

**Article title:** Health Insurance Schemes and Their Influences on Healthcare Variation in Asian Countries: A Realist Review and Theory's Testing in Thailand

**Journal name:** International Journal of Health Policy and Management (IJHPM)

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**Citation:** Witthayapipopsakul W, Viriyathorn S, Rittimanomai S, et al. Health insurance schemes and their influences on healthcare variation in Asian countries: a realist review and theory's testing in Thailand. *Int J Health Policy Manag.* 2024;13:7930. doi:[10.34172/ijhpm.2024.7930](https://doi.org/10.34172/ijhpm.2024.7930)

**Supplementary file 1**

## Search strategy

The PICOS (Population, Intervention, Comparator, Outcome, Study design) approach was used to help developing key domains of search terms and eligibility criteria. We also filtered Asian countries, English language, and years of publication where allowed. The following terms were attempted.

| Domains      | Qualification   | Possible terms   |
|--------------|---|--|
| Population   | Asian country populations <sup>†</sup>  | Use filter where possible                                    |
| Intervention | Different health insurance schemes<br>Any differences in insurance policies   | insurance, health insurance, scheme*, program*, plan, system |
| Comparator   | Population groups covered by different insurance schemes OR<br>Population groups targeted by different insurance policies | insurance, health insurance, scheme*, program*, plan, system |
| Outcome      | Variation in medical practice, service provision, utilization rate  | variation*, difference*, change*                             |
| Study design | Original research, Reviews such as systematic review, scoping review, rapid review  | Use filter where possible                                    |

<sup>†</sup> Referred to countries and territories in Asia used by the Statistics Division of the United Nations (<https://unstats.un.org/unsd/methodology/m49/>)

Finally, the search terms 'health insurance' AND 'variation' were selected as they were broad but precise enough to yield relevant results. The exact terms and filters used in each database were reported below.

| DATABASE          | MEDLINE          | EMBASE                    | SCOPUS                    | Web of Science     |
|-------------------|------------------|---------------------------|---------------------------|--------------------|
| <b>KEYWORDS</b>   |                  |                           |                           |                    |
| <b>1</b>          | variation        | variation                 | variation                 | variation          |
| <b>2</b>          | health insurance | health insurance          | health insurance          | "health insurance" |
| <b>BOOLEAN</b>    | AND              | AND                       | AND                       | AND                |
| <b>SCOPE</b>      |                  | title, abstract, keywords | title, abstract, keywords | topic              |
| <b>FILTERS</b>    |                  |                           |                           |                    |
| <b>1</b>          | 2010-2021        | 2010-2021                 | 2010-2021                 | 2010-2021          |
| <b>2</b>          |                  | English                   | English                   | English            |
| <b>3</b>          |                  | Article                   | Article                   | Article            |
| <b>4</b>          |                  | Human                     | Medicine                  | Asia (UN)          |
| <b>5</b>          |                  |                           | All open access           | Open access        |
| <b>6</b>          |                  |                           | Asia (UN)                 |                    |
| <b>No of Hits</b> | 381              | 663                       | 334                       | 205                |
| <b>Date</b>       | 04-Oct-21        | 05-Oct-21                 | 25-Oct-21                 | 25-Oct-21          |

### Eligibility criteria

| Inclusion  | Exclusion  |
|--|--|
| <p>1. studies that compared at least two insurance schemes or a single scheme with a policy change and presented the variation of medical practice, service provision, access to or utilisation of health services.</p> <p>AND</p> <p>2. studies that focused on Asian countries were included (based on the list of countries and territories in the Asia geographical region of the Statistics Division of the United Nations</p> <p>AND</p> <p>3. only research or review articles</p> <p>AND</p> <p>4. studies published in the English language between 2010-2021</p> | <p>1. studies that demonstrated the variation only between insured and uninsured people</p> <p>OR</p> <p>2. studies comparing schemes with a harmonised benefit package and provider payment mechanism, such as in Japan</p> |