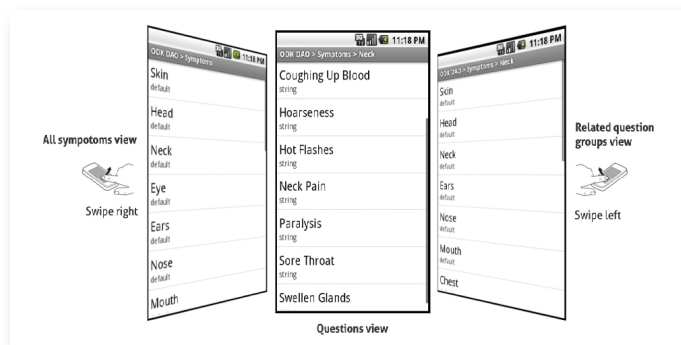


ODK:Data in Any Order

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ODK DAO: The Solution

Guided data collection on mobile platforms is a solved problem. UW's own Open Data Kit (ODK) is at the forefront of this type of technology. Medical records, on the other hand must allow for a natural and unguided flow of data input. ODK:Data in Any Order (DAO) takes the benefits of ODK and breaks them out of the guided model of data collection, allowing clinicians to document symptoms as they go through a patient visit.



Background & Problem

Both paper and electronic medical records (EMRs) currently exist in developing countries, however both have drawbacks. Having and maintaining a wired network of computers for EMRs is difficult and does not translate well to more remote clinics. Computer systems face limited internet connectivity, intermittent power, and take a lot of expertise to setup. Paper based systems are slow to move data, allowing it to stagnate in one clinic.



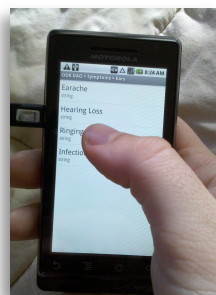
Fieldwork

Semi-structured Interviews – By interviewing a number of clinicians in different positions and levels of experience, we've been able to capture a constant stream of feedback.

Usecase Scenarios – By testing out different use cases with clinicians we were able to find out how to change our project for the better.

Card Sort – Running through a card sort with a doctor, we were able to see the doctor's mental model of the relationships between questions.

Paper Prototyping and User Interface Testing



Features

Mobile Platform – The mobile platform allows the user to seek out internet when it is needed, or simply take advantage of internet as it is available. Battery power allows the device to be less affected by intermittent or dirty power. In rural areas off of the grid there are more sources of power for phones.

XML based forms – A standard language for input allows users to create and edit forms with little technical background.

Tags – Allow for overlapping hierarchies to exist within the organization of a given form.

Based on ODK Collect – ODK Collect already supports a variety of data types. Because of the Collect heritage DAO data could more easily be linked to the web.

Future Work

- Syncing forms and data to ODK Aggregate
- Interoperability with ODK Collect forms
- Reminder system for clinicians
- Form creation utilities
- OpenMRS integration

