Using a simple checklist to prioritise medical devices in low-income countries and as a screening test for full health economic modelling.

Background

- Many hospitals in low-income countries (LICs) have a long list of items that staff would like to procure.
- However, there is insufficient time and resources available to conduct full cost-effectiveness analysis of all items, while basic items, such as corner cabinets or syringes would be difficult to prioritise on the basis of a formal economic model.
- A method is needed to identify items for procurement based on informal judgment, without a health economic evaluation.

An approach to prioritization of medical devices in low-income countries: an example based on the Republic of South Sudan
Findings

- The authors defined a screening algorithm with five decision-gates:

1) **Plausibility** – is the device a bare essential? i.e. simple devices that are easy to use, do not rely on continuous external power, have low relative cost, have widespread benefits, etc.

2) **Usability** – is the device usable? i.e. the physical infrastructure, human resources, and supply chain needed are available.

3) **Cost minimisation** – is a cheaper alternative available?

4) **Cost-effectiveness Programme** – is the device part of a multi-component service that has been shown to be cost-effective in LICs? e.g. devices that are a necessary component of a service tackling TB, such as a microscope.

5) **Cost-effectiveness Analysis** – is the device cost-effective? If there is not sufficient time or resources to construct a model, an intuitive decision should be made.

References


Recommendations for practice

Using this simple flow diagram can help assist in prioritisation of medical devices in LICs, help mitigate pro-technology bias, and reduce waste from purchase of more expensive and unsupported alternatives.

What is NIHR CLAHRC West Midlands?

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