# ANC module OpenMRS training approach

Since clinician data entry is new in Rwanda and there is very little developing country experience in this regard to draw upon- we will take the general approach that this will be a “learning by doing” exercise.  Although we know most of what will need to be taught, we do not yet know the best way to present data and what approach will be best.  So we will use 1-2 sites as the pilots to help us with developing proper materials and timeframes.

**It is important to note that the intention is for clinician data entry right from the beginning.  Only if this turns out not to be possible, will we look at using data managers or others to enter data.**

In general the approach will be as follows:

1) Address computer skills

As early as possible make a computer available to the clinicians for practice.  Give them a brief lesson on how to use a computer- typing, mouse, general windows etc. This will also be documented in a brief illustrative how to booklet that is attached to the computer. Encourage them to help each other as well. Maybe appoint a “super user” that already has some computer experience. We have obtained several applications that help learn and practice computer skills- mostly games that improve the use of the mouse, and typing tutorials.  There will also be a self assessment application they can run.

2) Application training

This is to be done initially at the clinic- but we will determine if materials can be developed to allow this to be done in a train the trainer format or more formal training.  The clinicians are ONLY expected to know how to view and enter data- they will not be expected to troubleshoot errors initially- for this they will access the data managers- who support OpenMRS more broadly. Clearly, the will learn some of these troubleshooting techniques over time, but they will not be the initial focus. Data managers will also be trained on the more detailed support- as they are with all new modules.

In order to practice, the clinicians will sit with a support person, side by side, and back enter data from existing ANC forms (those due visits in the next few weeks).  This will be done at a time when there are no patients (an afternoon likely) so there are no additional pressures.  The support person will also enter data- and be available at the elbow in case the clinician has any questions.  The questions and difficulties the clinicians encounter will be incorporated into the training materials, tips and trick, cheat sheets etc.  Also during this process, the support person can share insights into interpreting data- trends, outliers, data quality etc. This will also be incorporated into a manual and other training tools. Most clinics will have in excess of 200 records each that can be used for back entry practice.  This also means that the data entry burden in the first few clinics will be far less as the patientce will already be there and they will have data to review.

During the first few clinics when the application is being used- there will be a support person.  They can help during clinic- so that the clinician can have some time to get comfortable to the workflow and using the computer.  The support person may do things like record information in the register or paper, organise the patient flow etc. Base on the findings of the first few clinics- we will get an idea of how much support is actually needed and the best way to provide that support.  This will then be incorporated into other implementation schedules. It is not expected that every site has extensive at the elbow support for an extended period- the optimum time frame and support will be determined.

3) Training materials

In order to optimise time and allow the users to absorb the training at their own pace, the intention is to make available online recorded lessons, screen captures and other tools so that they may watch them as many times as they need. Some clinicians may need minimal support- others will need much more. Providing both in person support and tools to review and practice allows those who need more time and practice to have it.

This approach and materials will extend beyond the RHEA project and can be “packed” for all modules or primary care. Extensive print documentation and manuals will likely not be done until we have the experiences of a few sites to help adjust and perfect the materials.

4) Double entry and downtime

Initially, until we can be assured of good quality data – there will be a period of double entry (paper and electronic).  Once a few months of data has been collected and is validated – we can formally begin moving towards electronic reporting etc.  Downtime procedures will also be developed for times when there is no computer access during a clinic.  It is likely that clinical will be responsible for entering data later when the computer is available – but the exact parameters will need to be determined, informed on the actual practice and situation on the ground.

5) Workflow

During times of heavy data entry- such as the first ANC visits- a data entry, or registration clerk can be made available to help with the initial registrations and data entry (medical history).  This solution  was proposed at each site visited and they felt that would work. This helps reduce the data entry burden on the clinicians.  Subsequent visits have a very small subset of data collected and almost no free form typing, so should be very straight forward. Consistent with the overall approach- clinic specific workflows will be adjusted during the support period and lessons learned from what works in different circumstances will be shared with other clinics as they implement similar modules.

All of these materials will be incorporated into EMR implementation packages- which include technical checklists, validation of staff etc etc. This is significantly beneficial when rolling out to scale. There will be a standard implementation schedule which will include a “count down” of activities.  For example (the timing here is just illustrative- we will determine the best timing based on training capacity and lessons learned):

 **6 weeks month before go live**:

drop off computers and do computer skills training with staff

Ensure all staff understand what changes will be coming and what their role in that is.

**4 weeks before go live**

Ensure all staff have completed the computer skills self assessment

Validate all staff data is correct (correct name spelling, role etc)

Give each user a log in and have them set their password

Train them on the application

**3 weeks before**

Begin back entry of data for practice

Ensure all devices and printers are functioning

 These are just examples- there will be more detail and more activities for each module etc. Multiple sites will be going through this process at the same time- and may be staggered by a week or so.