April 2017 – SUPPORT Summary of a systematic review

# Do social and community-based health insurance schemes have an impact on the poor and the informal sector in low- and middle-income countries?

People with low incomes often have poor access to health services and limited ability to pay for medical care. For such individuals and households, substantial out-of-pocket healthcare expenditure may have catastrophic financial consequences and worsen poverty. Health insurance schemes are intended to reduce the burden of health costs on individuals and households.

## Key messages

➔ **Community health insurance may increase utilisation of health services but it is uncertain if it improves health outcomes or changes out-of-pocket expenditure among those insured in low-income countries**

➔ **It is uncertain if social health insurance improves utilisation of health services and health outcomes, leads to changes in out-of-pocket expenditure or improves equity among those insured in low-income countries**

➔ **Most of the included studies were conducted in low- and middle-income countries in Latin America, Asia and Africa**

# Background

For many people in low-income countries, poverty may both reduce access to healthcare and be worsened by large out-of-pocket payments for healthcare. Poor people include individuals working in the formal sector with low salaries and most of those employed in the informal sector.

Health insurance is a method of reducing the difficulties related to paying for healthcare. The intended impacts of health insurance include improvements in healthcare coverage and health status and reductions in out-of-pocket payments for individuals and households.

*Social health insurance* (SHI) involves compulsory contributions levied largely on the earnings of formal sector workers and the payment of healthcare providers through an independent mechanism (a health care purchaser).

*Community-based health insurance* (CHI) are not-for-profit schemes based on voluntary enrolment in which a community (which may be geographic, religious, professional or ethnic) is actively engaged in mobilizing, pooling, and allocating resources for healthcare.

## Knowing what's not known is important

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

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

**About the systematic review underlying this summary**

**Review objective:** To systematically examine studies that show the impact of nationally or sub-nationally sponsored health insurance schemes on the poor and near poor.

| Types of | What the review authors searched for | What the review authors found |
|---|---|---|
| **Study designs & Interventions** | Randomised trials, non-randomised trials, controlled before-after studies, regression studies and qualitative studies that measured the impact of national health insurance. | 24 studies were included: 4 randomised trials, 10 non-randomised trials and 10 observational studies. 16 studies reported on SHI and 3 on CHI. 19 studies strongly met the review inclusion criteria and 5 partially met the inclusion criteria. |
| **Participants** | People taking up health insurance. | People who enrolled in social and community health insurance schemes. |
| **Settings** | Low- and middle-income countries | Burkina Faso, China (6 studies), Colombia (2 studies), Costa Rica, Egypt, Georgia, India (2 studies), Mexico (3 studies), Nicaragua, Philippines, Tanzania and Vietnam (3 studies). One study was done in Senegal, Mali and Ghana. |
| **Outcomes** | Access or utilisation, healthcare expenditure and health status. | Access or utilisation, healthcare expenditure and health status. |

**Date of most recent search:** July 2010

**Limitations:** This is a well-conducted systematic review. However, the methods for assessing the risk of bias of the included studies were unclear.

Acharya A, Vellakkal S, Taylor F, Masset E, Satija A, Burke M and Ebrahim S (2012). Impact of national health insurance for the poor and the informal sector in low- and middle-income countries: a systematic review. London EPPI-Centre, Social Science Research Unit, institute of Education, University of London. http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3346

# Summary of findings

The review included 24 studies, conducted in low- and middle-income countries. The review did not report quantitative data and therefore the results are reported narratively.

## 1) Social health insurance compared to no insurance

Twenty studies reported on this comparison.

➜ **It is uncertain if social health insurance improves utilisation of health services and health outcomes, or leads to changes in out-of-pocket expenditure among those insured in low- and middle-income countries because the certainty of this evidence is very low.**

➜ **It is uncertain if social health insurance improves equity because the certainty of this evidence is very low.**

| Social health insurance compared to no insurance | | |
|---|---|---|
| **People** | Poor people including those working in the informal sector | |
| **Settings** | Low- and middle-income countries (Nicaragua, Mexico, Colombia, Georgia, Ghana, China, Vietnam, Egypt, Indonesia) | |
| **Intervention** | Social health insurance | |
| **Comparison** | No health insurance | |
| Outcomes | Impact | Certainty of the evidence (GRADE) |
| **Utilisation of health services** (use of different types of health facilities including public and private; use of specific health services like diabetes care or pre-natal care; visits to physicians; outpatient / inpatient services; use of formal / traditional medicine) | 14 studies reported this outcome. Eight studies reported higher utilisation of health services and 5 studies found no increased utilisation among the insured. | ⊕◯◯◯ Very low |
| **Out-of-pocket expenditure on healthcare services** | 14 studies reported this outcome. Seven studies found reduced OOP expenditure among insured participants; 6 studies found little or no changes in expenditure; and 1 study found an increase in expenditure. | ⊕◯◯◯ Very low |
| **Health outcomes** (e.g. glucose control in diabetic patients, infant mortality and health status of communities) | Five studies reported this outcome. Three studies found little or no improvement in health outcomes for the insured and 2 studies found improvements in health outcomes. | ⊕◯◯◯ Very low |
| **Equity** | Some studies assessed impacts on poorer groups and found mixed results for utilisation of services and out-of-pocket expenditure. | ⊕◯◯◯ Very low |
| GRADE: GRADE Working Group grades of evidence (see above and last page) | | |

## 2) Community-based health insurance compared to no insurance

These were community-based health insurance programmes, some of which were initiated by the government of the countries.

➔ **Community health insurance may increase utilisation of health services. The certainty of this evidence is low.**

➔ **It is uncertain if community health insurance improves health outcomes or decreases out-of-pocket expenditure because the certainty of this evidence is very low.**

## Community health insurance compared to no insurance

**People**          Poor people including those in the informal sector
**Settings**      Low- and middle- income countries (Burkina Faso, China and India)
**Intervention**  Community health insurance
**Comparison**  No health insurance

| Outcomes | Impact | Certainty of the evidence (GRADE) |
|---|---|---|
| **Utilisation of health services** (use of different types of health facilities including public and private; use of specific health services like diabetes care or pre-natal care; visits to physicians; outpatient / inpatient services; use of formal / traditional medicine) | All three studies that reported this outcome found higher utilisation of health services among those enrolled in community health insurance schemes. | ⊕⊕◯◯ Low |
| **Out-of-pocket expenditure on health services** | Two studies measured this outcome. A decrease in OOP expenditure was reported for one study while the results of the other study were seen as not valid due to a small sample size. | ⊕◯◯◯ Very low |
| **Health outcomes** (e.g., glucose control in diabetic patients, infant mortality and health status of communities) | One study reported improvements in health outcomes. | ⊕◯◯◯ Very low |
| GRADE: GRADE Working Group grades of evidence (see above and last page) | | |

# Relevance of the review for low-income countries

| ➜ **Findings** | ▷ **Interpretation*** |
|---|---|
| **APPLICABILITY** | |
| ➜ **The studies were all carried out in low- and middle-income countries**. | ▷ *The effects of social and community-based health insurance schemes are largely uncertain as the certainty of the evidence is very low.*<br>▷ *Health financing arrangements differ from one country to another and this should be taken into consideration when planning whether and how to implement health insurance schemes. The ease with which different insurance schemes can be implemented, and their impacts, will depend on a range of factors including the nature of the economy (whether most people are employed by the public or private sectors), the size of the formal workforce, collection mechanisms, risk pooling, and co-payments that might be incurred.*<br>▷ *The acceptability to stakeholders (healthcare users, healthcare providers, professional organisations, policy makers, health delivery organisations) of different insurance schemes needs to be considered in each setting.* |
| **EQUITY** | |
| ➜ **The studies examined the effects of insurance schemes among largely poorer people and those in the informal sector**<br>➜ **It is uncertain if social health insurance improves equity because the certainty of evidence is very low** | ▷ *Disadvantaged groups who have limited financial resources and often greater healthcare needs could benefit from social and community health insurance that reduces out-of-pocket payments for healthcare. However, most of the included studies were not designed to address this question and did not report outcomes among poorer groups separately from the rest of the study population.*<br>▷ *A number of groups may be disadvantaged in terms of access to healthcare, including poorer people as well as people living with physical and mental impairments. The needs of all these groups should be considered when planning insurance schemes - ideally insurance mechanisms should aim to be progressive and ensure cross-subsidization from richer to poorer groups.* |
| **ECONOMIC CONSIDERATIONS** | |
| ➜ **Out-of-pocket spending was addressed by some studies but no long-term economic data were identified** | ▷ *There are important economic consequences of rolling out insurance schemes that cover a large proportion of the population. Spreading the burden of health costs across the population will entail payment from those who are able to afford these, with smaller or no payments from individuals with little or no earnings. Payments for the latter group may need to be subsidized by the government.*<br>▷ *Making health insurance more widely available may increase utilisation of health services by those who are insured. How to assess and manage this, including ensuring that service use is appropriate, needs to be considered by those developing and implementing these schemes.* |
| **MONITORING & EVALUATION** | |
| ➜ **The studies included in this review did not address all of the key outcomes relevant to understanding the effects of social and community-based health insurance schemes implemented in low-income countries** | ▷ *Outcomes such as healthcare expenditure, equity, access to care, quality of care and health outcomes (like disease morbidity and mortality) need to be monitored in order to evaluate the effectiveness of insurance schemes. This monitoring should be continuous and should be of sufficiently robust to enable informed decisions and adjustments to be carried out.* |

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

# Additional information

## Related literature

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## Conflict of interest

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

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