

Additional file 1 – Online Survey questionnaire**TWENDE ONLINE SURVEY QUESTIONNAIRE****Participant information**

We are grateful for time to participate in this survey. Please take a few moments to read carefully the information provided below: You are being invited to participate in a research study titled Tuberculosis: Working to Empower Nations' Diagnostic Effort (TWENDE). This study is being done by the TWENDE consortium comprised of University of St. Andrews, UK in collaboration with Mbeya Medical Research Institute Tanzania, Kilimanjaro Clinical Research Institute Tanzania, Makerere University Uganda, Kenya Medical Research Centre Kenya, CPAR Uganda Ltd Uganda, and the East African Health Research Commission of the East African Community. Follow the link to view TWENDE team:

<http://infection.standrews.ac.uk/projects/about-twende-2/the-twendeteam/>

The purpose of this research survey is to get an overview of the state of diagnosis and treatment of tuberculosis in your district. Information from the survey feeds into an East Africa wide study aiming at understanding the barriers and identifying opportunities that could improve diagnosis and treatment of tuberculosis in the region, and will take you approximately 12min minutes to complete. Your participation in this study is entirely voluntary and you can withdraw at any time. You are free to omit any question. We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach is always possible. To the best of our ability your answers in this study will remain confidential. We will

minimise any risks by coding the data given and storing it without any personal identifiers. The data will be stored for 10 years after which it will be destroyed.

Consent

By clicking YES you agreeing to the following: I have read and understood the participant information.

I understand that I can withdraw from the study at any time without having to give an explanation.

I understand that my data will be confidential and that it will NOT contain identifiable personal data

I understand that my data will be stored for a period of 10 years before being destroyed

I have been made fully aware of the potential risks associated with this research and am satisfied with the information provided.

I agree to take part in the study

Yes

No

Q1 What is your job title?

Q2 How long have you served in this job?

Less than 1 year

1 - 2 years

3 - 4 years

5 - 6 years

7 - 8 years

9 - 10 years

More than 10 years

Q3. What are the names of your district and region?

Q4. In your job, which of the following are the roles you play? Select as many as appropriate.

A) Participate in health policy formulation_

B) Monitor implementation of health policies by healthcare facilities_

C) Supervise healthcare provision in my area of jurisdiction_

D) Attend healthcare management meetings_

E) Supply medicines to the healthcare facilities_

F) Supply laboratory materials to healthcare facilities_

G) Preside over healthcare procurement decision making_

H) Pay salaries of healthcare professionals my area of jurisdiction_

I) Supervise healthcare infrastructure development_

J) Represent healthcare institutions at national & international meetings_

K) Write & submit disease notification reports to Ministry of Health &

World Health Organisation

Q5. Are there health care facilities (HCF) in your area of jurisdiction in which tuberculosis (TB) is treated?

Yes_

No

Q6. If yes, how many? Select the appropriate number. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9,

10, 11-24, 25-50, 51-74, 75 – 100.

Q7. How many are owned by Government? Use the drop down list to select the right number. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11-24, 25-50, 51-74, 75 – 100.

Q8. How many are owned by Not-for-Profit Sector? Use the drop down list to select the right number. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11-24, 25-50, 51-74, 75 – 100.

Q9. How many are owned by the Private Business Sector? Use the drop down list to select the right number. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11-24, 25-50, 51-74, 75 – 100.

Q10. If no, to which Healthcare facility are TB patients in your area of jurisdiction referred for treatment? Select one or more as appropriate to your area of jurisdiction.

A) District or Sub-county referral hospital_

B) Regional or County referral hospital

C) National referral hospital

Q11. What diagnostics are mainly used for TB diagnosis by the HCFs in your area of jurisdiction? Select one or more answers as appropriate

A) Smear microscopy

B) Tuberculosis Culture

C) GeneXpert MTB/RIF

D) Line probe assay (LPA) or Hain test

E) Clinical (diagnosis based on disease symptoms done by an experienced medical practitioner)_

F) None of the above

Q12. Which of the following statements is (are) true for your area of jurisdiction? Select one or more as appropriate to your area of jurisdiction.

- A) TB is diagnosed but NOT treated in my area jurisdiction
- B) TB is NOT diagnosed but is treated in my area of jurisdiction
- C) Both diagnosis and treatment of TB occur in my area of jurisdiction
- D) Specimen collection centres, diagnosis and treatment occur in my area of jurisdiction
- E) Only TB specimen collection centres exist in my area of jurisdiction_
- F) TB specimens are collected and referred to a healthcare facility outside my area of jurisdiction_
- G) TB specimens are collected and referred to a healthcare facility in my area of jurisdiction
- H) None of the above

Q13. Which of the following is true about specimen referral? Select one or more as appropriate to your area of jurisdiction. Skip if you do not refer specimens in your area of jurisdiction.

- A) District or sub-county referral hospital
- B) Regional or county referral hospital
- C) National referral hospital

Q14. Do any of the Healthcare facilities in your area of jurisdiction, which treat TB have the GeneXpert MTB/RIF for diagnosis of TB?

Yes

No

Q15. If yes, how many healthcare facilities have Xpert MTB/RIF? Use the drop down list to select the right number. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25.

Q16. Name the healthcare facilities in your area that have GeneXpert MTB/RIF

Q17. If not, what do you think are the reasons for not having GeneXpert MTB/RIF?

Select as many answers as appropriate. Skip if answered Yes in Q14.

A) No budget allocated

B) Too expensive for the healthcare facilities in the district or county_

C) No electricity at the healthcare facility_

D) No water supply at the healthcare facility_

E) Procurement difficulties_

F) No qualified human resource_

G) Biosafety issues

H) Stigma by the local community_

G) Not aware of this diagnostic

Q18. Do any of the Healthcare facilities in your area of jurisdiction, which treat

TB have Line Probe Assay (Hain test) platform for diagnosis of TB?

Yes

No

Q19. If yes, how many Healthcare facilities have LPA Platforms? Use the drop down list to select the right number. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25.

Q20. Please name the Healthcare facilities that have LPA platform

Q21. If not, what do you think are the reasons for not having LPA? Select as many answers as appropriate. Skip if answered Yes in Q18.

- A) No budget allocated
- B) Too expensive for the healthcare facilities in the district or county
- C) No electricity at the healthcare facility
- D) No water supply at the healthcare facility
- E) Procurement difficulties
- F) No qualified human resource
- G) _Biosafety issues_
- H) Stigma from the community
- I) Only available at regional hospital level
- J) Unaware of this diagnostic

Q22. In your opinion and on a scale of 1 to 5, where 1= very low and 5 = sufficient, please rate the capacity in your area of jurisdiction for diagnosis of TB. Use the dropdown list to select the appropriate score. 1, 2, 3, 4, 5.

Q23. Please explain your score in one or two sentences.

Q24. In your opinion and on a scale of 1 to 5, where 1= very low and 5 = sufficient, please rate the capacity in your area of jurisdiction for treating TB.

Use drop down list to select the appropriate score. 1, 2, 3, 4, 5.

Q25. Please explain your score in one or two sentences.