CONDUCTING IN-DEPTH PROCESS MAPPING

1. PURPOSE

In order to better understand the way in which MDA is delivered in each cluster, process mapping will take place in all clusters following each round of MDA. In most clusters, this will require the completion of short routine worksheets, called a "workflow tracking" worksheet. In six clusters, however, implementation science teams will undertake in-depth process mapping. This document describes the process by which the DeWorm3 implementation science team and Ministry of Health or Education collaborators will conduct in-depth process mapping activities.

2. INTENDED USER

Implementation science teams and any appointed cluster process mapping leads.

3. RESPONSIBILITIES

All DeWorm3 implementation science teams should understand and follow this SOP during process mapping activities. It is the responsibility of the site's Principal Investigator (PI) to ensure that all study staff and implementation science teams comply with this SOP.

4. DEFINITIONS

4.1. **Process mapping:** Process mapping is a systems analysis approach to identifying the flow of inputs required to achieve an optimal output, such as high treatment coverage. Process mapping generates a systems-wide view of the interdependent activities that contribute to effective MDA programs with high coverage. Process mapping also helps build a shared understanding of how work is carried out and promotes common organizational values and goals.

5. REQUIRED MATERIALS

5.1. In-depth process mapping activity worksheets (at least one copy for each person participating in the exercise)
5.2. Writing materials (pencils preferred)
5.3. Flipchart paper
5.4. Markers (green, red, black)
5.5. Sticky notes (yellow, pink, blue, purple, green, and orange)
5.6. Loose sheets of A4 paper
5.7. Tape

6. PROCEDURE

6.1. In-depth process mapping will take place in <u>four</u> <u>intervention</u> and <u>two</u> <u>control</u> clusters (see Deworm3_SOP 809. *Cluster selection for in-depth process mapping*) annually for the first three years of the trial.
6.2. Training
   a. At baseline, implementation science teams and appointed cluster leads from the six clusters will participate in a one-day training on how to conduct process mapping, led by the site implementation science point person.
6.3. Baseline process mapping
   a. Following the training, process mapping working groups should be formed in each of the selected six clusters.
   b. The working groups should be comprised of the DeWorm3 site's implementation science team, the cluster lead, the designated cluster process mapping lead (if different than the cluster lead), and select personnel from the Ministry of Health (MOH) and Ministry of Education (MOE) who are familiar with the MDA planning

and delivery process for school-based and community-based deworming. Representatives from community based organizations (CBOs) and non-governmental organizations (NGOs) may also be invited to participate as appropriate.

    c. The local MOH and MOE personnel participating in the baseline process mapping should be familiar with MDA delivery in the specific cluster, and therefore participating personnel may necessarily be the same or different individuals across each cluster.

        i. The DeWorm3 implementation science team members may participate in multiple process mapping workshops across the six selected clusters.

6.4. The process mapping working groups should hold a one day meeting in each cluster to complete the in-depth process mapping worksheet at baseline.

6.5. The working groups should use the worksheet templates provided. These worksheets provide step-by-step directions for completing the process mapping. Briefly, the steps include:

    a. In step 1 of process mapping, the working groups discuss activities that occur in the delivery of STH MDA programs in their cluster. The teams should identify all activities that must take place in order to achieve high treatment coverage. For example, both training of drug distributors and transport of drugs to the local level may be necessary activities in an effective MDA campaign.

    b. In step 2 of process mapping, the working groups should describe the flow of activities identified in step 1. For example, the activity of contacting village leaders may precede the activity of conducting community sensitization activities.

    c. In step 3 of process mapping, the working group should identify ideal activity targets for each activity identified in step 1. These are the ideal targets necessary for delivering the intervention with high treatment coverage in the cluster. The entire working group should agree on the cluster-specific targets, as these targets will remain in place for the following three years.

    d. Targets should be made as specific as possible. For example, a target for the final leg of the drug supply chain may be: "All albendazole for cluster #15 arrive at Jia Health Centre 72 hours prior to MDA distribution."

    e. Some of the DeWorm3 implementation science team members may participate in multiple process mapping exercises across the six selected clusters. While some of the higher level activities will be the same in each cluster (ex. Delivery of drugs from district level to health centres), these individuals should be careful not to dictate the ideal targets based on their experience conducting the exercise in other clusters. The identified goals/targets should be specific to what the working group hopes to achieve in this specific cluster.

    f. The final hand-drawn process map should be returned to the DeWorm3 site office. A photograph of the hand-drawn process map and a computerized version of it (made in Power Point or another similar program) should be provided to the core DeWorm3 team via email within one week of the working group meeting.

    g. The original process map should be stored locally for the duration of the trial.

    h. The data manager should enter data from Tables 1 and 2 into the relevant SurveyCTO form within one week of the working group meeting.

6.6. Follow-Up Process Mapping (i.e. process map updates)

    a. At baseline, each cluster leader should appoint a specific individual (or 2-3 individuals depending on the size of the cluster) who will serve as the cluster's process mapping lead. This individual will be responsible for tracking progress of activities identified in baseline process mapping. As such, they should have the skill and authority to track MDA progress. The cluster lead may fill the role of cluster process mapping lead, if desirable.

    b. The process mapping worksheets provide step-by-step directions for completing the process mapping follow-up.

c. It is important that these activities are tracked <u>as they occur</u> and the process map is updated in real-time to avoid inaccuracies. For example, if deworming tablets arrive 24 hours in advance of MDA, this information should be recorded accurately in the in-depth process mapping worksheet on the day the tablets arrive.

d. <u>The purpose of this exercise is not to identify problems in delivery, but rather to understand how MDA delivery occurs in reality and how this does or does not influence MDA treatment coverage</u>.

e. It is the responsibility of the implementation science team leader to ensure that each cluster submits a fully-updated in-depth process mapping worksheet within <u>one month</u> of the last day of the relevant MDA program.

f. The data manager should enter data from the process mapping follow-up worksheets into the relevant SurveyCTO form within two weeks of completion.

g. Follow-up process mapping will take place at the end of Year 1, Year 2 and Year 3 in order to track observed activities throughout the duration of intervention delivery. The designated process mapping lead in each cluster will follow the same procedure and timelines to update the process mapping accordingly.

h. During interim MDAs when process mapping updates are not scheduled, the routine workflow tracking worksheet should be completed (see DeWorm3_SOP 811. *Conducting routine workflow tracking worksheets*).