Smart Phone Vaccine Registry

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Problem space & Project description

- Importance of problem space
 - Increased vaccine coverage = improved well-being for citizens in Sudan
- How do people deal with this problem today?
 - Mixture of outreach work and gatherings at clinics or makeshift clinics using mostly primitive systems such as paper documentation





Problem space & Project description

- Description of your problem space/project as a humancentered design challenge
 - Vastly different understandings of technology by stakeholders in Sudan necessitate ethnographic inquiry by designers
- Who will care about your solution? Who will your solution effect?
 - Sudanese citizens, those who are funding the project, and citizens of other nations who value global improvements in human wellbeing
- How does it address the problem?
 - Project will facilitate the activity of vaccine dispersal in Sudan and its various requirements

Related Work

- What other projects relate to this one?
 - <u>mVAC</u> Mobile innovations in recording child vaccination and health data in immunization registers
 - <u>ODK Clinic</u> Design of a Phone-Based Clinical Decision Support System for Resource-Limited Settings
- What ideas does it draw on and who has worked on them?
 - Inefficiencies of paper-based systems; NGO's, universities
- What makes this project novel/interesting?
 - Healthcare officials can follow up on the next shots of vaccine without having to lookup on the PC application (long start up time, blue screen, hard to maintain) → auto notification

Fieldwork Findings

- Who did you talk to?
 - Talked to Rohit from the CS department about his previous experience developing for PATH, working with the main contact of PATH (Jan Grevendonk), and the general situation in Albania
- What did you learn from your fieldwork?
 - Vaccines are distributed at clinics, health posts, and extension programs (going to rural areas)
 - Social issues surrounding vaccines exist even in a moderatelydeveloped country like Albania
 - Jan facilitates technical things
- What further fieldwork is needed?
 - Skype calls / emails with Jan himself
 - Maybe contact PATH lab in Seattle if needed
 - Contact ODK developers at UW

Basic Scenario

Hi, I'm John and this is my daughter Jane Doe with ID#8972. Here is my ID card





ประณณร์ที่เกร.



After the shot.....



ประการที่และ





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Architecture

- What are basic components of your product?
 - Database in a server that holds the vaccine registry
 - Android application
 - Security

1. Initial data of the child

2. Dosage of the vaccine administered & the current date

3. Period of the follow up date for the current dosage 4. Calculate the follow up date and set a reminder



Next Steps (for solution sketch/prototype

presentation scheduled for next week)

- What medium will you use for your prototype? (web, flash, video, stickies, etc.)
 - Paper prototype possibly combined with a web mockup
- How will you iterate on your prototype and the UI?
 - Who will you ask to provide feedback on your prototype and the UI?
 - Jan, PATH lab, field workers in Sudan
 - Where will you test your prototype and the UI?
 - field workers in Sudan, PATH lab (maybe)
- What questions do you have about your system architecture?
 - What kind of database will we use?
 - Encryption of data?
 - Resource Constraints in Sudan