



# 1.1

## Systematic Review Protocol

Protocol for Uganda and Tanzania

### Burden of Disease and Health Service Delivery

#### OBJECTIVE 1

#### Define the burden of GAS, ARF and RHD

Outcomes of interest:

- Incidence of sore throat in children aged 5-15 years
- Prevalence of GAS among cases of sore throat
- Incidence of acute ARF
- Case-fatality rate from acute ARF
- Prevalence of RHD
- Mortality from RHD
- Non-fatal RHD outcomes: heart failure, stroke, infective endocarditis, atrial fibrillation, cardiac surgery and its complications

#### OBJECTIVE 2

#### Identify key issues around sore throat, ARF, and RHD care

Outcomes of interest: barriers and facilitators in the continuum of care “matrix”

	Patients	Health providers	Health Systems
Initial decision to seek care	✓	✓	✓
Factors influencing diagnosis	✓	✓	✓
Factors influencing treatment and/or referral	✓	✓	✓
Factors influencing adherence and retention in long-term care	✓	✓	✓

#### OBJECTIVE 3

To create a systematic stakeholder framework around sore throat/ARF and RHD to identify and include individual stakeholders deemed important by literature and experienced stakeholders.

Outcomes of interest:

1. Identify a relevant framework of stakeholder categories
2. Identify specific stakeholder groups
  - Begin with relevant research disciplines
  - Supplement with collaborative networks

3. Solicit feedback from expert informants
4. Presentation of a detailed stakeholder framework

Search strategy (common to both objectives):

1. Pubmed search

Search (((("Tanzania"[Mesh]) OR ganda)) OR ((ganda) OR "Uganda"[Mesh])) AND (((("Rheumatic Heart Disease"[Mesh]) OR rheumatic heart)) OR ((rheumatic fever) OR "Rheumatic Fever"[Mesh])) OR (((("Pharyngitis"[Mesh]) OR pharyngitis) OR sore throat) OR strep) OR "Streptococcus pyogenes"[Mesh]) OR group a streptococcus)) Filters: Publication date from 1995/01/01 to 2015/12/31

2. Embase search

('group a streptococcal infection'/exp OR 'streptococcus group a'/exp OR 'group a streptococcal infection' OR 'streptococcus group a' OR 'pharyngitis'/exp OR 'pharyngitis') OR ('rheumatic fever'/exp OR 'rheumatic fever') OR ('rheumatic heart disease'/exp OR 'rheumatic heart disease')) AND ('uganda'/exp OR 'uganda' OR 'ugandan'/exp OR 'ugandans') OR ('tanzania'/exp OR 'tanzania' OR 'tanzanian'/exp OR 'tanzanian')

Supplement with grey literature searches:

- Academic theses from study country
- Government documents (especially death notification)
- Conference proceedings
- Google scholar

Also: hand-search reference lists, consult with local ARF/RHD experts in study country

Inclusion criteria:

- Studies conducted in Tanzania and Uganda
- Studies addressed one or more of the diseases of interest (GAS, ARF, RHD)
- Studies contained one or more of the objectives above
- Any epidemiological study is eligible (e.g., cross sectional, case series, case control, cohort study, intervention study)

Exclusion criteria:

- Opinion articles, case reports, reviews; systematic reviews will be retained temporarily to hand search reference lists, but ultimately excluded
- Studies prior to 1995 excluded (rationale: 1) up-to-date information desired; 2) echocardiography for diagnosis of RHD only widely used after the 1990s)

## Identifying a relevant framework of stakeholder categories

This is based on an iterative search of the literature specific to ST/ARF/RHD and stakeholders/policy/mapping.

### 3. Pubmed search (Appendix 1)

Search (((("Rheumatic Heart Disease"[Mesh]) OR rheumatic heart)) OR ((rheumatic fever) OR "Rheumatic Fever"[Mesh])) OR (((("Pharyngitis"[Mesh]) OR pharyngitis) OR sore throat) OR strep) OR "Streptococcus pyogenes"[Mesh]) OR group a streptococcus)) Filters: Publication date from 1995/01/01 to 2015/12/31 [This could be focused on the RHDA countries or applied to all developing countries]

((("policy"[MeSH Terms] OR "policy"[All Fields]) AND stakeholder[All Fields] AND mapping[All Fields]) AND ("health"[MeSH Terms] OR "health"[All Fields])) AND ("health"[MeSH Terms] OR "health"[All Fields])) AND ("developing countries"[MeSH Terms] OR ("developing"[All Fields] AND "countries"[All Fields]) OR "developing countries"[All Fields])

### 4. Embase search (Appendix 2)

(('group a streptococcal infection'/exp OR 'streptococcus group a'/exp OR 'group a streptococcal infection' OR 'streptococcus group a' OR 'pharyngitis'/exp OR 'pharyngitis') OR ('rheumatic fever'/exp OR 'rheumatic fever') OR ('rheumatic heart disease'/exp OR 'rheumatic heart disease'))

Supplement with grey literature searches:

- Academic theses from study country
- Government documents (especially death notification)
- Conference proceedings
- Google scholar

Also: hand-search reference lists, consult with local ARF/RHD experts in study country

Inclusion criteria:

- Articles focusing on the person with ST/RHD/ARF and identifying key stakeholders involved, in particular in rural and low-income settings. We will identify the relevant health stakeholders including public, policy makers and politicians and research community.
- Studies addressed one or more of the diseases of interest (GAS, ARF, RHD)
- Studies contained one or more of the objectives above
- Any epidemiological study is eligible (e.g., cross sectional, case series, case control, cohort study, intervention study)

Exclusion criteria:

- Opinion articles, case reports, reviews; systematic reviews will be retained temporarily to hand search reference lists, but ultimately excluded
- Studies prior to 1995 excluded (rationale: 1) up-to-date information desired; 2) echocardiography for diagnosis of RHD only widely used after the 1990s))

## 2 IDENTIFY SPECIFIC STAKEHOLDER GROUPS

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- Begin with relevant research disciplines
  - Supplement with collaborative networks

A list of relevant research disciplines will be generated using the academic affiliations of the authors of the papers from the review above and the types of journals in which they were published. We anticipate that several disciplines will be identified in this manner.

We will also add stakeholder groups related to these disciplines based on the critical literature review.

Finally we will supplement the findings with collaborative networks using internet searches, grey literature and personal communication.

## 3 SOLICIT FEEDBACK FROM EXPERT INFORMANTS

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Feedback from experts will be collected to ensure that the framework reflected realities of practice and did not exclude key groups that may be missed in the literature search. A review of the framework will ensue with an iterative process to finalise the document. The key informants will include RHDA partners but also external partners to ensure a broad representation of experts.

## 4 PRESENTATION OF A DETAILED STAKEHOLDER FRAMEWORK

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We will finally construct two frameworks (abbreviated and detailed), which will be utilised for key informant interviews, policy dialogues and inform the production of a detailed planning map.