shield) or (managed and care and programs) or (sickness and insurance)) [Key Word]

### 31 and 2

# 25. HERDIN NeON Database (5 April 2009, 0 retrieved)

1 (child\$ or adolescent\$ or kid\$ or infant\$ or juvenile\$ or newborn\$ or student\$ or young people or young person\$ or teen\$ or minor\$ or neonate\$ or youth\$): Keywords (all fields)

2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): Keywords (all fields)

31 AND 2

26. Thai Index Medicus (6 January 2010, 205 retrieved)

1 health AND insurance AND coverage

2 health AND insurance AND children

31 OR 2

# 27. Scientific and Technical Egyptian Bibliographic Database (STEB) (5 April 2009, 36 retrieved)

1 keyword: (child or children or adolescent or adolescents or kid or kids or infant or infants or juvenile or juveniles or newborn or newborns or student or students or young people or young person or young persons or teenager or teenagers or teen or teens or minor or minors or neonate or neonates or youth or youths)

2 keyword: (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community health finance organizations or mutual health organizations or mutual health organizations or mutual health organizations or mutual health association or mutual health associations or cooperative medical scheme or cooperative medical scheme or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment schemes or third-party payment or third-party payer or third party payer or third party payer or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance)

### 31 AND 2



#### **28. IndMED** (5 April 2009, 16 retrieved)

1 (child\$ or adolescent\$ or kid\$ or infant\$ or juvenile\$ or newborn\$ or student\$ or young people or young person\$ or teen\$ or minor\$ or neonate\$ or youth\$): in Keywords

2 (health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance): in Keywords

#### 31 AND 2

### 29. LILACS (30 June 2009, 307 retrieved)

(health\$ and insurance\$) or (medical\$ and insurance\$) or (insurance\$ and program\$) or (seguro and medico\$) or (seguro and salud) or (seguro and saude) [Palavras] and child or children or nino\$ or crianca or infant or infants or infantil or lactante or lactente or newborn or (recien and nacido\$) or (recem and nascido\$) or neonat\$ or baby or babies or kid or kids or toddler\$ [Palavras] and ((Pt RANDOMIZED CONTROLLED TRIAL OR Pt CONTROLLED CLINICAL TRIAL OR Mh RANDOMIZED CONTROLLED TRIALS OR Mh RANDOM ALLOCATION OR Mh DOUBLE-BLIND METHOD OR Mh SINGLE-BLIND METHOD OR Pt MULTICENTER STUDY) OR ((time and series) or random\$ or intervention\$ or control\$ or evaluat\$ or effect\$ or compare\$ or chang\$ or experiment\$ or impact) or ((tw ensaio or tw ensayo or tw trial) and (tw azar or tw acaso or tw placebo or tw control\$ or tw aleat\$ or tw random\$ or (tw duplo and tw cego) or (tw double and tw ciego) or (tw double and tw blind)) and tw clinic\$)) AND NOT ((CT ANIMALS OR MH ANIMALS OR CT RABBITS OR CT MICE OR MH RATS OR MH PRIMATES OR MH DOGS OR MH RABBITS OR MH SWINE) AND NOT (CT HUMAN AND CT ANIMALS)) [Palavras]

#### 30. ChinaNational Knowledge Infrastructure (CHKD-CNKI) (6 April 2009, 288 retrieved)

See http://epocoslo.cochrane.org/sites/epocoslo.cochrane.org/files/uploads/Chinese%20databases%20search%20strategies.pdf

#### 31. Chinese Medicine Premier (Wanfang Data) (9 April 2009, 0 retrieved)

See http://epocoslo.cochrane.org/sites/epocoslo.cochrane.org/files/uploads/Chinese%20databases%20search%20strategies.pdf

#### 32. ID21 (4 April 2009, 69 retrieved)

1 child\* or adolescent\* or kid\* or infant\* or juvenile\* or newborn\* or student\* or young people or young person or young persons or teen\* or minor\* or neonate\* or youth\*

2 health insurance or health financing or medical insurance or Medicaid or medical scheme or medical schemes or community based health organization or community based health organizations or community-based health organization or community-based health organizations or community health planning or community health finance organization or community health finance organizations or community financing or community self-financing or mutual health organization or mutual health organizations or mutual health care or mutual health association or mutual health associations or mutuelles or prepayment insurance organization or prepayment insurance organizations or cooperative medical scheme or cooperative medical schemes or cooperative medical system or cooperative medical systems or prepaid health care or prepaid health plans or prepaid health plan or prepayment plan or prepayment plans or prepayment scheme or prepayment schemes or third-party payment or third-party payer or third party payment or third party payer or third-party payments or third-party payers or third party payments or third party payers or cost sharing or risk pooling or blue shield or managed care programs or managed care program or sickness insurance

31 and 2

STUDY FLOW DIAGRAM

# WHAT'S NEW



Date	Event	Description
14 October 2019	Amended	A link to a summary for policy-makers was added to the plain language summary

# HISTORY

Protocol first published: Issue 1, 2010 Review first published: Issue 8, 2010

Date	Event	Description
14 December 2012	New citation required but conclusions have not changed	No new studies were included in this update.
14 December 2012	New search has been performed	New search for studies and content updated. Target population expanded from children to include vulnerable populations.

# CONTRIBUTIONS OF AUTHORS

All review authors have contributed to the production of the review. Qingyue Meng and Paul Garner drafted the protocol. Beibei Yuan and Liying Jia amended it with comments from all other co-authors. In the updated review, Liying Jia, Ying Lu, Fei Huang and Xin Wang applied the inclusion criteria, assessed the risk of bias and extracted data for the included studies.

# DECLARATIONS OF INTEREST

There are no conflicts of interest.

# SOURCES OF SUPPORT

# **Internal sources**

- Shandong University, Other.
- Peking University, Other.

# **External sources**

- The Alliance for Health Policy and Systems Research, World Health Organization, Switzerland.
- Norwegian Satellite of the Cochrane Effective Practice and Organisation of Care Group, Norway.
- The Effective Health Care Research Consortium, funded by Department for International Development, UK.

# DIFFERENCES BETWEEN PROTOCOL AND REVIEW

We did not search the HIMC database because it is inaccessible in Shandong University, Liverpool School of Topical Medicine and the University of Oslo. Only two studies were included, and they applied different study designs evaluating different kinds of interventions, so we can not conduct a meta-analysis.

This is an update of a previously published review (Meng 2010b). The target population for this update was expanded from children to include vulnerable populations.

# INDEX TERMS

# Medical Subject Headings (MeSH)

Documentation [methods]; Emergency Service, Hospital; Insurance Coverage [\*organization & administration] [statistics & numerical data]; Insurance, Health [\*organization & administration] [statistics & numerical data]; Latin America [ethnology]; Medically Uninsured [statistics & numerical data]; Randomized Controlled Trials as Topic; United States; Vulnerable Populations



# **MeSH check words**

Adolescent; Child; Humans