



## Background

In 2010 when the SC4CCM Project completed a baseline assessment, Community Health Workers (CHWs) in Rwanda were organized into cells and affiliated with a Cell Coordinator (CC). All of the CHWs in a cell met before the monthly meeting at the health center to complete monthly HMIS reports. CHWs brought their stock cards to fill out the HMIS report. HMIS reports were aggregated by pairs of CHWs, so dis-aggregated CHW data was not available. CHWs could only be resupplied in pairs and would have to share products, making management difficult. Furthermore, no formal supply chain procedures existed for the community level. Health centers had no standard formula for resupplying CHWs and no consistent means of recording and reporting quantities provided to the community level, so their orders to districts were often inaccurate, perpetuating a cycle of understocking and overstocking, and ultimately stockouts and expiries.

#### Solution

In collaboration with the Ministry of Health/Community Health Desk, the SC4CCM Project developed a **standardized monthly resupply system** that requires simple documentation and procedures. The project used historical consumption data to determine appropriate stock levels for each product for CHWs. There are three main tools – **stock cards** maintained by the CHWs, a **resupply worksheet** maintained by the Cell Coordinators and a "**magic calculator**". The simple "magic calculator" (*fiche de calcul* in French) determines the resupply quantities for each product needed by each CHW based on actual data and standard calculations, obviating the need for manual calculations and reducing the potential for error.

### **Standardized Monthly Resupply Process**

The Standardized Monthly Resupply Process has eight steps:

- 1. Cell Coordinator coordinates fellow CHWs in his/her cell and meets with CHWs before the monthly meeting at the health center.
  - Cell Coordinator has resupply worksheet (Figure 1), resupply (magic) calculator, and his/her own stock cards
  - CHWs have their stock cards
- 2. After recording CHW names on the resupply worksheet, Cell Coordinator records dispensed-to-user (consumption) and stock on hand data for all products for each CHW.







### Figure 1 - Rwanda CCM Resupply Worksheet

Completed by CCs for all CHWs in their cell each month

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### (T) – Ibyatanzwe Quantity Dispensed/Used; Quantité Dispensée/Utilisée

- (S) Ibisigaye; Stock on Hand; Stock Disponible
- (K) Ibikenewe; Quantity Required; Quantité Nécessaire
- (H) Ibyahawe; Quantity Resupplied: Quantité Fournie
- 3. Cell Coordinator determines resupply quantities for each CHW for each product by using the magic calculator (Figure 2).
  - Cell coordinators finds the consumption quantity in the left column and matches it with the stock on hand in the top column to find where they meet. This is the resupply quantity for the CHW.
  - Cell coordinator records this quantity on the worksheet for each CHW.
  - Caveat: The magic calculator only works because of very low consumption per CHW; otherwise there would be too many rows and columns in the magic calculator. There is a formulaon the magic calculator to use if quantities surpass those included on the







calculator.

# Figure 2 - Sample of Magic Calculator for one product

Used by CCs to calculate resupply quantities

Balance →	0	1	2	3	4	5	6	7
↓ Cons.								
0	4	3	2	1	0			
1	4	3	2	1	0			
2	4	3	2	1	0			
3	6	5	4	ę	2	1	0	
4	8	7	6	5	4	3	2	1
5	10	9	8	ł	6	5	4	3
6	12	11	10	9	8	7	6	5
7	14	13	12	11	10	9	8	7
8	16	15	14	13	12	11	10	9
9	18	17	16	15	14	13	12	11
10	20	19	18	17	16	15	14	13

- 4. Cell Coordinator determines total resupply quantity for each product.
  - Cell Coordinator adds resupply quantities for all CHWs.
  - Cell Coordinator writes total resupply quantity for his/her cell on worksheet.
- 5. Cell Coordinator takes worksheet to monthly meeting at the health center and gives the worksheet to the Health Center pharmacy manager.
- 6. Pharmacy manager resupplies products based on total resupply quantity for the cell; pharmacy manager signs worksheet
  - Resupply quantities are packed while Cell Coordinator attends monthly meeting
- 7. Cell Coordinator collects supplies from pharmacy manager; Cell Coordinator signs for products on worksheet
  - Products are collected after the monthly meeting
  - Pharmacy manager and Cell Coordinator each keep a copy of the resupply worksheet
- 8. Cell Coordinator distributes supplies to each CHW using resupply quantities by CHW on worksheet
  - Products can be distributed to CHWs before or after returning to the village
  - CHWs sign for products received
  - CHWs who could not attend the meeting collect their supplies from Cell Coordinator in the village

