Fachhochschule Nordwestschweiz

Initial Management of Genital Ulcers CDSS – Implementation, monitoring and evaluation strategy, and expected impact

Group 7

Implementation

From the technical point of view, to be able to implement our CDSS and use it, we need the users to have installed ODK Collect on the devices, which is the tool to actually use the XLSform in terrain.

If it`s for personal use, for example, a medical doctor that wants to use it on his device, the medical doctor can download ODK Collect from Google Play.

In the case it is an institutional use of the CDSS, we would recommend that the IT department centralizes all the ODK Collect installations on the institutional devices.

An ODK Central will be established, which is a server where the forms can be administered, as well, in case it is necessary, data will be stored. In our case, we will use ODK Central only to manage the XLSform of our CDSS, because the goal is only to provide support to the clinical decision-making process and not collect data from the patients, but it is a feature that could be implemented in the future if data collection for analysis is needed.

The ODK Central will be cloud based, since we cannot expect that every user (personally or at an institutional level) will have the infrastructure and/or technical knowledge to implement it (requires Linux server administration knowledge) to have it on premise. That leads to a monthly cost that will have to be prorated among users.

To use then the CDSS, it is necessary to configure the server on the ODK Collect app, and it will allow to access the forms that will be available on the cloud server.

The cloud-based solution for ODK Central will help with maintenance since the XLSform is changed in the server and those changes will be immediately available for all users, for example, in case of a change in guidelines or an upgrade of the CDSS based on user`s feedback.

Regarding user training, our CDSS is very intuitive to use because it guides the user through the decision logic by entering the required information. The most complicated aspect of getting it to run is installation and configuration, for which we would provide the whole documentation, and have an informative website with it including communication channels for further questions. Therefore, we expect, in a first approach, that the user will use the documentation to get started, and in case of doubts, reach to us for questions.

Monitoring and evaluation

At an initial stage, we would test the CDSS with focus groups to get feedback directly from the users, considering functionality, easiness to use, feel, added value, etc.

Then we will continue to monitor the use of the app by checking the statistics of use: if we see that the users are increasing, and then it starts decreasing, we should then focus in finding out the reasons for that. Also, maintain in the informative website of the CDSS mentioned before, a user satisfaction survey (with a direct link from the CDSS itself), with open questions.

Expected Impact

We expect that this CDSS will guide the decisions regarding treatments for STIs, using an evidence-based approach based on official guidelines. This will help medical doctors in their early stages of training to have a tool that will help them gain confidence in what treatment to provide and in which cases. By having sample images of the different ulcers within the CDSS, we also expect to allow to have a visual concept of the disease, which will further improve the decision-making process.