

Economic value of rehabilitation in low and middle-income countries

BACKGROUND & AIM

Given the rising need for rehabilitation and the endorsement to improve rehabilitation services delivery, it is of importance to assess and understand the economic value and affordability of rehabilitation interventions.

Clarifying the relative economic value of rehabilitation from different perspectives holds particular significance in low-resource settings and low-to-middle income countries (LMICs), where resource limitations make it challenging to provide essential healthcare services through public means.

METHODS

A **scoping review** of primary research, indexed in one of seven data sources, that studied rehabilitation in LMICs as a specific entity or as a component of broader cost

We used a prospectively developed and piloted data extraction form refined through numerous iterations.

Data on the health economic approaches used, geographical context, intervention characteristics, and **equity considerations** were extracted and synthesized descriptively.

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Globally more than 2,4 billion people can benefit from REHABILITATION, with more than 50% unmet need for rehabilitation in LMICs

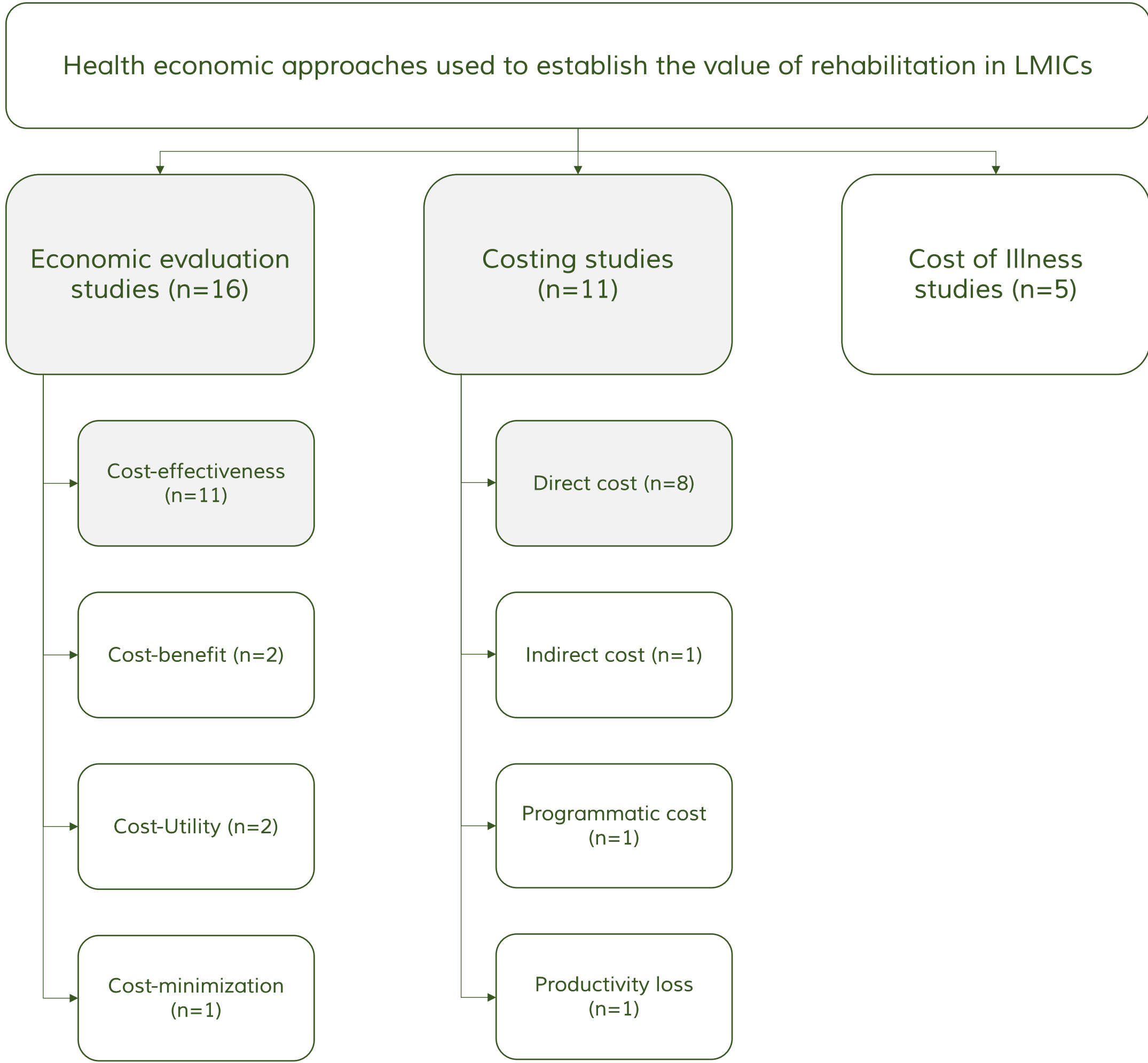


Figure 1: Overview of health economics approaches used to establish the value of rehabilitation in LMICs

Economic evaluations studies were most common of which cost-effectiveness analysis was most prevalent. Direct cost was often assessed when costing studies were concerned. Direct costs often included were rehabilitation expenses, treatment fees, staff remuneration, operational cost and hospitalization.

CONCLUSION

This scoping revealed shows that health economic studies pertaining to rehabilitation in LMICs are still **sparse**, and rehabilitation was **often not the primary intervention** in the health economic studies included. **Inequity** in the conduct and validity of health economic studies for rehabilitation may stem from challenges in

- the conduct of these type of studies (e.g., data availability)
- selective inclusion of participants (i.e., access to care),
- as well as poor unpacking of the rehabilitation “black box” (i.e., costs).

FINDINGS

Most included studies (n=31) originated from **upper-middle income countries** (n=18) and studied rehabilitation in context of disease of the **circulatory system** (n=12).

Economic evaluations (see Figure 1) was the approach most used (n=16) with **cost-effectiveness analysis** being most prevalent (n=11).

Outcome measures to substantiate the cost included measures of quality of life, such as EQ-5D-5L (n=2), SF-6D (n=4), and SF36 (n=2), health-related outcomes (n=7), healthcare utilization costs (n=7), and length of hospital stay (n=4).

Rehabilitation was poorly described (**a “black box”**) with regards to what was provided (i.e., what the “cost” were made for leading to benefit)

CHALLENGES

The challenges identified in conducting health economic research included:

- concerns related to deficient record-keeping
- short follow-up periods
- inadequate financial data
- lack of consensus on cost element, and
- restricted treatment options

Any focus on improving the future of health economics in the rehabilitation space will require **an initial investment** in primary data collection, routine health information systems and development methodologies **fit for local needs**.

Health Economic approaches used to measure the economic value of rehabilitation in low and middle-income countries.

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