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# FOR A WORLD FREE OF PARASITIC WORM INFECTIONS

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# Monitoring and Evaluation for schistosomiasis control programmes in Africa

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### What does SCI do?









### Purpose of Monitoring and Evaluation (M&E)

#### To guide government programmes in optimum SCH and STH control

- To provide a **continual cycle of feedback** for MoH to enable programme adaption
- Support WHO recommendations for M&E of SCH and STH
- Developed and revised over 13 years of supporting programme implementation
- Demonstrate impact for country use, donor reporting and community engagement
- Build the capacity and skills of in-country experts and technicians
- Foster south to south **technical exchange** and capacity building
- To determine if we are **reaching global goals** for SCH and STH control/elimination





### Helminth control in school-age children

A guide for managers control programmes



Published in 2011 by WHO ۲

- Defines key indicators and targets
- Updates in 2013 with publication of ۲ the Schistosomiasis: Progress Report 2001 – 2011 and Strategic Plan 2012 -2020

These guides give us WHO's three components of M&E:

- **Process indicators**
- **Performance indicators**
- Impact indicators .



https://apps.who.int/iris/handle/1066 5/78074

https://www.who.int/intestinal worms/resources/9789241548267/en/





## **WHO Components of M&E**

WHO (2011) Helminth control in school-age children: A guide for managers of control programmes







### **WHO Strategy for Elimination of SCH**

WHO (2013) Schistosomiasis: progress report 2001 - 2011, strategic plan 2012 - 2020.

<b>SCHISTOSOMIASIS</b>	<text></text>		Snail
	Control of Morbidity	Elimination as a public health problem	Elimination of transmission
	100% geographical and 75% national coverage with Preventive Chemotherapy (PC)	Adjusted PC and complementary interventions recommended	Intensified PC and complementary interventions essential
	Prevalence of heavy intensity infection <5%	Prevalence of heavy intensity infection <1%	Reduction of incidence of infection to zero
	Up to 5-10 years from joining the group	Up to 3-6 years from joining the group	Up to 5 years from joining the group





### National programme for SCH with preventive chemotherapy (PC)



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### SCI Foundation













## Mapping

- Prior to treatment, SCI works with in-country programme partners (primarily the Ministries of Health) to assess the level of infection
- SCI supports the development of risk maps, detailing predicted levels of infection across mapping units
- These maps show which areas require treatment and how often to distribute treatment



Disclimer: The boundaries and names shown and the designations used on this map do not imply the expression of any pointon whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Divide and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Data source: Health Ministries & ESPEN partnership Maa ronduction: ESPENAFROWIDN DT Maciona concert funded by the Bill & Melinda Gates Foundation.

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### **Mapping** *Diagnostic tools*



Kato Katz







Urine dipstick





#### Circulating Cathodic Antigen



### SCI Foundation





#### Treatment strategy based on WHO guidelines













### **Process**

#### Are *routinely reported* treatment data reliable and accurate?







### **Process:** Data Quality Assessment (DQA)



### **Ethiopia & Madagascar** Confirmed validity of routinely reported data

Cote d'Ivoire: Strengthened supervision Malawi: Improved registration forms + reporting system











### **Performance:** Coverage evaluation survey

Is *survey* treatment coverage >75% in school-age children?



**SCI** Foundation



### **Performance:** Coverage evaluation survey

#### Is *survey* treatment coverage >75% in school-age children?



SCI Foundation









### **Impact:** cross-sectional sentinel surveys in SAC Has control of morbidity been achieved?



- Indicators are assessed routinely in the same randomly selected sentinel schools
- Cross-sectional assessment of school-aged children for these indicators:
  - prevalence of infection
  - $\circ$  intensity of infection
  - prevalence of heavy intensity of infection
  - $\circ~$  macro and micro haematuria





### **Impact** *Diagnostic tools*



Kato Katz



Urine filtration



Urine dipstick





Circulating Cathodic Antigen







### **Parasitological (impact) surveys** *Prevalence of infection*



Fig 1. Overall prevalence of *S. mansoni* and *S. haematobium*, multi-country\* Each coloured line represents a country



**Fig 2.** *S. haematobium* prevalence, Malawi Each coloured line represents a sentinel school Black line indicates mean prevalence



\*Deol *et. al.,* Achieving global 2020 and 2025 goals for schistosomiasis: rapidly reaching the thresholds for control and elimination as a public health problem. *Under review* 

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### Impact: cross-sectional sentinel surveys in SAC

### Has control of morbidity been achieved?







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### **Cost: cost per treatment in FY15/16\***



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### **Cost:** Tools

#### Are we achieving a 'best buy' = low/high cost AND good quality?

#### **Cashbook:** Completed in-country and audited by Finance



Input Type	Activity Type
Communications	Country Management
Fuel	Mapping
Bank fees	Monitoring & Evaluation
Per diem - driver	Drug Distribution Training
Per diem - teacher	Drug Distribution
Per diem - officer	Drug Distribution Supervision
Per diem - top up to salary	Drug Distribution Registration
Salaries - officer	Drug Logistics
Salaries - technician	Strategic Planning
Salaries - driver	Social Mobilization
Stationary	Advocacy
Training Materials	Global management
ICT	
Laboratory Supplies	
Drug Distribution Materials	
IEC Materials	
Publicity	
Accommodation and meals	
Travel	
Drug transportation	
Customs clearing and handling	
Vehicle hire	
Vehicle insurances and taxes	
Vehicle maintenance and repairs	





## Value for Money

Summary

#### Are we achieving a 'best buy' = low cost AND good quality?

Value for Money: Cote d'Ivoire

FY7: July 2016 – March 2017

#### All (DfiD, UFH8, Unrestricted) Donor Local currency West African Franc (CFA) Conversion rate 864.17 (Local currency to GBP) Financial year FY7: Q2-4 of FY7 (July 2016 - March 2017) Treatments delivered October 2016 SUMMARY Treatments Targeted population 2,413,015 2,045,302 Treatments delivered Treatment coverage 84.8% Reported expenditure + 497,852.26 Total Procurement Cost per treatment 0.24

#### Historical performance



#### Cost per treatment by district



#### Spending by inputs and activities







### **Knowledge Management**

Translating evidence in to practice







### **Knowledge Management**

#### Translating evidence in to practice







### **Knowledge Management**

#### Translating evidence in to practice

Rapport de recommandations suite à l'enquête de couverture à Madagascar 2016





#### **1** Recommandations programmatiques

Ce rapport passe en revue l'enquête de couverture menée dans cinq districts de Madagascar en 2016, suite à la première campagne de chimiothérapie préventive de masse contre la schistosomiase (SCH) et des helminthes transmis par le sol (HTS). Comme convenu avec le programme national, les mesures programmatiques sont les suivantes :

Tableau 1 : Observations et mesures correctives pour maintenir et étendre la couverture à Madagascar.

Constatations ou observations	Ce qu'il faut rechercher	Mesure corrective
Le taux de couverture rapporté dans deux districts était nettement inférieur à celui validé par l'enquête	Les chiffres concernant la population totale et la population éligible (cà-d. le dénominateur) sont incorrects ou obsolètes	Mettre à jour et corriger les données concernant la population si des données plus récentes existent
	Tous les rapports des sous-districts n'ont pas été renvoyés à temps pour être inclus dans le rapport final	Renforcer le processus d'enregistrement et les exemples pratiques d'enregistrement du nombre de personnes traitées pendant la formation. Insister sur l'importance du renvoi des rapports au niveau central dans les délais
	Les registres de traitement sont incomplets et/ou les données ajoutées sont erronées	Envisager de mener une évaluation de la qualité des données pour diagnostiquer les problèmes du système de rapportage
Le taux de couverture rapporté et validé par l'enquête était élevé dans trois districts	Un bon système de rapportage est mis en place.	Maintenir la dynamique du programme pour l'année à venir afin de conserver les niveaux de couverture.











### "Complimentary Interventions"



Behaviour Change Communications











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## **Summary points**

- Monitoring and evaluation is critical to ensure programmes are reaching their goals and to adapt and improve i.e. knowledge management
- Adequate tools are available for measuring process, performance and impact measurements
- We need to strengthen our understanding of why uptake of treatment varies

**o** Further identification of supply and demand-side barriers

![](_page_34_Picture_5.jpeg)

![](_page_34_Picture_6.jpeg)

## **Summary points**

- For moving from control phases to interruption of transmission we need to build operational research on to existing M&E to:
  - Determine what the most effective and cost-effective 'complementary interventions' are
  - Identify the optimum combinations of PC and other interventions to break transmission
  - Understand factors for focal heterogeneity and how to address areas of persistent moderate and high infection of SCH

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![](_page_35_Picture_6.jpeg)

### Acknowledgements

- All the communities, health centre, district level and central level staff who invest and participate in control programmes
- All our partners in sub-Saharan Africa
- Our funding and research partners
- The SCI Team!

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### **Acknowledgements**

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### Thank you for listening!

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