


**CHERE**  
CENTRE FOR HEALTH ECONOMICS  
RESEARCH AND EVALUATION

**IS GHANA READY TO USE EVIDENCE FROM  
ECONOMIC EVALUATION FOR PRIORITY  
SETTING IN HEALTH CARE? A SYSTEMATIC  
REVIEW OF ECONOMIC EVALUATIONS  
CONDUCTED IN GHANA**

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## PRESENTATION OUTLINE

- Background
- Methods
- Findings
  - The case of Malaria
- Conclusions



## BACKGROUND

- Increasing costs of healthcare mean that health resources need to be prioritised
- A number of priority setting tools are in available
  - HTA is recommended globally by the WHO
- Ghana's current state of NHIS and the health system as a whole gives the impetus for using such tools
- Plans already under way to use HTA
  - Collaboration with NICE UK
  - Draft health bill



## OBJECTIVES

### Main

- To assess Ghana's readiness to use economic evaluation studies for priority setting

### To do this, the review specifically:

1. Assessed the availability (scope and quantity) of studies
2. Assessed the quality of studies
3. Determined if such evidence can be used for decision making
4. Determined the labour capacity available

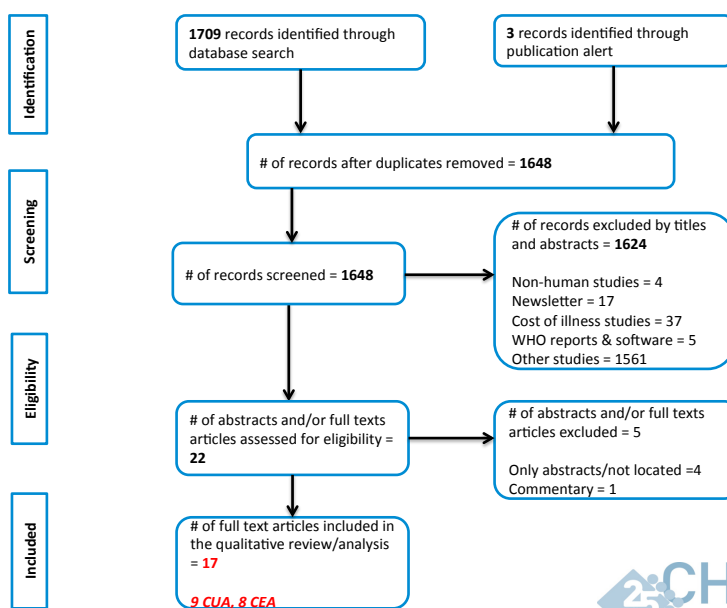


## METHODS

- A comprehensive literature search on databases such as Embase, Pubmed, Ovid medline from 1990-2015; publication alert till final analysis in Sept 2016
  - Key words include “cost effectiveness analysis”, “cost benefit analysis”, “cost utility analysis”, “costs”, “economic evaluation”
- Quality of studies assessed with reference to the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) checklist
- Used studies conducted on Malaria as a case study to access their usefulness for decision making



## FINDINGS – OBJECTIVE 1



## FINDINGS – OBJECTIVES 1 & 4

Scope (objective 1)	
<b>Technologies evaluated</b>	
Pharmaceuticals	7
Diagnostics	4
Treatment interventions*	6
<b>Conditions/diseases evaluated</b>	
Abortion	1
Breast cancer	1
Glaucoma	1
Hepatitis B & C	1
Hernia	1
HIV	2
Malaria	7
Neonatal health	1
Vaccine	1

\*Treatment interventions are those that do not include pharmaceutical or diagnostics

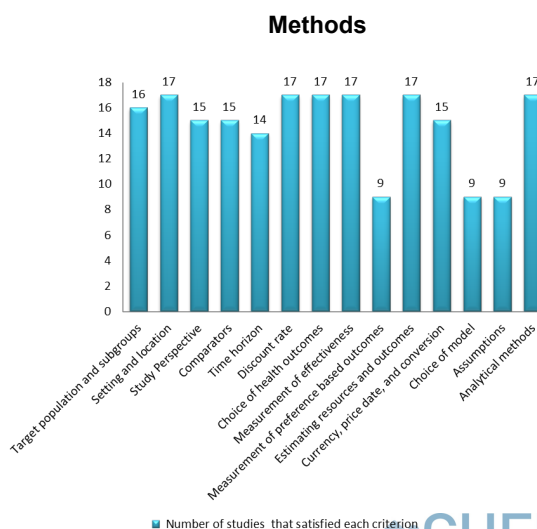
**Labour capacity (objective 4)**

- 48 local persons participated in different roles
- 5 lead/corresponding authors

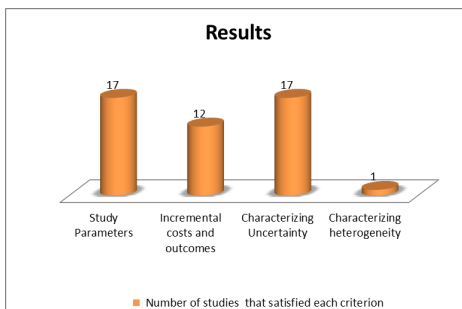


## FINDINGS - QUALITY OF STUDIES (OBJECTIVE 2)

- Mean quality score – 20.41 counts (out of 24)
- Titles, abstract and introduction well defined for all 17 studies

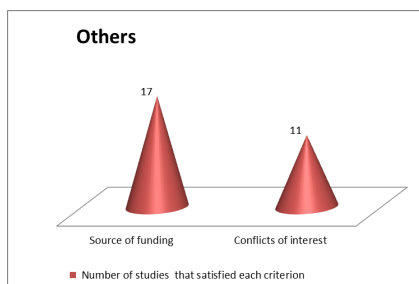


## FINDINGS - QUALITY OF STUDIES (OBJECTIVE 2)



### Discussion

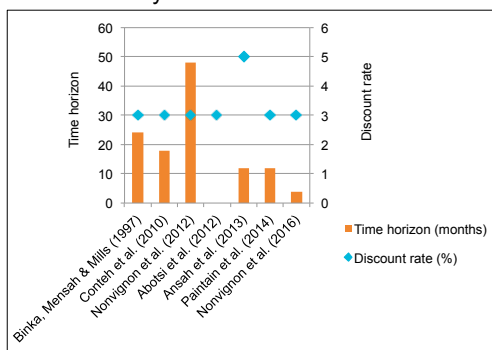
- Generalizability (17)
- Current knowledge (17)
- Limitations (17)



## OBJECTIVE 3 - THE CASE OF MALARIA

- 6 out of 7 studies targeted children under 5 years
- All studies were funded by donor agencies
- Similar preventive interventions e.g. prophylaxis treatment
- Varied effectiveness outcome
- Variations in other methodological approaches e.g. discount rates, time horizon, cost components

Comparison of time horizon and discount rates used by studies



### OBJECTIVE 3- IMPLICATIONS FOR PRIORITY SETTING



- Using the WHO recommended decision rule; interventions with ICER/CER less than 3x GDP of the country is cost effective
  - All Malaria interventions reviewed were cost effective
- However, economic evaluation evidence currently available hinders comparison between similar and/or alternative interventions
  - Methodological variations (such as discount rate, outcome measure, cost components)



### IS GHANA READY



- Availability
  - Quality
  - Scope
  - Quantity
- The supply of economic evaluation studies
  - Limited labour
  - Data for studies
- Non-existence of a methodological guideline
- Decision rule ??



## LIMITATIONS AND FUTURE WORK

- Limitations
  - Possible underestimation of quantity
  - Using number of local persons involved in studies as proxy for labour capacity
  - Possible bias in quality assessment
- Future work
  - Knowledge and perception of decision makers on the use of HTA (data collected)
  - HTA case study to determine feasibility of use in Ghana



## CONCLUSION

- Develop or adopt a methodological standard for conducting economic evaluation
- The need to build local capacity
- Invest in national data repository and economic evaluation studies
- Consider investing into research to develop a decision rule and utility weights specific to Ghana



**THANK YOU FOR YOUR ATTENTION**

