StAR-2 project

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I. OBJECTIVE

1) To update the progress of the Star-2 project.

II. DEVELOPMENT MEETINGS

In this Progress Report 34, the updates on StAR-2 project will be presented. Many apologies for the delay of sending this report. The second development meeting has just finished at 19:30 today. David Springer, John Prince and myself were in the meeting, today. David Springer has further guided us on SourceTree for Sana Mobile application, OpenMRS module development, Txtnation Sms service system and Django administration. The first development meeting this week was held on the 11 August 2016. Dr. Kirsten Bobrow, MD, Dr. Maaten De Vos, Dr. David Springer (skype) and myself were in the meeting. Dr. Bobrow highlighted on the Codebook, the paper 'blueprint' for the information in the procedures. There will be one sheet per procedure, one concept per question and numerically incremental concepts will be done to ensure no duplication. The trial will begin on the 1 October 2016 at Cape Town and Malawi. The go/no go for the trial must be decided by end of August. For this StAR-2, the ambient and clinic temperature will also be recorded using bluetooth-enabled device.

III. SANA MOBILE APPS

Concerning the error when uploading procedures to openmrs-sana-arc.uct.ac.za server, Eric Winkler (MIT) has requested us to run Django-admin-collectstatic. David Springer has requested Timothy Carr (Cape Town) to run this. By doing this, the error can be viewed in details at mds/core/session, which Eric will then proceed with the debugging accordingly. On the technical site, the encounters (procedures) need to be added in both OpenMRS and Django by the developers. However, the new concept will only be added in OpenMRS. At the technical training today, we have added person attribute type or the test patient to check whether the OpenMRS-txtnation is able to send the SMS to the test patient or not. In actual run, during the first meet up with the patients who will be participated in this study, we will start with the registration procedure. All the basic information such as patient name (unique ID will be given), phone number, age, next of kin will be recorded by the observer using Sana mobile apps. Patient will receive welcome SMS upon uploading it to OpenMRS. This is done by the code, where if procedure=registration (inside the procedure, if concept==mobile number), get the phone number and send SMS. The next procedure that will be done is the screening. All the info about patient's height, weight, BP, HPA1C will be inserted. After that, we will proceed with the baseline procedure, to get the info on the alcohol, drugs intakes and smoking. Finally, checkout procedure will be done. Here, all necessary information is checked including whether the patient has received the welcome SMS or not. From this patient data, we will proceed to the randomization process, the patient CSV files are send to the online clinical trial randomization system, Sortition. As the output, we will get two groups, which are well-balanced, i.e. the intervention–patients who will receive reminder and support SMS, and the control- those who will only receive the greetings. The procedures which is written in Java using Android Studios will always be updated between three of us using SourceTree. During this traning today, hands-on on the cloning, committing, fetching, push has been done.

IV. SMS FROM OPENMRS SERVER AND TXTNATION TO PATIENT

The SMS are divided into greetings, reminders and support messages. There will be three messages in a week with a maximum of one message per day. The reminders are sent two days before and two days after the appointments. The post appointment messages are sent to thank them for coming. The priority will be reminders, followed by greetings and finally the support messages. The support messages are chosen from about 100 messages such as 'please use the stairs' or 'do more exercise' or 'eat more fruits' etc. The engineering team will come up with a solution on how to choose one from those messages each time. For the appointment tracking, it is divided into appointment type and date. Appointment type has doctor appointment (every six month) and medicine dispensary (every 28 days). For Malawi, the default for medicine dispensary is 3 months. At the end of the training today, the new task was given. It is to code a new page of the module in OpenMRS. It will start from the form generation (html) and link it to the controller (java), using Eclipse. The module will then be uploaded to OpenMRS. Sending emails and possibly SMS to UK numbers will be confirmed upon successfully done these tasks.

V. CONCLUSION

At this point of time, the StAR-2 project is going according to the schedule. Most of our task are on the Java codings using Eclipse and Android Studios. Even though it is quite new to me, with the support received from the team members, especially David Springer, I am quite confident that we can run the trial run this October.