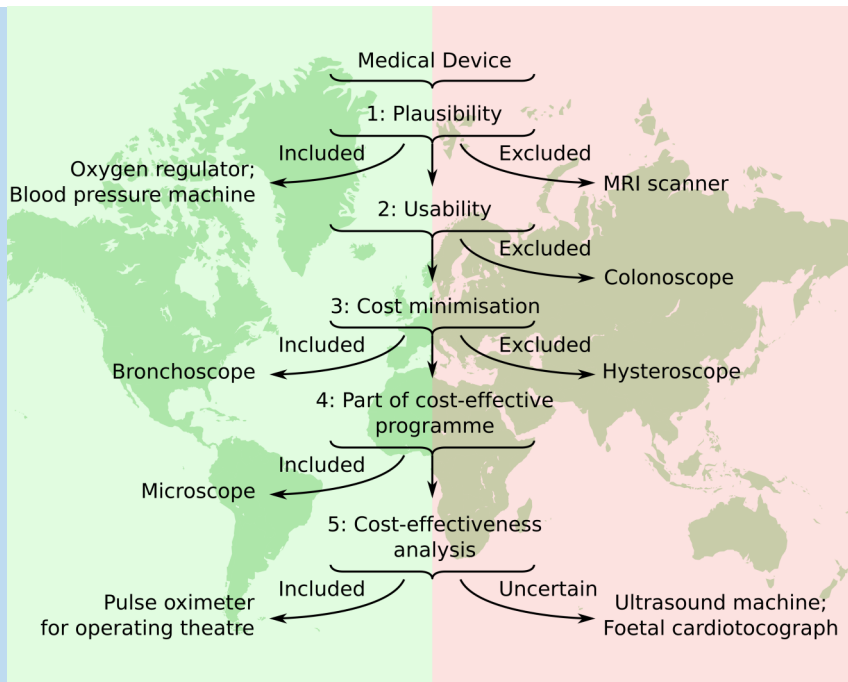# CLAHRC BITE

Brokering Innovation Through Evidence

12 A bite-sized summary of a piece of research supported by NIHR CLAHRC West Midlands

Nov 2015

International

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

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.
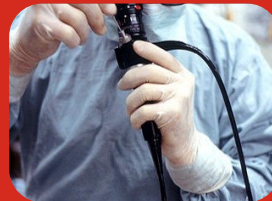
Findings

- 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

Lilford RJ, Burn SL, Diaconu KD, et al. An approach to prioritization of medical devices in low-income countries: an example based on the Republic of South Sudan. *Cost Eff Resour Alloc*. 2015; **13**:2. http://goo.gl/JoZ8gm

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?

The Collaboration for Leadership in Applied Health Research and Care (CLAHRC) is a partnership between universities (Birmingham, Warwick and Keele) and a number of health and social care organisations in the West Midlands. We are funded by the National Institute for Health Research with a mission to undertake high-quality applied health research focused on the needs of patients to improve health services locally and beyond.
For further information, visit:
www.clahrc-wm.nihr.ac.uk