Doctor evaluation questionnaire: Medical Lab Assistant Application

Basic information

- Name: Dr.Eulade Muhizi

- Speciality; Doctor

- Year of practice_____

- Facility type:

Hospital Clinic Other

System Usability

- Test cases: order a malaria test
- Immediately request to confirm of a consultation type (general practioner)
 (if I can't confirm I won't proceed)
- **LLM response:** which malaria test do you want to proceed with

- thick blood smear GE blood smear

Doctor's comment: those tests make sense and they relevant for malaria test but they are not exhaustive (what if I want a malaria test different from all those suggested by the model)

- Suggestion:
 Did a patient have a history: no, the patient that I used seem to have no history
 Suggested tests seem to be based on the fact that we are ordering a malaria test
 And they makes senses 55% (with relevant to the test that can be done with malaria test)
- Prioritization score given -20 (this is very low with respect to the test that were already in the lab: 1. FBC (priority score: 20) 2. Progesterone and testosterone (priority score: 5) please make sure that the priority score is not only based on the nature of the lab tests but also the patient history, progesterone and testerone test can not be prioritized over a malaria because those testestone test and progesterone test, the condition is likely to be a condition that a patient might have lived with for so long or that he can live with for so long so it is not that urgent.

Lab Test Ordering Process

- 1. Did the system accurately identify the consultation type based on your speciality? Comments: it is adding complexity adding consultation type. As I saw the consultation type is being based on speciality of the doctor, while logged in as a general practitioner, genecologist, etc the system is already aware of the consultation type that I can handle.
- 2. How helpful were the lab test suggestions based on patient history? Comment: this makes it quick and save the time that I would spent while going through the patient history but the suggestions are not accurate enough
- 3. Rate the clarity of the lab test descriptions and information Comment: N.B: but not needed like for CBC there is no need of mentioning all those that are included in CBC, because every doctor is aware of them and
 - 4. How intuitive was the priority setting for urgent lab requests? Output priority

Comment: progesterone and testosterone can not be prioritized over a malaria test; please while determining the priority score please make sure that the system taken in account the patient history (80%) and nature of the test (20%) not just the contents of test

Conversational Interface

How helpful was the assistant in guiding you through the lab test ordering workflow? Comment: it all depends on the experience of a doctor, it is telling me what I know so I consider it as wastage of time.

Clinical Value

Comment: The system is suggesting me with 2 specialist and then I have to choose from why doesn't it decide on its own the right personnel to escalate the test to.

Overall Assessment

1. What features of application did you find most valuable?

Suggestions of additional tests from the patient history Descriptive flagging

- 2. What features need improvement?
- 3. Would you recommend this system to the colleagues? **Improvements needed, complexity should be reduced**
- 4. How would this application integrate with your current workflow?
 Don't have idea of how it will be integrated with existing system because I did not see how they can be integrated
- 5. What additional features would you like to see in future versions?
 - Voice to text: patient history/consultation getting written as a patient talks to the doctor.
 - Need for information icon for provide more information in details on a certain results or decision being made.