

Please see below for a link to the webinar recording for the Trials Methodology Research Partnership:

Global Health Trials Methodology

Elizabeth Allen, University of Cape Town – South Africa

Aranca De La Horra Gozalo, University of Oxford – UK

Sylvia Nalubega, Soroti University – Uganda

Jamlick Karumbi, KEMRI Wellcome Trust - Kenya

Mercy Chepkirui, KEMRI Wellcome Trust – Kenya

Naomi Waithira, Mahidol Oxford Research Unit - Thailand

19 October 2020

The slides are also available below.

For any queries, please contact uktmn@nottingham.ac.uk

<https://www.youtube.com/watch?v=Yf8aP1Eiouw>



TMRP Methodology Webinar Series – Global Health Trials Methodology

Monday 19 October 2020

Elizabeth Allen – University of Cape Town, South Africa

Aranca De La Horra Gozalo – University of Oxford, UK

Sylvia Nalubega – Soroti University, Uganda

Jamlick Karumbi – KEMRI-Wellcome Trust, Kenya

Mercy Chepkirui – KEMRI-Wellcome Trust, Kenya

Naomi Waithira – Mahidol University, Thailand



Global Health Working Group



Trials methodology research

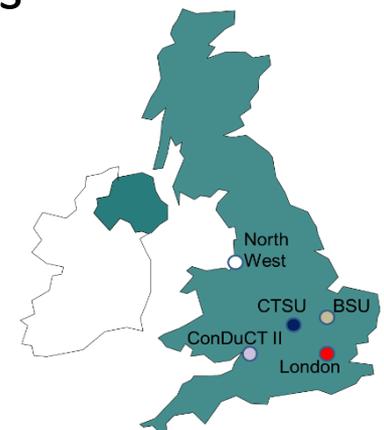
Improving the design, conduct, analysis of trials

- Exploring/comparing methods, generating evidence for & implementing the most effective, appropriate methods
 - Research questions
 - Design (including e.g. outcomes)
 - Planning, conduct (operations, data management)
 - Analysis
 - Reporting/dissemination, secondary use

Ultimately improving patient care

Hubs for Trials Methodology Research

- Promoting high quality collaborative research
- Advice on development of innovative methods
- Strengthening research training & capacity
 - 5 ‘hubs’ in UK academic trial units/groups
 - 9 working groups (topics)
 - 400+ colleagues
 - 50+ funded/partially funded/supported projects
 - 25 PhD students



Guidance

- Advice
- Guidance pack
- Methodology advice
- Publications
- Top Tips

Home / Advice / Guidance pack

Guidance pack

Our overarching aim is [Improving Health by Improving Trials](#). Since its inception in 2009, the HTMR Network has strived to undertake cutting edge research in areas important to trials methodology.

By funding various [projects](#) and initiatives, we have contributed to [publications](#), guidance documents, resources and recommendations for trialists. The resources below constitute the current recommended "Guidance Pack" (as April 2018).

Guidance pack

COMET: Core Outcome Measures in Effectiveness Trials

DIRUM: Database of Instruments for Resource Use Measurement

CONSORT PRO: Patient-Reported Outcomes

ACE: Adaptive designs CONSORT Extension

Monitoring trials efficiently: The role of central statistical monitoring

Sharing participant data: Good practice principles for sharing individual participant data from publicly funded clinical trials

CONNECT: Consent methods in paediatric emergency and urgent care trials

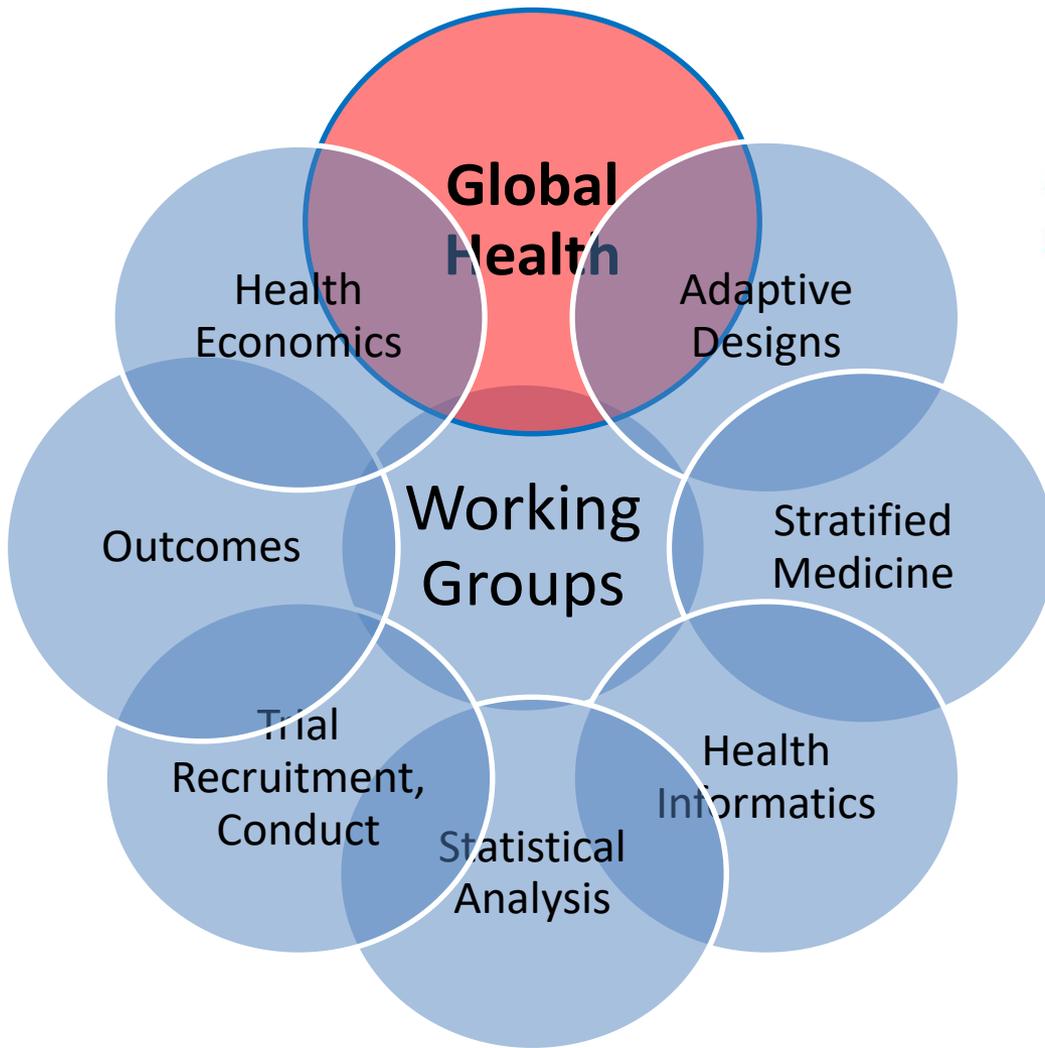
MAMS: Some recommendations for multi-arm multi-stage trials

Qualitative research: Maximising the impact of qualitative research in feasibility studies for randomised controlled trials: guidance for researchers

Surgical trials: Interventions in randomised controlled trials in surgery: issues to consider during trial design

PIRRIST: Patient and public Involvement to enhance Recruitment and Retention In Surgical Trials

- Guidance
- Workshops
- Webinars
- Working Groups
- Publications



**More and better, larger network
within & outside of UK**



A global community of practice for Trials Methodology Research

- Trials everywhere benefit from insight & experiences of those working in HICs & LMICs
- Cannot assume a method can be transported into other contexts (e.g. modes of questionnaires)
- Trial staff can & should contribute to finding the best ways of doing their role (extra funding stream.....)



Remit of the Global Health WG

- Raise awareness of the field/scope of CTMR in LMICs
- Signpost to other working groups of the TMRP
- Increase capacity through freely accessible resources, training, networking
- Respond to queries from those in LMICs wanting guidance on methods, potential collaborators etc.
- Facilitate small grants for LMICs



Activity thus far

- Eliciting applications for membership (48)
 - All topic areas/can join those WGs too
- Integration with **the Global Health Network's Global Health Methodology Research hub**
 - **Webinars, newsletters, articles**
- Twitter feed (@GHWG_TMRP)
- TGHN competition to win attendance at ICTMC 2019
- First online meeting 5th Nov

<https://globalresearchmethods.tghn.org/>
www.methodologyhubs.mrc.ac.uk



Pump priming awards

- 270 applications from 48 LMICs
- 7 funded projects

Country	Title
Uganda	The practice of pilot studies in informing the conduct of HIV clinical trials in sub Saharan Africa: a review of study protocols
Kenya	Pilot implementation of Short Message Service for randomisation in a multisite pragmatic factorial clinical trial in Kenya (PRISMS Study)
Uganda	Photovoice to explore community members perspectives regarding health and healthcare challenges in Mukono District, Uganda
Tanzania	Assessment of the challenges encountered in implementing vaccine clinical trial methodologies in low income countries
UK/India	Optimising Informed CONsent in clinical trials in low- and middle-income settings: feasibility of an adapted QuinteT Recruitment Intervention (QRI) in India (OrION-I)
Thailand	Exploring barriers to data reuse
South Africa	Cultural competence in trial design and conduct

Many thanks to all involved thus far & the UK Trial Managers' Network for hosting this webinar



Better Research for Better Health



Facilitating health research & delivering research capabilities



THE GLOBAL HEALTH NETWORK

[Register / Sign in](#)

[Language](#) ▾

[Search](#)

[Member hubs](#)

[Research tools](#)

[Resources](#)

The Global Health Network enables easier, faster, and better research in the world's most challenging settings.

Knowledge Sharing Hubs

Transferring knowledge and exchanging methods, processes and research findings between diseases, regions and organisations.

[About](#) 

[Explore](#) 

Capacity Development and Process Improvement

Regional and online training, resources and professional development to build skills and careers that deliver evidence to change practice.

[About](#) 

[Explore](#) 

Integrated Programmes and Platforms

An online platform and regional programme for knowledge exchange and building lasting capable teams who deliver research excellence

52 'communities of practice' each sharing their know-how between disease areas, roles, regions and organisations

Visited over 28 million times and over 1.3 million 'how to' research skills training courses have been taken

Many 100's of 1000's of templates, protocols and guidance documents shared downloaded and used, and then re-shared!

This is also a research platform for understanding the barriers and enablers, to improve the process and deliver findings into practice

Impact at a glance



28.8 million

visits to theglobalhealthnetwork.org
- 16 million from Africa, Latin America and Asia

265,000+

registered members in our global community, representing a full range of research disciplines and roles in global health research.

1.3 million+

online training modules taken

380,000+

templates, tools and resources downloaded

3700

pages of information including 2300 guidance articles and 1300 blog posts

Global Health Methodology Research

What are you looking for? **SEARCH**



- Home
- About Us
- Resources
- Global Methodology Projects
- MRC/NIHR Trials Methodology Research Partnership
- Events
- COVID-19 COS

Get started

Home

This is a community of researchers who are interested in supporting the generation of more and better evidence to drive improvements in health across the globe. Clinical research needs evidence-led improved methods. You can [read more about the site here](#).

What is Methodology Research?



Methodology Research is research about the way we design, conduct, analyse, report and interpret research studies. Conducting methodology research studies will regenerate evidence-led improvements in the way we design and run studies.

Methodology Research is research on research

<https://globalresearchmethods.tghn.org>

New webinar

A practical introduction to methodology research and the project that aimed to develop a Global Health Trials Methodological Research Agenda

[LEARN MORE](#)

New Webinar

A Global Health Trials Methodological Research Agenda

Tweets by @GHWG_TMRP

- Global Health Working Group TMRP Retweeted
- MRC-NIHR Trials Method @MRCNIHRTMRP
- September @MRCNIHRTMRP webinar hosted by @UKTMN Improving transparency and

Resources



Generic Research Methods

PANDA - A Practical Adaptive & Novel Designs and Analysis toolkit

Hubs

Global Health trials
Global Health Social Sciences

Training Courses

- Introduction to clinical research
- ICH Good Clinical Practice E6 (R2)
- The research question
- The study protocol (part 1 & 2)
- Introduction to informed consent
- The Practice and Ethics of Participatory Visual Methods for Community Engagement in Public Health and Health Science
- Many more



Methodology Research resources

ICTMC 2019 - Abstracts from the 5th International Clinical Trials Methodology Conference

ICTMC 2017 - Abstracts from the 4th International Clinical Trials Methodology Conference

The Study within a Trial (SWAT) repository

COMET initiative: Core Outcome Measures in effectiveness Trials

PANDA - a resource to learn about adaptive designs



MRC-NIHR & other groups

MRC-NIHR Trials Methodology Research Partnership (TMRP)

Tip for data extraction in meta-analysis - 18 by CEBM

Trial Methodology Research Network (TMRN) by Health Research Board

Trial Forge

More external organisations



Webinars & workshops

MRC-NIHR Trial conduct webinars 2014 - 2019

TMRP webinar series (May-Oct 2020)

Global Health Methodology Research

SEARCH

[Home](#) [About Us](#) [Resources](#) [Global Methodology Projects](#) [MRC/NIHR Trials Methodology Research Partnership](#) [Events](#) [COVID-19 COS](#)[Grant Awards](#)

MRC/NIHR Trials Methodology Research Partnership

Clinical trials methodology research and the Global Health Working Group of the MRC/NIHR Trials Methodology Research Partnership (TMRP)

Clinical trials are still a relatively new concept, with the **first modern randomised controlled trial** (RCT) only conducted in 1948. For many subsequent years there was little progress in terms of novel ways to design, conduct, manage, analyse and report trials despite significant changes in, for instance, medicine, health care technology, and our understandings of ethics. However, obtaining good quality evidence for cost-effective healthcare interventions that satisfies payers, prescribers and users is more important than ever.

This means that the methods we use in clinical trials should continually be questioned so that they are optimal and responsive for a broad range of stakeholders. As such, the past decade has seen a new field of **clinical trials methodology research** - research about the way we conduct trials and other types of clinical research.

The above issues are important for wherever trials are conducted, including in low- and middle-income countries (LMICs), as it cannot be assumed that the same methods will be important, relevant or acceptable in every context. As such, **The Global Health Network** is delighted to join a new **MRC-NIHR Trials Methodology Research Partnership (TMRP)**, from June 2019, so that researchers in low resourced settings may both benefit from and contribute to ongoing developments in clinical trial methodology research. These developments will increase the ability of trials methodologists in the UK and other higher income settings to work with partners in LMICs to address key priorities and capture novel approaches successfully implemented in LMICs, thereby adding a global health voice to the overall effort of the partnership.

To ensure that the voice of those working in LMICs is heard, The Global Health Network will work closely with a new **Global Health Working Group** of the MRC/NIHR TMRP. Objectives are to:

- 1) Raise awareness of the field and scope of clinical trial methodology research to those in LMICs
- 2) Signpost them to the other Working Groups of the TMRP (Stratified Medicine, Health Informatics, Adaptive Designs, Outcomes, Trial Conduct, Health Economics, and Statistical Analysis)
- 3) Further increase the capacity for trial methodology research in LMICs through freely accessible information on this dedicated site
- 4) Respond to queries from those in LMICs wanting guidance on methods, potential collaborators and training opportunities/events

**For any other queries about
the Global Health Working
Group please
contact Elizabeth Allen
elizabeth.allen@uct.ac.za**



The practice of pilot/feasibility studies in informing the conduct of HIV clinical trials in sub Saharan Africa: a scoping review of study protocols

TMRP Webinar Series

PI: Dr. Sylvia Nalubega, Soroti University, Uganda

CO-Is

Dr. John Bosco Matovu	Ministry of Health, Uganda
Mr. Osuwat Lawrence Obado	Soroti University, Uganda
Assoc. Prof. Dr. Catrin Evans	University of Nottingham, UK
Dr. Brenda Agyeiwaa Poku	University of Nottingham, UK

Background

- **Pilot/feasibility** studies represent a fundamental phase of the research process
 - ❖ Are largely a **research methodological requirement**.
 - ❖ Play a vital role in the **preliminary planning** of a full size clinical trial
- May include procedures such as the;
 - ❖ **pretesting of study tools** on a related sample to the intended study participants
 - ❖ affirming the **validity of the sample participants**, and that of **the questions** included in the data collection tools

Background...cont.

- ▶ Pilot and feasibility studies are essential in assessing the;
 - ❖ feasibility
 - ❖ acceptability
 - ❖ safety of treatment or interventions
 - ❖ recruitment potential
 - ❖ randomization and blinding processes
 - ❖ and provide estimates for sample size calculation

Background...cont.

► Advantages

- ❖ Contribute to the **determination of the most appropriate trial design**
- ❖ Help to **prevent extensions or unintended closure** as a result of failure to recruit sufficient numbers
- ❖ Contribute to **improvements in the quality of research** conducted
- ❖ Contribute to reduction in **waste in research**

Background...cont.

- ▶ HIV remains a global health challenge and efforts to curb the epidemic requires new innovations through high quality research including **clinical trials on HIV epidemiology, prevention and treatment.**
- ▶ Due to the high incidence and prevalence of HIV in the region, **sub-Saharan Africa remains the hub for large HIV clinical trials** in the world.
- ▶ Despite the likely benefits, **the practice of undertaking pilot/feasibility studies as a pre-requisite for conducting HIV clinical trials** in sub Saharan Africa is not well documented.

Problem statement

- ▶ Less documentation on how pilot/feasibility studies **inform subsequent larger HIV clinical trials.**
- ▶ Likelihood that many pilot/feasibility studies **do not reach their intended goal.**
- ▶ This could however, be due to **underreporting** of how the respective pilot/feasibility studies inform the conduct of a subsequent clinical trial.
- ▶ If pilot/feasibility studies are not conducted prior to larger HIV clinical trials,
 - ❖ The **safety of study participants** could be undermined.
 - ❖ There **could be waste** of resources
 - ❖ Studies **may not achieve intended outcomes**

Research aim

- ▶ We aim to undertake a scoping review of published HIV clinical trial protocols/proposals, to establish **how larger HIV clinical trials have been informed by a prior pilot/feasibility study.**

Research question

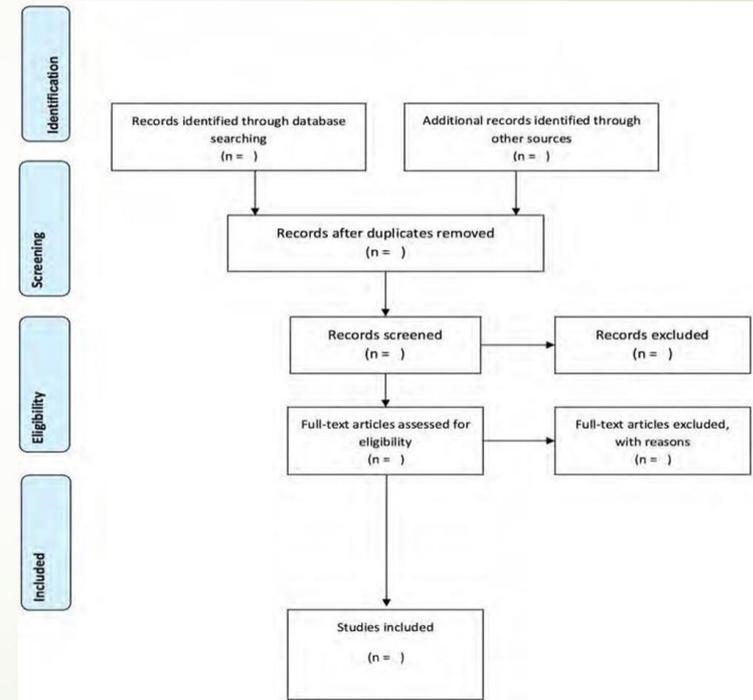
- To what extent do pilot/feasibility studies inform the conduct of HIV clinical trials in sub-Saharan Africa?

Specific questions

- To **estimate the proportion** of HIV clinical trials that are informed by a pilot/feasibility study
- To determine **geographical, clinical trial and funder related factors** that are associated with use of pilot/feasibility studies in informing the conduct of HIV clinical trials

Methodology

- **Scoping review** of protocols/proposals of HIV clinical trials in sub-Saharan Africa.
- Will follow the **JBI approach**.
- Will utilize the **PRISMA-ScR** reporting guideline and checklist.



Methodology...cont.

Inclusion criteria

- ▶ **Types of participants/population**
 - ❖ Published HIV study protocols/proposals that were **designed for conducting human based HIV clinical trials**
- ▶ **Concept**
 - ❖ All protocols/proposals that focus on **HIV clinical trials**

▶ Context

- ❖ **sub-Saharan Africa.**
- ❖ **Multiple settings** that include sub-Saharan Africa
- ❖ Protocols/proposals with **unindicated or unclear will be excluded**

▶ Types of studies

- ❖ Published/unpublished protocols/proposals for HIV clinical trials
- ❖ Articles in English language
- ❖ Published in the past 10 years (2011-2020)

Identification of studies

- ▶ A three-step search strategy will be utilized.



- ▶ Included databases: MEDLINE (OVID), CINAHL, EMBASE, Web of Science, UK Clinical Research Network [UKCRN] Portfolio Database, and African Index Medicus (AIM).
- ▶ Gray literature will be searched from Google, Google Scholar, ClinicalTrials.gov, and Cochrane Central Register of Controlled Trials (CENTRAL) databases.

Study selection/screening for eligibility

- All articles will be imported into the **Endnote software** for screening.
- Selection of documents will be performed by **two independent reviewers**.
- Any disagreements that will arise shall be solved by **consensus or by the decision of a third reviewer**.
- Duplicates will be removed before screening
- The selection process will be done at three levels.
 - At **Title** level, at **abstract** and at **full text**
- The review process shall be aligned to the flowchart from the PRISMA-ScR statement

Data extraction

- ▶ Data will be **extracted and charted using a structured tool** adapted from the JBI scoping review methodology guideline
- ▶ Data to be extracted will include: Author(s), Year of publication, clinical trial phase, year published, country(s) hosting the trial, population, sample size, methodology/methods, intervention (and comparator), duration of the intervention, and funding agency
- ▶ We shall finally extract data related to **any indication that the proposed trial was informed by a pilot or feasibility study.**

Scoping Review Details	
Scoping Review title:	
Review objective/s:	
Review question/s:	
Inclusion/Exclusion Criteria	
Population	
Concept	
Context	
Types of evidence source	
Evidence source Details and Characteristics	
Author(s)	
Date (year)	
Article title	
Journal	
Country	
Context (clinical setting, etc...)	
Sample size	
Participants' age	
Participants' sex	
Clinical trial phase	
Methodology	
Intervention/comparator	
Duration of intervention	
Funder(s)	
Details/Results extracted from source of evidence (in relation to the concept of the scoping review)	
Indication that the proposed trial was informed by a pilot or feasibility study	
No indication that the proposed trial was informed by a pilot or feasibility study	

Data analysis/presentation

- ▶ Data analysis shall involve **tallying of the numbers** of HIV clinical trial protocols/proposals identified in the last 10 years.
- ▶ Data will be **exported into Microsoft excel** for analysis.
- ▶ Computation **of proportions of trials** that had a pilot/feasibility study before they commenced shall be done.
- ▶ Analysis of how **other variables associate** with the primary outcome will be done.
- ▶ Data will be analysed and interpreted using simple **descriptive statistics** (frequencies, means, median, and Standard Deviations)
- ▶ **Patterns and trends** (if identified) will be illustrated using figures and/or diagrams, and summarized in **a narrative form**.
- ▶ Final conclusions will be drawn from the mapped evidence
- ▶ Recommendations for **future research** and provisional recommendations for **practice** may be proposed.

Potential impact

- ▶ Cultivating a culture of;
 - ❖ reporting of the **outcomes/endpoints** of pilot and feasibility studies
 - ❖ accountability to funders and the scientific community
- ▶ Influence on the integration of pilot and feasibility studies in HIV clinical trials conduct
- ▶ Influence on HIV clinical trial policy and guidelines

Dissemination plans

- Scoping review protocol to be published
- Final scoping review to be published
- Presentation in international conferences



IMPROVING UPTAKE OF CORE OUTCOME SETS IN LOW- AND MIDDLE-INCOME COUNTRIES

Jamlick Karumbi

University of Liverpool, UK

KEMRI Wellcome Trust, Kenya

Background

- When trials assessing the same intervention or condition choose different outcomes to measure or report on it becomes difficult to synthesize results in a systematic review limiting the translation of evidence into practice.
- It also has been shown to lead to selective reporting bias in research.
- Standardizing outcomes and how we measure them is important, enhances research usability and reduce research waste.
- The greater emphasis on the choice of outcomes to measure may also help increase patient centered care when patients are involved in the choice of the outcomes to be measured

- COS are agreed-on minimum standardized outcome sets that should be measured and reported in all clinical trials in a given clinical area.

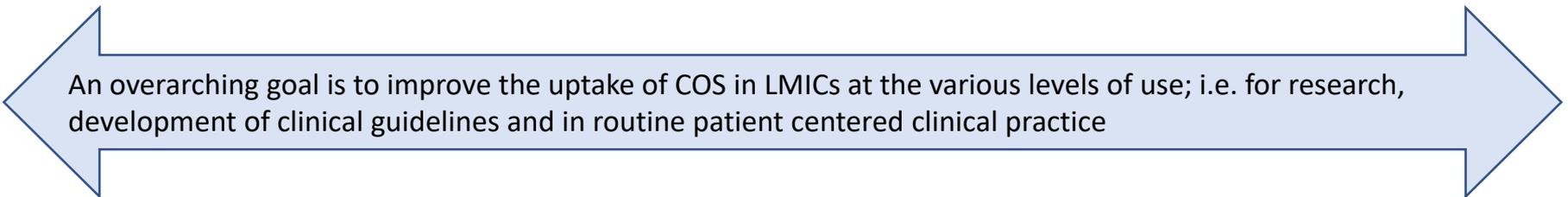
What are COS?

- They consist of
 - Core Domain Set (this defines what domains should be measured in a trial) and
 - Core Outcome Measurement set (defines the instruments which would be appropriate to measure the domain).

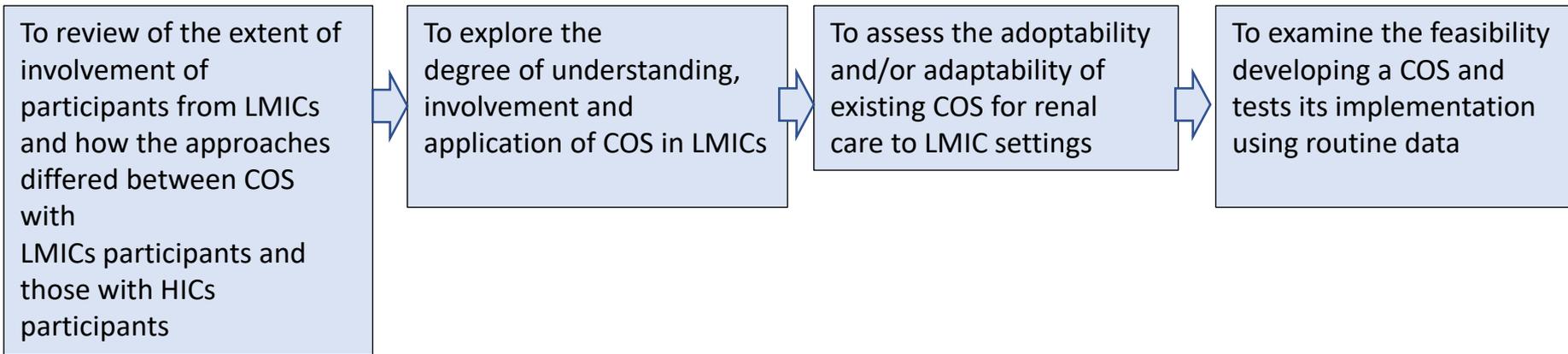
COS development and uptake

- To date, COS have been developed for various conditions or diseases and continue to be developed.
- Over 70% of COS works and participants have been from Europe and North America.
- Virtually no COS that has been initiated from developing countries.
- As of last year about 25% of COS had participants from developing countries

Objectives



An overarching goal is to improve the uptake of COS in LMICs at the various levels of use; i.e. for research, development of clinical guidelines and in routine patient centered clinical practice



To review of the extent of involvement of participants from LMICs and how the approaches differed between COS with LMICs participants and those with HICs participants

To explore the degree of understanding, involvement and application of COS in LMICs

To assess the adoptability and/or adaptability of existing COS for renal care to LMIC settings

To examine the feasibility developing a COS and tests its implementation using routine data

Methods – Objective 1

Systematic review describing the involvement of participants from LMICs and approaches used.

Guiding questions

- *What is the proportion of COS that have had participants from LMICs?*
- *What were the approaches used in the COS that have had participants from LMICs*

Methodology – Objective 2

Explore the degree of understanding, involvement and application of COS in LMICs through an online survey and a stakeholder's workshop.

Guiding questions

1. *What are experiences of involving participants from LMICs in COS development. [2 surveys]*
 - i. An online survey for authors from HIC who had LMICs participants
 - ii. An online survey for LMIC participants who have been involved in COS development
2. *In the Kenyan Context, what are Knowledge, Attitude and practice on COS in general? [workshop]*

Methodology – Objective 3

Test the adoptability or adaptability of existing COS to LMIC settings.

Guiding questions

- 1. Are COS developed in HIC generalizable to LMICs?*
- 2. What are the context issues to consider?*

- Qualitative methods will be used [Key Informant Interviews, Group interviews and Focused Group Discussions]*

Methodology – Objective 4

Examine the feasibility developing a COS and tests its implementation using routine data

- *Guiding questions*

1. *Is a rapid COS development process feasible in an LMIC setting in the area of basic newborn care?*
 - Scope definition
 - Systematic review
 - Consensus process - Delphi process, Focused Group Discussions etc
2. *Can the routine data collection systems be used to assess implementation of COS?*
 - Analysis of data from the Clinical Information Network (CIN) for pediatrics and The East African Renal Registry for Renal

Table 1 Scope of included studies

	HICs n (%) (N=295)	LMICs [#] n (%) (N=75)
Scope of the COS study		
Study aims		
Part of wider trial design	124 (42)	13 (17)
Specific for COS	171 (58)	62 (83)
Intended use of recommendations		
Research	264 (89)	61 (81)
Clinical Practice	0	0
Research and Practice	31 (11)	14 (19)
Population characteristics		
Neonates	4 (1)	1 (1)
Adults	61 (21)	12 (16)
Children	26 (9)	7 (9)
Children and Adults	28 (9)	10 (13)
Not specified*	176 (60)	45 (60)

Public participation			
	Patients	72 (24)	28 (37)
	Carers	26 (9)	17 (23)
	Patient Support group representatives	21 (7)	9 (12)
	Service users	4 (1)	5 (7)
Non-Clinical Research expertise			
	Researchers	55 (19)	21 (28)
	Statisticians	22 (7)	8 (11)
	Epidemiologists	13 (4)	9 (12)
	Academic Representatives	5 (2)	0 (0)
	Methodologists	19 (6)	5 (7)
	Economists	7 (2)	2 (3)
Authorities			
	Regulatory agency representatives	33 (11)	15 (20)
	Government agencies	14 (5)	5 (7)
	Policy makers	10 (3)	7 (9)
	Charities	4 (1)	0 (0)
	Service commissioners	3 (1)	1 (1)

Main methods (not mutually exclusive)	HIC (n) (295)	LMIC (n) (75)
Delphi	83 (28)	47 (63)
Focus group discussion	8 (3)	7 (9)
Nominal Group Techniques	17 (6)	11 (15)
Semi structured discussions	152 (52)	39 (52)
Survey	29 (10)	9 (12)
Literature review	140 (47)	49 (65)
Unstructured group discussions	4 (1)	8 (11)
No methods described	6 (2)	1 (1)

Acknowledgements

Supervisors

University of Liverpool

1. Prof Paula Williamson
2. Prof Bridget Young
3. Dr. Elizabeth Gargon

Kenya Medical Research Institute- Welcome Trust Research

1. Dr. David Gathara

PILOT IMPLEMENTATION OF A MOBILE TEXT MESSAGE-BASED SOLUTION FOR RANDOMIZATION

MERCY CHEPKIRUI

CLINICAL TRIAL DATA MANAGER, KEMRI-WELLCOME TRUST NAIROBI.

KEMRI | Wellcome Trust



OUTLINE

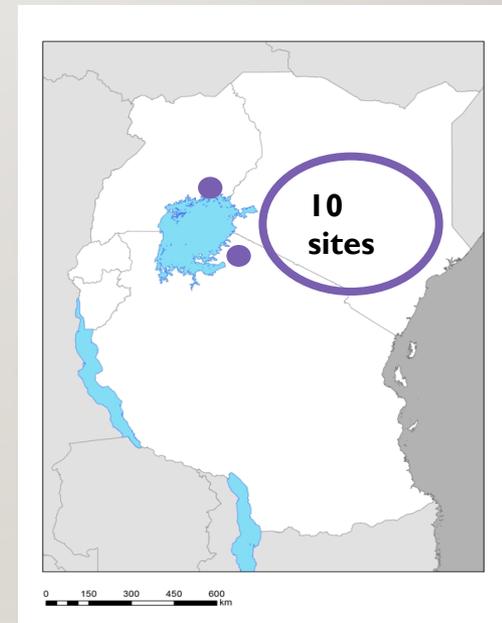
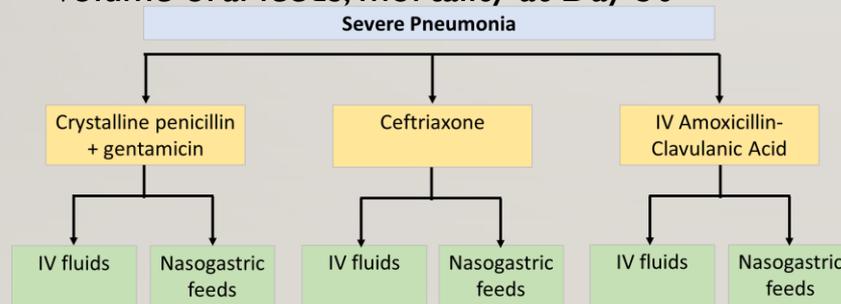
- Background & rationale
 - Objectives
 - Methodology
 - Work plan
- 
- A decorative horizontal band at the bottom of the slide featuring a realistic wooden floor texture with vertical planks and natural wood grain patterns.

BACKGROUND

- Randomization - the standard method of experimental control
- Randomization involves two steps
 - Generating an unpredictable random sequence,
 - Implementing the sequence in a way that conceals the treatment until the participant have been **assigned** the treatment .
- Impact of improper randomization
 - Biased estimates of treatment effects
- Traditional methods for concealment
 - The use of sequentially numbered opaque sealed envelopes is prone to manipulation, can get easily damaged during shipping and filling and concealing is time-consuming which is prone to human-error.

SUPPORTIVE CARE AND ANTIBIOTICS FOR SEVERE PNEUMONIA AMONG HOSPITALIZED CHILDREN (SEARCH)

- Randomized pragmatic 3x2 factorial clinical trial
- Sample size: 4392 children in 12 sites
- Primary endpoint: Mortality at Day 5
- Secondary outcomes: length of hospitalisation, time to full volume oral feeds, mortality at Day 30



RATIONALE

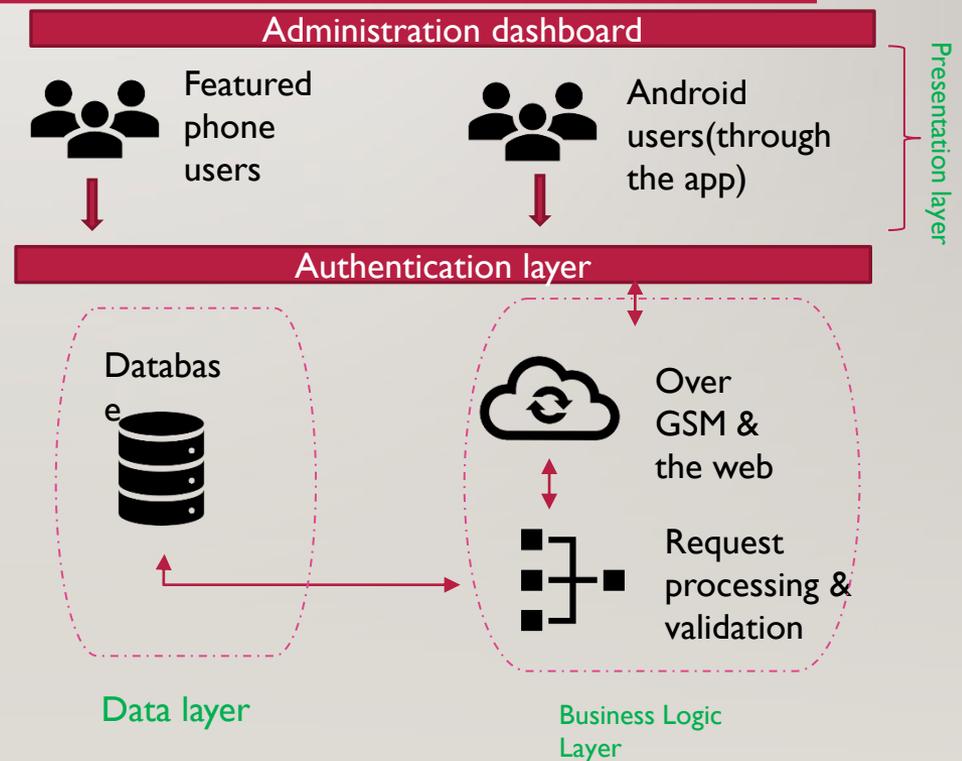
- Centrally-administered web-based/telephone randomization as an option.
- Weak communication infrastructure and poor internet connectivity in low resource settings is a limitation.
- An affordable, auditable, and suitable for low-resource settings is the use of mobile phone-based Short Messaging Service (SMS).
- SMS used in clinical trials
 - To reduce missed appointments (Perron, N. J., 2013)
 - To improve clinic attendance (Chen, Z. W., 2008)
 - As a cost-effective intervention for managing patients with chronic illnesses (Islam, S. M.S., 2019; Finitsis, D. J.,2014; Thakkar,2016; Park, L.G., 2014).
 - SMS reminder trial for malaria case management (Zurovac et al., 2011) to improve adherence to treatment guidelines.
- Rapidly expanding mobile phone technology in developing countries.
- This has the potential to promote equitable improvement in the quality of global health trials by providing a verifiable and convenient method for randomization that works in marginalized settings

OBJECTIVES

- To determine accuracy of SMS randomization against the master randomization list and sealed envelopes (the method being used in the SEARCH trial)
- Estimate response time of SMS delivery for every randomization request across different networks.
- Assess user experience for both approaches.

METHODOLOGY

- Sample size: 200 eligible participants in SEARCH clinical trial.
- 2 study sites in Nairobi
- A pair-wise randomization: A participant will be randomized using 2 methods. The existing envelope method & SMS method.
- Qualitative interviews with the users (Clinical trial team).
- SMS platform development (3-tiers)



WORK PLAN

Period	2020					2021						
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July
Developing the SMS platform	█	█	█	█								
Reporting I					█							
Clinical trial randomization						█	█	█	█			
Qualitative interviews									█	█		
Reporting II											█	█



THE END

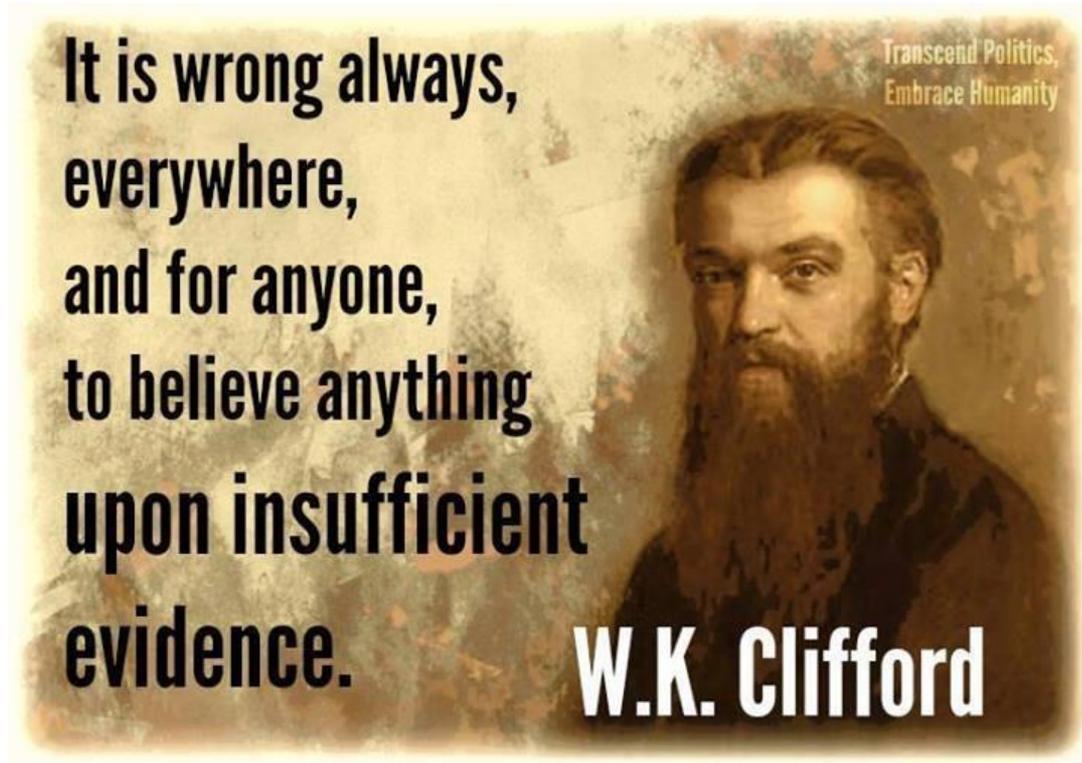
-
- Thank you

Promoting reuse of clinical research data

What are the barriers and enablers of data reuse?

Naomi Waithira

Mahidol Oxford Research Unit, Thailand



**It is wrong always,
everywhere,
and for anyone,
to believe anything
upon insufficient
evidence.**

**Transcend Politics,
Embrace Humanity**

W.K. Clifford

William Kingdon Clifford (1845-1879)

Mathematician and philosopher-introduced geometric algebra

The Evidence Pyramid



HOW is individual patient-level data from other studies relevant for new studies?

Design:

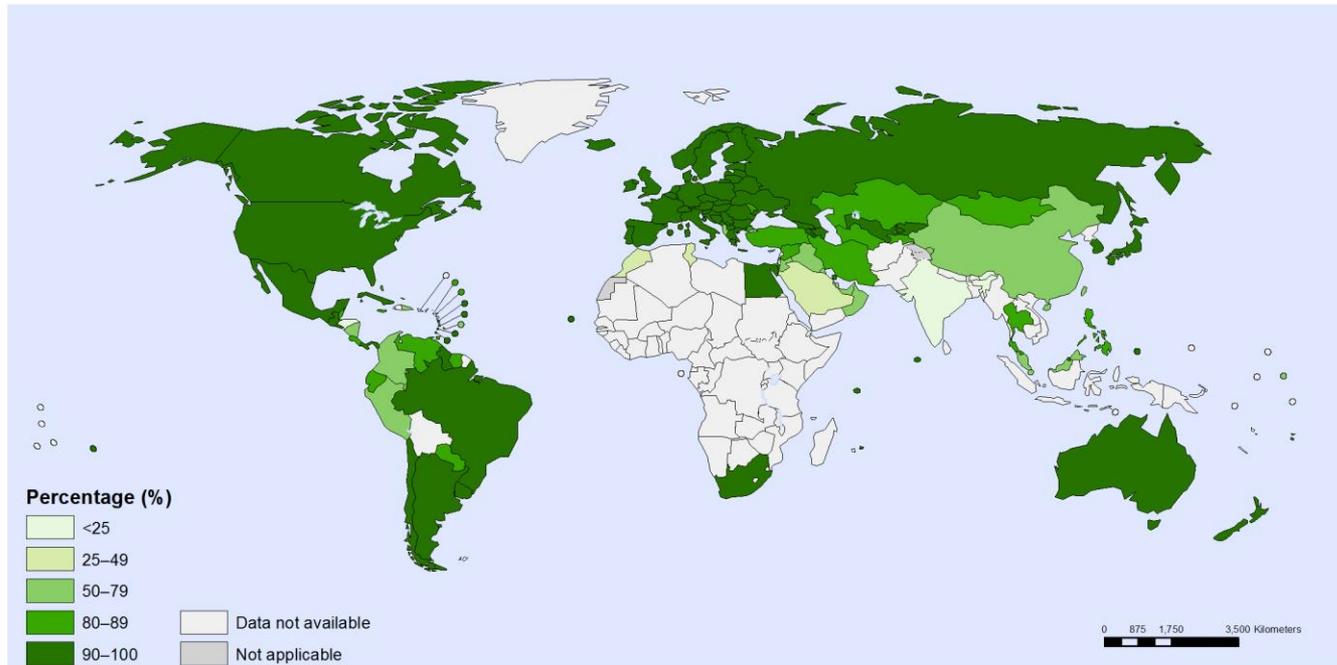
Baseline/Background data, hypothesis development

Operations:

Determine Cost, Complexity & Feasibility

Analysis: Interpretation of results

Completeness of cause-of-death data (%), 2007–2016



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Information, Evidence and Research (IER)
World Health Organization



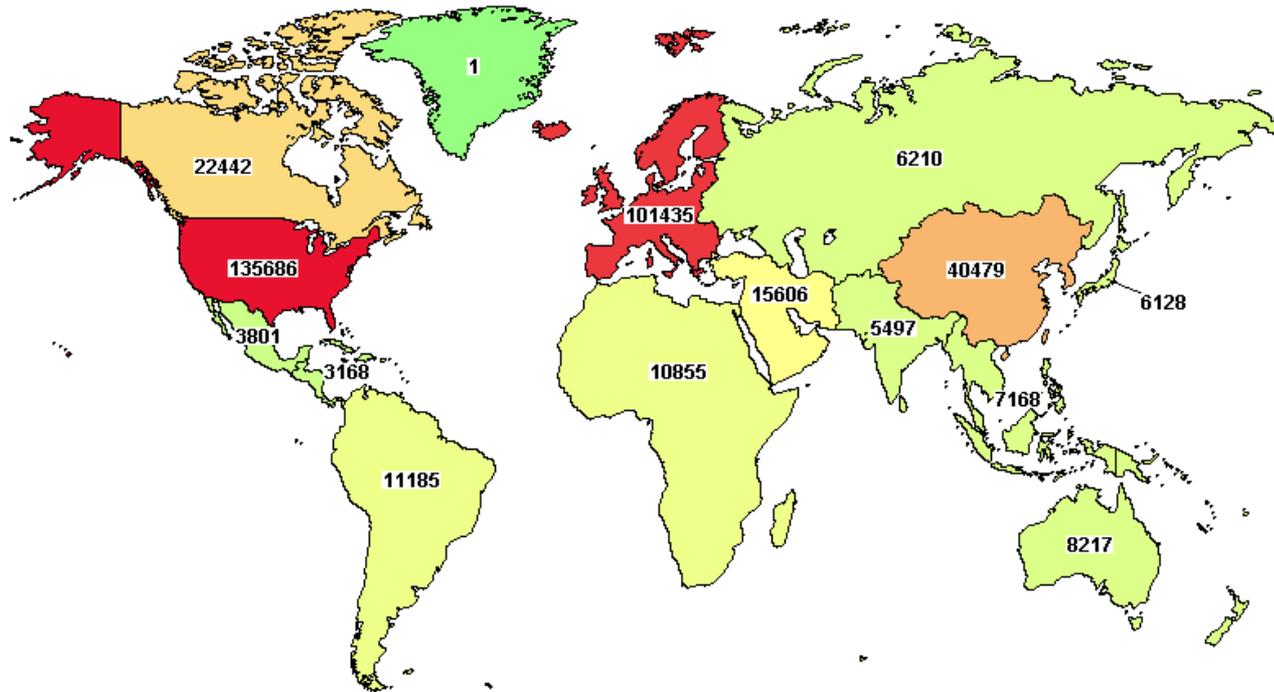
© WHO 2018. All rights reserved.

Does the data exist?

Can the data be accessed?

Can the data be used?

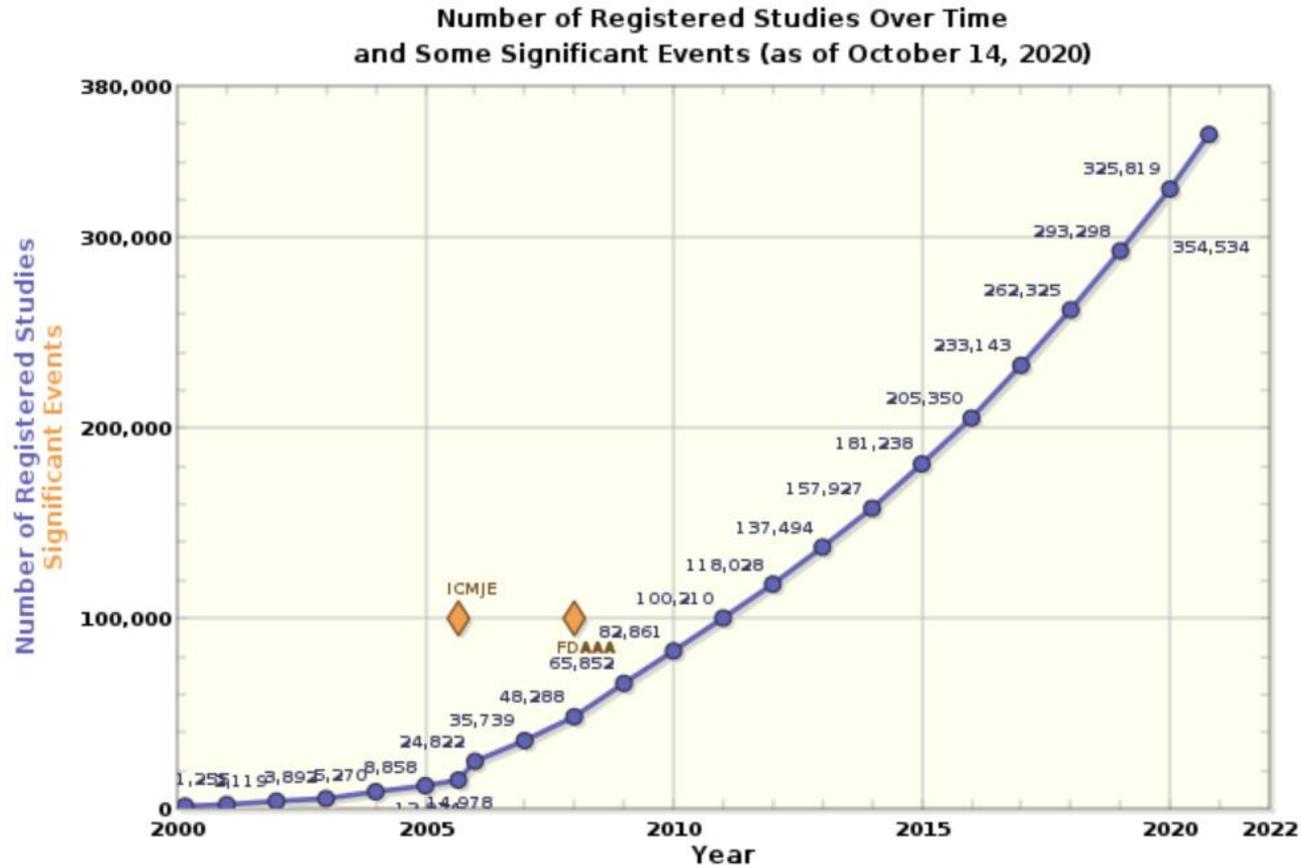
Does data exist: Registered clinical studies



Source: <https://ClinicalTrials.gov>

Least  Most

Does the data exist?

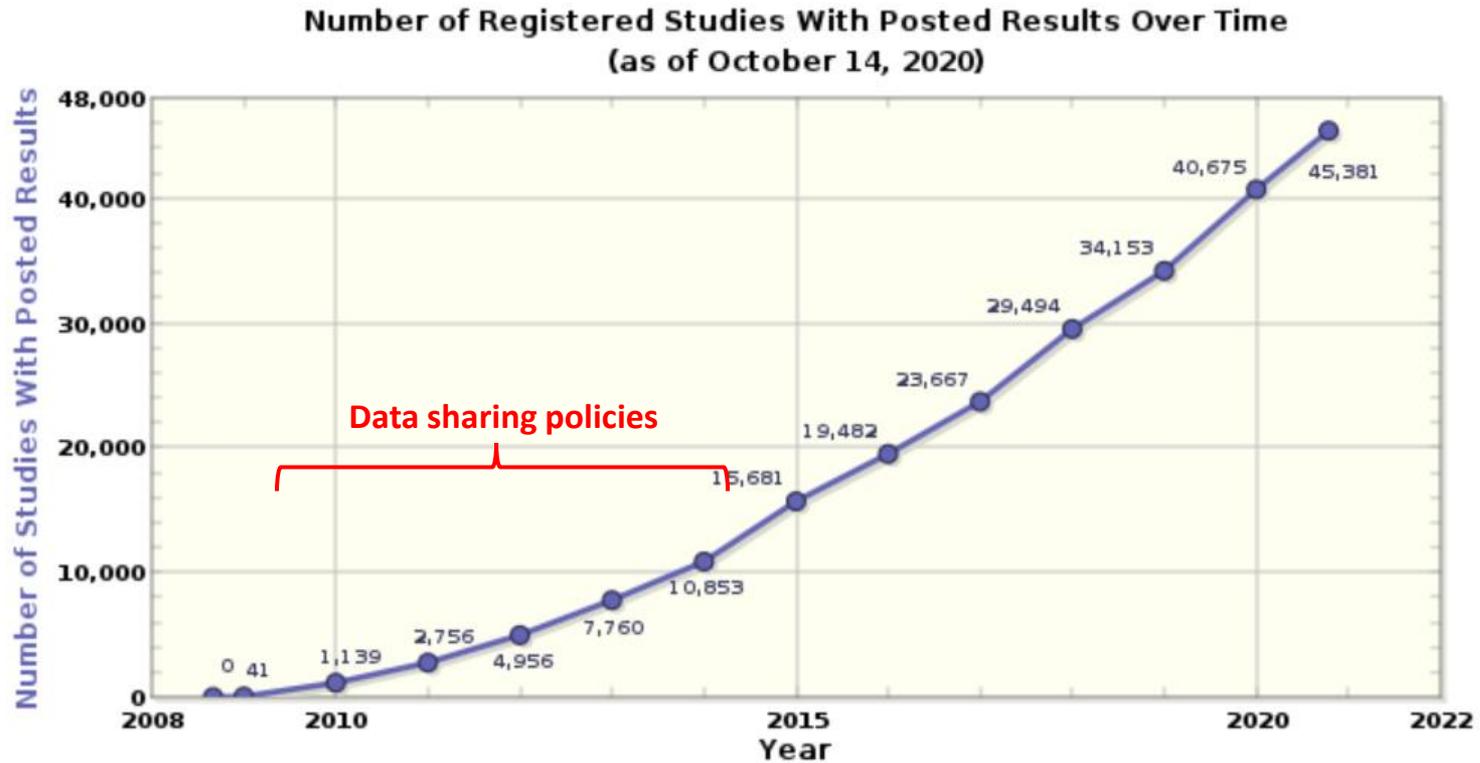


ICMJE: trial registration made a condition for publication (September 2005)

FDAAA: requirements for trial registration

Source: <https://ClinicalTrials.gov>

Does the data exist?



Source: <https://ClinicalTrials.gov>

Steady increase in number of studies with posted results over time. Potential increase in number of datasets available

The premise of data sharing

IMPACT

Improved health and wellbeing of the public

OUTCOMES

More treatment options

Improved methods for disease treatment, diagnosis, prevention

OUTPUTS

Data is

Findable

Accessible

Interoperable

Reusable

INPUTS

Data sharing policies

Data Access Committees

Repositories

(Meta)Data standards

Data Management tools

Consent guidance

Staff eg DM

Increased quality and transparency in science

Researcher career progression

Accelerated innovation

Better study design

Higher quality data

Economic gain

Higher Return on Investment in research

Savings from deduplication

Direct financial benefit for reusers

REUSE Study: background

- Thousands of clinical research studies are conducted annually
- Significant investment made to facilitate data collection and 'sharing'

Does data sharing actually happen?

Is shared data reused?

Has data sharing had the intended impact?

What are the outputs of secondary data use?

If not, what can be done to increase its impact?

REUSE study: objectives

Impact of secondary use of clinical research data



Barriers and enablers of secondary use of clinical research data

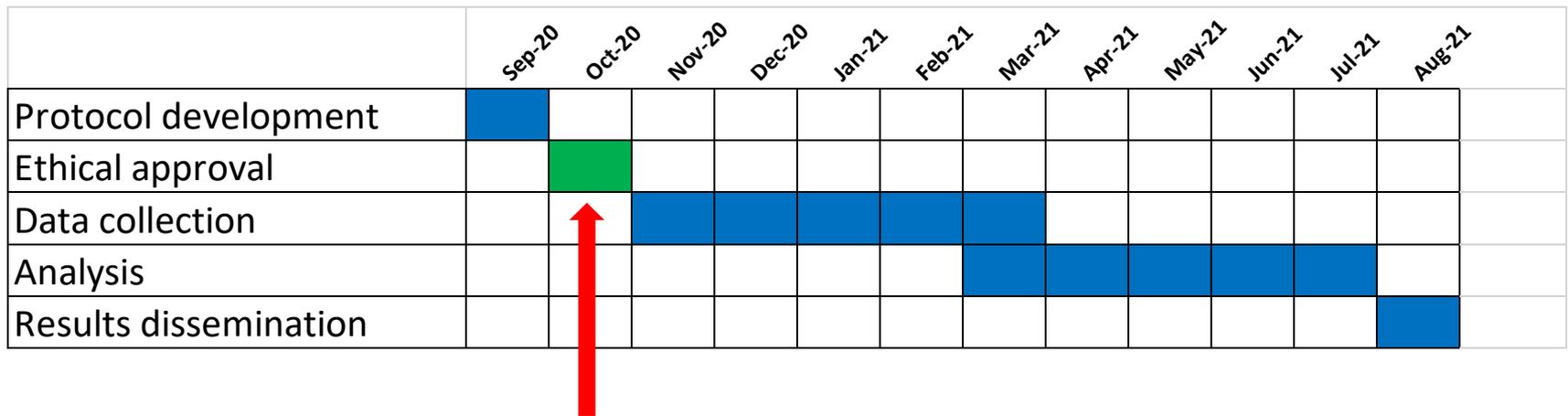
Research questions

1. What outputs are obtained from data reuse?
 - i. What benefits have these outputs had for researchers, general public ?
 - ii. How has data reuse influenced transparency and quality of research?
2. What difficulties do users experience with data access and reuse?
3. What are the perspectives of the public with regard to use of their data for clinical research purposes.

Methods

- **Online survey**
 - N=200
 - Secondary data users
 - Researchers, Epidemiologists, Statisticians, Artificial Intelligence experts, Regulators, Disease advocacy bodies
- **In-depth interviews**
 - N=20-30
 - similar population as online survey
- **Focus group discussions**
 - 2-3 discussions
 - Public population

Timeline



We are here

With thanks to **MRC/NIHR Trials Methodology Research Partnership (TMRP)** for funding this work

Thank you.



Mahidol Oxford Tropical Medicine Research Unit

Faculty of Tropical Medicine | Mahidol University | 420/6 Rajvithi Road | Bangkok 10400, Thailand



Thank you to our presenters today.

Please type your questions in the chat box!