

Monitoring of surgical quality, patient satisfaction, and data quality during the 3-6 month period following trichiasis surgery



Context:

Blinding trachoma and its main complication, trichiasis, are the leading cause of preventable blindness in the world. To eliminate blinding trachoma worldwide by 2020, Ministries of Health will need to address their trichiasis backlog, reducing the prevalence below less than one case per 1,000 population, as defined by WHO.

Health professionals trained to conduct trichiasis surgery have been providing ongoing support for trichiasis management in many countries. Generally, routine and systematic data regarding surgical outcomes have not been collected, particularly data capturing surgical failure during the critical 3-6 month post-operative period. This exercise was developed based on a recommendation included in the 2011 Trichiasis Quality Improvement Study conducted by the Kilimanjaro Center for Community Ophthalmology, the Carter Center, and Helen Keller International, as well as the recommendations released following the first Global Trichiasis Scientific Meeting, held in Moshi, Tanzania in 2011.

General objective:

- To improve trichiasis surgical services and trichiasis data quality under Ministry of Health trachoma programs.

Specific objectives:

- To capture surgical failure and other complications 3-6 months following trichiasis surgery;
- To assess the quality of data reported on trichiasis surgery;
- To assess the satisfaction of patients who received trichiasis surgery; and
- To provide feedback to surgeons and national programs to improve the quality of surgical services.

Methodology:District and health center/ area selection:

1. Each month, one health district will be randomly or purposively sampled. Examples of reasons for using purposive sampling could be the following, in addition to others: unusually high or low surgical output in a district, reports of surgical failure, reports of data quality issues, reports of unusually high levels of patient refusals, and reports of high surgeon turnover. A different district should be chosen each month, unless there is reason to continually revisit a district.
2. A numbered list will be prepared of all the health centers/areas in the selected district that surgical teams visited in the preceding 3-6 months.
3. Using Excel's "RANDOM" function (or another method for randomization), the evaluation team will make a random choice of a health center/area number on the list.
4. Each time an evaluation is conducted, the list of health centers/areas in the selected district will be updated to include only those where surgical services were provided in the prior 3-6 months in the selected district.

Participant selection:

1. An alphabetical list of all individuals who received surgery during the prior 3-6 months in the randomly selected health center/area chosen in the section above will be drawn up (last name, first name).
2. This alphabetical list will be numbered starting at 1 and ending with number N, corresponding to the number of people on the list. The names can be masked at this point, and a number can be used to identify the person.
3. The total population, N (from step 2 above), will be divided by the desired number of people to be included in each follow-up activity to create a sampling interval (n).
4. Using Excel's "RANDOM" function (or another method for randomization), generate a number between 1 and n. This will be the starting point for selecting the participants who will be included in the evaluation.
5. Mark an "X" next to the person selected as the random starting point. This will be the first person included in the activity for follow-up.
6. Starting with the person whose number you have just marked with an "X," continue to count until you reach the "nth" person on the list. Mark an "X" next to that person.
7. Repeat step 6 until you have worked through the entire list. The most appropriate person on the team will then record the number of the selected persons, and re-identify them to record their names. The names will be stored in a safe and secure place before and during travel to the field.
8. If the number of people who received surgery in the prior 3-6 months in the health center/area chosen is *fewer than the total number of people to be followed-up with during the activity*, all the persons on the list will be included in the evaluation.

When the total number of people desired for follow-up have been chosen using the method described above, the monitoring team will travel to the field to conduct the monitoring exercise. If a person chosen for monitoring cannot be found, the monitoring team will note the inability to contact the person and mention it in the field report. The team can try and address the surgical status of those people not found by asking their family members and document this in the report as well.

Persons selected should not be replaced with other people on the original list.

A report with the results of the activity will be shared with the national program, in addition to the in-country MMDP project lead within two weeks after the survey is conducted. Results from the report and resulting actions should be discussed at the next district, regional, and/or central level trachoma meetings held by the MoH and partners.

Geographic sector:

The monitoring exercise will involve trachoma-endemic regions, districts, and villages with Ministry of Health-supported trichiasis management services.

Target population:

The population included in the sampling for the monitoring exercise is composed of individuals who received surgery for trichiasis during the prior 3-6 months.



Inclusion, non-inclusion and exclusion criteria:

All trichiasis cases operated and reported in the Ministry of Health's records in the prior 3-6 months will be included in the activity. Consent must be obtained from each patient prior to administering the physical exam and questionnaire.

Confidentiality:

An appropriate masking system can be used to ensure confidentiality. Names of persons selected will be needed in order to find the patients, but these names once de-identified can be stored in a secure place before and during the field work. All information regarding patient satisfaction and post-operative outcomes will be reported in aggregate.

Risks and benefits:

The expected benefit is improved trichiasis surgical services.

Follow-up team:

The team should include:

- A Ministry of Health trachoma staff member (preferably a national trainer or senior surgeon)
- A trichiasis surgeon from the district involved, preferably the surgeon who performed all or some of the surgeries in the area chosen for follow-up
- An MMDP in-country lead staff member
- A driver

EXAMPLE 1 - TT POST OPERATIVE MONITORING QUESTIONNAIRE

Q1. Date: ____/____/20____

FORM N°:

A. IDENTIFICATION

Q2. Region: _____

Q3. Health district: _____

Q4. Health area: _____

Q5. Village: _____

Q6. Interviewers: _____

Q7. Patient's first and last name: _____

Q8. Age (years): _____

Q9. Gender: _____

Q9a. Concordance with reported gender? 1. Yes 2. No

Q10. Did you see the patient? 1. Yes 2. No (If no, skip to Q10b)

Q10a. If yes, verbal consent obtained: 1. Yes (If yes, skip to Q11) 2. No (If no, end questionnaire)

Q10b. Please specify the reasons:

B. INFORMATION ON THE SURGERY

Q11. Eye operated on for TT: 1. Right eye 2. Left eye 3. Right and left eyes

Q11a. Concordance with reported operated eye(s) 1. Yes 2. No

Q12. Site of the operation:

1. Hospital 2. Reference Health Center 3. Community Health Center

4. Village 5. Other

If another location, please specify: _____

Q13. Month and year of the surgery: _____

Q13a. Concordance with reported month and year of the surgery 1. Yes 2. No

Q14. Type of strategy: 1. Automobile 2. Motorbike 3. Mixed / Rattissage (Mop-up)

Q14a. Concordance with the reported strategy 1. Yes 2. No

Q15. How many days after the surgery was the dressing removed? /_____/

Where was the dressing removed? _____

Q16. How many days after the surgery were the stitches removed? /_____/

Where were the stitches removed? _____

Q17. Did the person take azithromycin after the surgery? 1. Yes 2. No 3. Don't know

Q18. Did the person take paracetamol after the surgery? 1. Yes 2. No 3. Don't know

Q19. Did the person use tetracycline ointment? 1. Yes 2. No 3. Don't know

Q20. How did you feel after your surgery?

C. CLINICAL EXAM

Q21. Does the person have trichiasis in the operated eye? 1. Yes 2. No

Q22. Does the person have an eyelid abnormality in the operated eye? 1. Yes 2. No

Q23. Does the person have a granuloma in the operated eye? 1. Yes 2. No

D. PATIENT SATISFACTION

Q24. Did your vision improve after the surgery? 1. Yes 2. No

Q25. Do you have a problem with excess tearing in the operated eye(s)? 1. Yes 2. No

Q26. Would you recommend that other people with TT receive TT surgery?
 1. Yes 2. No 3. Neither yes nor no

Q26a. If no, can you explain why? _____

E. Other relevant information

EXAMPLE 2 - TT POST OPERATIVE MONITORING QUESTIONNAIRE

I. Demographic information/General information

- Date: _____
- District : _____
- Health center: _____
- Kebele: _____
- Village: _____

II. Patient identification information

- First and sur name of person : _____
- Age (years) : _____ Sex (M/F): _____

III. Clinical exam

Observations	Right Eye	Left Eye
The person has trichiasis in the operated eye	<input type="checkbox"/>	<input type="checkbox"/>
The person has an eyelid abnormality in the operated eye	<input type="checkbox"/>	<input type="checkbox"/>
The person has a granuloma in the operated eye	<input type="checkbox"/>	<input type="checkbox"/>
The person has over-correction in the operated eye	<input type="checkbox"/>	<input type="checkbox"/>
The person has sutures from the TT operation still in place	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

IV. Information on the surgery :

- Place the surgery was conducted : _____
- Date of the surgery :
- Eye operated for TT: 1. Right 2. Left 3. Both
 - Does the operated eye correspond to the eye reported? 1. Yes 2. No
- Name of the surgeon : _____
- Who referred you for TT surgery? _____

- Did you receive medication after the surgery? 1. Yes 2. No
 - If yes, which medication? (**Show medications to the patient and have them identify which ones they received – DO NOT READ THE LIST BELOW**)
 - Azithromycin 1. Yes 2. No 3. I don't know
 - Paracetamol 1. Yes 2. No 3. I don't know
 - Tetracycline ointment 1. Yes 2. No 3. I don't know

V. Information on post-operative counseling received

- Did someone counsel you after the surgery? 1. Yes 2. No
 - If yes, what information were you told? (**DO NOT READ TO PATIENTS**):
 - Do not touch the operated eye
 - Directions on how to take medication given to them
 - Return the following day to remove the bandage
 - Return in 7 days (after 1 week) to remove the sutures
 - Other: _____

VI. Adhesion to best practices in post-operative care?

- How many days after surgery was the bandage removed? _____
 - Where was it removed?
 - Hospital At home Other _____
 - Who removed the bandage?
 - Surgeon HEW Family member Other _____
- How many days after surgery were the sutures removed? _____
 - Where were the sutures removed?
 - Hospital At home Other _____
 - Who removed the sutures?
 - Surgeon HEW Family member Other _____
- Have you returned to the health center to receive care for the operated eye at any time (other than for bandage or suture removal): 1. Yes 2. No
 - If yes, why? (**Do not read to patients**):
 - General irritation in the operated eye
 - Excessive tearing
 - Pain
 - Others (linked to the TT surgery): _____

VII. Patient satisfaction :

- Do you feel your vision has changed since the surgery:

1. Yes 2. No 3. N/A *(For people with CO or who are blind in operated eye)*

- If yes, how has it changed?

1. Vision has improved 2. Vision has deteriorated Other _____

- Before the surgery, did you have difficulty performing your daily activities due to your trichiasis? :

1. Yes 2. No 3. Don't know

- Has your ability to perform daily tasks changed since you received TT surgery?

1. Improved 2. Deteriorated 3. No change Other _____

- If improved, in which ways : _____

- Did you have pain in the operated eye prior to surgery? 1. Yes 2. No

- If yes, has the amount of pain changed since you received surgery? 1. Yes 2. No

- If yes, how has the pain changed?

1. Improved 2. Deteriorated Other _____

- Would you recommend someone with TT to receive surgery to manage their trichiasis?

1. Yes 2. No 3. Indifferent

- If no, why? _____

EXAMPLE 3 - TT POST OPERATIVE MONITORING QUESTIONNAIRE

I. Demographic/General information

- Date: _____
- District: _____
- Health area: _____
- Village: _____

II. Patient identification data

- Patient code: _____
- Age (years): _____ Gender (M/F): _____

III. Clinical examination

Signs	Right Eye	Left Eye
Does the person have trichiasis in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have trichiasis in the non-operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have an eyelid abnormality in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
If there is an abnormality in the operated eye, please specify the nature of the abnormality.		
Does the person have a granuloma in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
Is there excessive tearing in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
Is there conjunctival redness in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
Does the eyelid margin on the operated eye turn outward (over-correction)?	<input type="checkbox"/>	<input type="checkbox"/>
Are sutures still in place in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>
Is there lagophthalmos in the operated eye?	<input type="checkbox"/>	<input type="checkbox"/>

IV. Information on the operation:

a. Information on the operation to be collected from the register

- Location where the surgery was performed: _____
- Date the surgery was performed: _____
- Eye operated on for TT: 1. Right eye 2. Left eye 3. Both eyes
- Surgeon's name: _____

Information on the operation to be collected from patients

- Location where the surgery was performed: _____
- Eye operated on for TT: 1. Right eye 2. Left eye 3. Both eyes
- The operated eye matches the one noted in the report 1. Yes 2. No
- Were you given medicine after the operation? 1. Yes 2. No
 - If yes, which (**show images or a drug sample**)?
 - Azithromycin 1. Yes 2. No 3. Don't know
 - Paracetamol 1. Yes 2. No 3. Don't know
 - Tetracycline ointment 1. Yes 2. No 3. Don't know

V. Information on post-surgical instructions:

- Did you receive instructions after the operation? 1. Yes 2. No (*If no, skip to section VI*)
 - If yes, which ones (**do not read the list to patients**):
 - Do not touch the operated eye or eyes
 - Take the drugs provided
 - Come back the next day to have the dressing checked
 - Come back after one week to have the stitches removed
- Other: _____

VI. Follow-up on post-operative checks

- How many days following surgery was the dressing removed? _____
 - Where? Hospital Traditional practitioner At home Other _____
 - By whom? Surgeon Health worker Traditional practitioner
- Other _____

- How many days after surgery were the stitches removed? _____
 - Where? Hospital Traditional practitioner At home Other _____
 - By whom? Surgeon Health worker Traditional practitioner
Other _____
- Did you return to the health center later for the operated eye: 1. Yes 2. No

(If no, skip to section VII)

- If yes, why **(do not read the list to patients)**:

Sensation of sand in the eye

Excessive tearing

Eye pain

Other (associated with the operation): _____

Other (not associated with the operation): _____

VII. Patient satisfaction:

- After the operation, did your sight improve? 1. Yes 2. No 3. N/A *(for persons who are blind or with CO)*
- Before the surgery, did you have problems carrying out your daily activities? : 1. Yes 2. No
 - If yes, did the situation improve after the surgery? 1. Yes 2. No
 - If yes, please specify: _____
- Would you recommend that other people with TT have this operation?
 - 1. Yes 2. No 3. No opinion
 - If no, why not? _____
- Has the pain in the operated eye decreased since the surgery?
 - 1. Yes 2. No