



SADC Regional Assessment Report of Policies and Programmes for Child and Adolescent HIV, TB and Malaria

ORIGINAL IN ENGLISH

Acknowledgements

This work was made possible through the collaboration of the Southern African Development Community (SADC) Secretariat with Member States and various stakeholders. The Secretariat wishes to acknowledge all their contributions.

Member States of SADC, through their programme managers and other focal points for child and adolescent HIV, tuberculosis (TB), malaria and orphans, vulnerable children and youth issues provided policy documents and information about Member States programmes, and coordinated discussions with other stakeholders during the field assessments. In addition, programme managers reviewed drafts and provided valuable technical input and guidance to the report. Senior Government officials in the Communicable Diseases Project Steering Committee, and in national AIDS, TB and malaria authorities reviewed final drafts and made recommendations to facilitate finalisation.

This project was carried out in collaboration with UNICEF Eastern and Southern Africa Regional Office, which provided coordination, technical input and overall support for reviewing various drafts of the document, and participated in technical meetings to discuss the drafts. A Technical Working Group composed of regional experts in child and adolescent HIV, TB and malaria reviewed various drafts of the report and provided valuable technical feedback.

The consultant for this work was the Southern Africa HIV & AIDS Information and Dissemination Services (SAfAIDS) who collected data from the Member States and produced an analysis report which informed the development of the minimum standards. Additionally, the consultant provided valuable technical inputs and drafted various versions of the report.

At the SADC Secretariat this work was led by the Communicable Diseases Project under Directorate of Social and Human Development and Special Programmes.

This work would not have been possible without the financial support provided by the African Development Bank under the SADC/ADB Communicable Diseases Project.

ISBN: 978-99968-402-8-9

The contents for this publication are the sole responsibility of SADC. The designations employed in the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the SADC Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitations of its frontiers or boundaries.

The mention of specific companies, organizations, or certain manufacturers products does not imply that they are endorsed or recommended by the SADC Secretariat in preference to others of a similar nature that are not mentioned.

For more Information

Directorate of Social and Human Development And Special Programs SADC Secretariat Private Bag 0095 Gaborone, Botswana Tel (267) 395 1863 Fax (267) 397 2848

Email: registry@sadc.int Website: www.sadc.int



Table of Contents

ACKNOWLEDGE	EMENTS	
ACRONYMS AN	D ABBREVIATIONS	4
KEY DEFINITION	NS	5
EXECUTIVE SUM	MMARY	7
1. INTRODUCTI	ION	10
2. BACKGROUN	ND	11
2.2 Th	oidemiological analysis ne SADC response, challenges and way forward ne continuum of care and support approach	12 16 18
3. RATIONALE		19
4.1 Pu	ND OBJECTIVES urpose bjectives	19 19 20
5.2 Sc 5.3 De 5.4 Se 5.5 De 5.	esign cope and focus ata collection methods and tools ampling ata analysis 5.1 Analysis of data from collection tools	20 20 20 21 22 22 22
5.6 Et	5.2 Triangulation of data from all collection tools thical considerations mitations	23 23 23
6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6	xistence and content of policy and programming frameworks on child and dolescent HIV, TB and malaria 1.1 Existence and content of policy and programming frameworks on child and adolescent HIV 1.2 Existence and content of policy and programming frameworks on child and adolescent TB 1.3 Existence and content of policy and programming frameworks on child and adolescent malaria 1.4 Gaps and opportunities in policy and programming frameworks tegration of HIV, TB and malaria policy and programming frameworks 2.1 Integration of HIV, TB and malaria policy and programming frameworks into primary health care 2.2 Integration of HIV, TB and malaria with basic services for children 2.3 Gaps and opportunities in integration armonisation 3.1 Harmonisation of policies and programming frameworks 3.2 Harmonisation in the integration of policies and programming frameworks 3.3 Domestication of policies and programming frameworks 3.4 Gaps and opportunities in harmonization	24 24 24 35 40 46 48 48 50 52 52 52 56 57 57
7. DISCUSSION		59
8. RECOMMEN	DATIONS	62



9	. CONCLUS	SION	65
F	EFERENCE	s	66
	ANNEX 1	Titles and positions of key informant interviewees	67
	ANNEX 2	Service provider interviewees	77
	ANNEX 3	Health facilities visited	78
	ANNEX 4	Schedule of field country assessments	80
	ANNEX	5 Documents received and analysed	81
	ANNEX 6	Sample of debriefing sessions: Angola	88
	ANNEX 7	Consultants and project team members	90
	ANNEX 8	Technical working group experts	93



ACRONYMS AND ABBREVIATIONS

ACT Artemisinin-based combination treatment
AIDS Acquired immune deficiency syndrome

ART Antiretroviral therapy

ARV Antiretroviral

BCG Bacille Calmette Guérin

CPT Co-trimoxazole preventive therapy

DOTS Directly Observed Treatment, short course

DRC Democratic Republic of Congo
HIV Human immunodeficiency virus
HTC HIV testing and counselling

integrated community case management

IMCI Integrated management of childhood illnesses

IPT Isoniazid preventive therapy

IPTp Intermittent preventive treatment in pregnancy

IRS Indoor residual spraying
ITNs Insecticide-treated bed nets

IUATLD International Union Against Tuberculosis and Lung Disease

MDG(s) Millennium Development Goal(s)

MDR-TBMultidrug-resistant TBM&EMonitoring and evaluationMTCTMother-to-child transmissionPEPPost-exposure prophylaxis

PMTCT Prevention of mother-to-child transmission

RDT Rapid diagnostic test for malaria

SADC Southern African Development Community

SAFAIDS Southern Africa HIV and AIDS Information Dissemination Service
SP-IPT Sulfadoxine-Pyrimethamine Intermittent Preventive Therapy

SRH Sexual and reproductive health
STI Sexually transmitted infection

TB Tuberculosis
U5 Under 5 (years)

U5MR Under 5 (years) mortality rate

UNGASS United Nations General Assembly Special Session

UNICEF United Nations Children's Fund

UNAIDS The Joint United Nations Programme on HIV/AIDS
USAID United States Agency for International Development

WHO World Health Organization

XDR-TB Extensively drug-resistant TB



KEY DEFINITIONS

Adolescent	This document uses the WHO definition of adolescent: "A person 10 to 19 years old". 1
Adolescent-friendly services	Adolescent-friendly health services are defined in this document as health services that do not discriminate or intimidate and that are accessible, acceptable, affordable and appropriate for adolescents and young people. This definition is based on WHO's Operational Guidelines on HIV Testing of Infants, Children and Adolescents for Service Providers in the African Region. ²
Caregiver	A caregiver is any person giving care to a child in the home environment. The Primary caregiver is the main person who lives with a child and who provides regular parenting care for the child in a home environment. This often includes family members, such as parents, foster parents, legal guardians, siblings, uncles, aunts and grandparents or close family friends. Secondary caregivers include community members and professionals (such as nurses, teachers or play centre minders) who interact with a child in the community or visit a child at home, but who do not necessarily live with the child. Child and youth caregivers include children and youth who are caring for other children, ill parents and relatives, and/or are heading households.
Child	This document uses the child definition of the SADC Strategic Framework and Programme of Action (2008-2015) for Comprehensive Care and Support for Orphans and Vulnerable Children and Youth, taken from the UN Convention of the Rights of the Child: "Every human being below the age of 18". Thus the child definition used for this document comprises adolescents who are 10-18 years old.
Child-friendly services	A system of care that focuses on the physical, psychological, and emotional wellbeing of children attending health care facilities. A separate waiting area should be provided for children where they are contained and safe, and able to play and explore. Health-care workers who are identified as being good with children or who have been specifically trained in paediatrics should staff the clinic. Counsellors may require special training to provide age-appropriate counselling and be sensitive to non-verbal communication. Children and their parents/caregivers should feel able to ask questions. Medical procedures (for example, phlebotomy or injections) should be explained to the child to allay anxiety. ⁴
Comprehensive care and support	Interventions or service delivery efforts that meet the complete set of basic needs or defined minimum standards across multiple services, and that address the survival, development, protection and participation rights of children and youth while addressing vulnerability.
Continuum of care and support	Integrated system of care for children from pregnancy to delivery, the immediate postnatal period, and childhood through adolescence. It guides and tracks patients over time through a comprehensive array of health services spanning all levels of care: outpatient services, clinics and other health facilities, and care by families and communities. ⁵

¹ WHO. Child and adolescent mental health policies and plans. Geneva: WHO: 2005.

² WHO. Operational Guidelines on HIV Testing and Counselling of Infants, Children and Adolescents for Service Providers in the African Region. Geneva: WHO; 2011. Available at http://www.afro.who.int/en/clusters-a-programmes/dpc/acquired-immune-deficiency-syndrome/features/2883-operational-guidelines-on-hiv-testing-and-counselling-of-infants-children-and-adolescents-for-service-providers-in-the-african-region.html

³ United Nations General Assembly. Convention on the Rights of the Child. New York: United Nations General Assembly; 20 November 1989

⁴ WHO. Operational Guidelines on HIV Testing and Counselling of Infants, Children and Adolescents for Service Providers in the African Region. Geneva: WHO; 2011.

⁵ UNICEF. State of the World's Children. Maternal and Newborn Health. New York: UNICEF: 2009.



Harmonisation	When all SADC Member States are willing to adopt and apply the same minimum standards to their child and adolescent HIV, TB and malaria policy and programme frameworks. ⁶
Holistic approach	A procedure for ensuring that different options or strategies are considered and applied flexibly in appropriate combinations that ensure comprehensive or optimal fulfilment of the wellbeing and development of a child.
Integration	This document uses the WHO definition of integration: "The organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money." ⁷ This requires a continuum of funding, administration, organisation, service delivery and clinical strategies designed to create connectivity, alignment and collaboration of HIV, TB and malaria programmes within the platform of primary health care services towards improving patient outcomes, efficiency and cost-effectiveness. ^{8 9}
Orphan	A child below the age of 18 years who has lost one or both parents. The concept of "social orphans" may be used to describe children whose parents may be alive, but are no longer fulfilling any of their parental duties. 10
Paediatrics	The term, as applied in this document, refers to the medical care of children.
Primary health care	This document uses the definition from the Alma-Ata Declaration of 1978: "Primary Health Care is essential health care, based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process." ¹¹
Psychosocial support	A continuum of care and support that addresses the social, emotional, spiritual and psychological wellbeing of a person and that influences both the individual and the social environments in which people live. 12 13
Task-shifting	A rational redistribution of tasks among health workforce teams. Specific tasks are moved, where appropriate, from highly qualified health workers to health workers with less training and fewer qualifications in order to make more efficient use of the available human resources for health-14
Vulnerable children	Children who are unable or have diminished capacity to meet their basic needs and realise their rights to survival, development, protection and participation as a result of their physical condition, or social, cultural, economic or political circumstances and environment, and who require external support because their immediate care and support system can no longer cope. 15 16 17

- 6 UNICEF. State of the World's Children. Maternal and Newborn Health. New York: UNICEF: 2009.
- 7 WHO. Making Health Systems Work. Integrated Health Service Delivery. What and Why. Technical Brief No. 1. Geneva: WHO; 2010. Available at http://www.who.int/healthsystems/service_delivery_techbrief1.pdf
- 8 Kodner DL, Spreeuwenberg C. Integrated care: meaning, logic, applications, and implications–a discussion paper. International Journal of Integrated Care. 2002;2:e12.
- 9 Coker R, Balen J, Mounier-Jack S, et al. A conceptual and analytical approach to comparative analysis of country case studies: HIV and TB control programmes and health systems integration. Health policy and Planning. 2010;25 Suppl 1:i21-31.
- 10 SADC. Comprehensive Care and Support Orphans, Vulnerable Children and Youth in the SADC: Strategic Framework and Programme of Action, 2008-2015. Gaborone: SADC, 2008.
- 11 International Conference on Primary Health Care. Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, 6-12 September 1978. Available at http://www.who.int/publications/almaata_declaration_en.pdf



EXECUTIVE SUMMARY

Member States of the Southern African Development Community (SADC) have made important progress in the last decades in reducing child mortality. However, with children under 18 years of age representing 48% of the total population in the SADC region, child survival and development remains a key challenge.

HIV, tuberculosis (TB) and malaria are important sources of morbidity and mortality in children. In 2009, there were more than 1 million children under the age of 15 years estimated to be living with HIV in SADC Member States. In 2010, mother-to-child transmission of HIV (MTCT) resulted in more than 176 000 new infant infections in the region, with the rate of MTCT across Member States ranging from 3% to 37%.

The impact of TB remains high in the SADC region, with five Member States ranking among the 22 global high-burden TB countries. It is estimated that 5-15% of TB cases involve children,³ but the true extent of TB-related paediatric morbidity and mortality is thought to be underestimated, due to the difficulty of confirming diagnosis of TB in children.⁴

As for malaria, approximately 35 million children younger than five years are estimated to be at risk of contracting malaria, which is responsible for 1 in 5 childhood deaths in the SADC region.⁵

By affecting children's caregivers and impoverishing their households, these epidemics also render children vulnerable to malnutrition and other diseases, and negatively affect children's survival, development and wellbeing.

SADC Member States have committed to a number of regional and international goals on reducing child mortality and fighting HIV, TB and malaria, among them the Millennium Development Goals (MDGs) 4 and 6.

Member States, through the SADC Protocol on Health, are committed to dealing with communicable diseases—particularly HIV, TB and malaria—in a harmonised manner, as an essential ingredient for their effective control. However, the key regional strategic frameworks and minimum standards developed to guide action in the control of these three diseases in a harmonised way do not adequately cover children and adolescents.

In this context, the SADC Secretariat is mandated to develop SADC Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care. This document will establish the minimum package of services that Member States should have in place, to achieve a common response in the region.

Because of the links between HIV, TB and malaria and child vulnerability, it is crucial that access to services such as health, education, social and child protection, food security and nutrition and psychosocial services are adequately integrated into this response, as established in the SADC Strategic Framework and Programme of Action for Orphans and Vulnerable Children and Youth.⁶

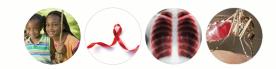
The first step in the articulation of this initiative was to (1) identify the existing policies and programming frameworks in the area of child and adolescent HIV, TB and malaria and determine the extent to which these are (2) integrated and (3) and harmonised in the SADC region. To that end, a Regional Assessment was conducted in the 14 active SADC Member States between October 2011 and July 2012.

Progress and opportunities

The *Regional Assessment* showed that the foundations for integration and harmonisation of child and adolescent HIV, TB, malaria policies and programming frameworks are already in place.

Strategic frameworks/plans and guidelines for HIV, TB and malaria exist and contain child-specific coverage in the areas of prevention, diagnosis, treatment, care and support that are aligned with international recommendations. Monitoring

- 1 SADC. HIV and AIDS Strategic Framework (2010–2015). Gaborone: SADC; 2009.
- 2 WHO, UNAIDS, UNICEF. Global HIV/AIDS Response: Progress Report 2011. Geneva: WHO; 2011. Available at www.who.int/hiv/pub/progress_report2011/en/index.html
- 3 du Cros P, Nyang'wa BT, Gale M, Venis S, Ford N. Counting children: comparing reporting for paediatric HIV and tuberculosis. Bulletin of the WHO Organization. 2011;89(12):855.
- 4 Moore DP, Schaaf HS, Nuttall J, Marais BJ. Childhood Tuberculosis Guidelines of the Southern African Society for Paediatric Infectious Diseases. South African Journal of Epidemiology and Infection. 2009; 24(3).
- 5 SADC. Regional Minimum Standards for the Prevention Treatment and Management of Malaria. Gaborone: SADC; 2010.
- 6 SADC. Comprehensive Care and Support for Orphans, Vulnerable Children and Youth in the SADC: Strategic Framework and Programme of Action 2008-2015. Gaborone: SADC; 2008.



and evaluation (M&E); advocacy, communication and social mobilisation; health systems strengthening; and supply chain management are also pillars that are included in country documents.

Regarding integration, the Regional Assessment showed that HIV-TB integration is now considered a pillar of all HIV and TB strategic frameworks/plans in the region. Moreover, HIV strategic frameworks/plans clearly articulate child vulnerability and delineate strong links to basic services for children (such as nutritional and psychosocial support, and child and social protection). A number of local best practices that provide integrated child services were also encountered.

With respect to harmonisation, the assessment showed a high level of harmonisation of malaria and, to a lesser degree, of TB policies and programming frameworks. Together with the existence of regional SADC key guiding documents that set out minimum standards of care and psychosocial support for orphans, and vulnerable children and youth, as well as minimum standards for the three diseases and a harmonised surveillance framework, this provides a solid basis for wider harmonisation across SADC Member States.

Key challenges

Despite progress in recent years in the region, child and adolescent HIV, TB and malaria remain serious challenges. Mother-to-child transmission of HIV is still high in the region, and the provision of antiretroviral therapy (ART) for children is lagging behind coverage for adults. TB disease in children remains under-diagnosed, and the majority of malaria deaths occur in children. Child and adolescent access to prevention, diagnosis and treatment services for HIV, TB and malaria is still limited. The Regional Assessment identified gaps in the existing child and adolescent policies and programming frameworks for HIV, TB and malaria, their integration and harmonisation.

In the national strategic frameworks/plans and guidelines, there is a need to reinforce child-specific aspects of prevention (such as strengthening child and adolescent HIV testing and counselling, systematic screening for TB of children who are in contact with a source case, and provision of insecticide-treated bed nets to protect against malaria in endemic malaria areas); diagnostics (especially for child TB); and treatment and care (scale-up of ART treatment, routine child clinical follow up, and fine-tuning community- and home-based care systems to cover children).

Another important challenge revealed in this assessment relates to the limited human resources and restricted child and adolescent skills among available staff, along with gaps in clear definitions of task-shifting responsibilities concerning children and adolescents, and limited child- and adolescent-friendly services.

There are important gaps in M&E of children and adolescents, with strategic frameworks/plans for HIV, TB and malaria rarely stating the need for disaggregating data by age and sex. There is no harmonisation of age categories for reporting data on children across the three diseases: international indicators for HIV use 0-14 and 15-24 year categories, while TB indicators use 0-4, 5-14 and 15-24 year categories, and malaria indicators use under 5 and over 5 years.

Major gaps remain in strategic frameworks/plans in articulating the integration of HIV-malaria and TB-malaria programmes, and on linking TB and malaria programmes to basic child services. HIV and TB are "vertical" programmes and more integration into decentralised health systems is needed. Malaria case management is more integrated (though not enough) within the integrated management of childhood illnesses (IMCI) at health facility level and within integrated community case management (iCCM) at community level (i.e. diarrhoea, malaria and pneumonia—the biggest child killers in the region) in several SADC countries.

The assessment revealed that basic child services are not easily being accessed by children vulnerable to HIV, TB and malaria, when they attend health facilities, or from community health workers to whom they are referred. This illustrates the limited implementation of integration strategies for all three diseases.

Policies and programming frameworks on HIV are not harmonised across the region. Countries are implementing different PMTCT programmatic options and first-line treatment regimens, and have different provisions of child universal access to ART.



Key recommendations

To Member States

The Regional Assessment recommends that Member States take the following steps with regard to policies and programmatic frameworks for HIV, TB and malaria:

- Expand access to prevention, diagnosis and treatment services for child and adolescent HIV, TB, malaria and basic child services in communities, through community- and home-based care (CHBC) programmes, the scale up of local best practices and integrated community case management;
- Allocate adequate financial and technical resources to train, attract and retain health care workers with skills in child and adolescent HIV, TB and malaria;
- Revise M&E plans to include the disaggregation of child and adolescent data by sex and age, using age categories that maximise the abilities of Member States to tailor interventions to specific age groups, while still allowing for easy reporting to donors;
- Clearly outline task-shifting policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers; and
- Strengthen the availability of child- and adolescent-friendly services.

On integration:

- Ensure that strategic frameworks/plans for HIV, TB and malaria articulate the integration of programmes to primary health care;
- Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between the programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E at all health system levels), based on existing models for HIV-TB integration;
- Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those that exist for HIV and AIDS;
- Ensure that basic services for children are correctly publicised and strengthened through effective referral linkages in communities; and
- Scale-up local best practices that provide integrated services for children affected by HIV, TB and malaria.

To the SADC Secretariat

The Regional Assessment recommends that the SADC Secretariat take the following steps with regard to harmonisation:

- Develop Minimum Standards for child and adolescent HIV, TB and malaria to facilitate harmonisation across Member States, and ensure their wide circulation and advocacy to mainstream them into national policies and programmes;
- Promote harmonised integration of basic child services to HIV, TB and malaria services/programmes, based on the HIV model and local best practices;
- Strengthen M&E of children issues by including child and adolescent indicators in the SADC Harmonised Surveillance Framework for HIV and AIDS, Tuberculosis and Malaria; and
- Support Member States by contributing to strengthening health systems in the provision of comprehensive and integrated child and adolescent health services.

This assessment has shown that, while important gaps in policy and programming frameworks in child and adolescent HIV, TB and malaria exist across the Member States, there are also strong foundations and valuable opportunities for scaling-up a harmonised continuum of care for the three diseases, and for integrating them with basic child services. Such an effort could have a great impact on child health, survival and development in the region, and help SADC Member States achieve MDGs 4 and 6, as well as live up to other pertinent regional and international commitments.



1. INTRODUCTION

The HIV and TB epidemics, along with the continuing reality of malaria infection, are undermining development gains in the SADC region. Children, who comprise close to half of the population in the majority of the Member States, are highly vulnerable to these three diseases—not only in terms of direct morbidity and mortality, but because of orphanhood and the weakening of household economies when parents and caregivers are affected. While individual Member States have made some progress in meeting the Millennium Development Goals (MDGs), many are not on-track to reach MDGs 4, 5 and 6.

The SADC Protocol on Health stipulates that Member States should deal with health issues in a harmonised manner as an essential ingredient for the effective control of communicable diseases in the region. As part of the response, key strategic frameworks to guide action for controlling HIV, TB and malaria have been developed by SADC, but they mostly address the adult population.

In this context, the SADC Secretariat is mandated to develop the SADC Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care. The Minimum Standards is the guideline document that establishes the minimum package of services that Member States should have to achieve a common response in the region.

Once harmonised and translated into policies and practices at the national level, the Minimum Standards will ensure that the SADC children population (including migrants and vulnerable populations) receives standardised HIV, TB and malaria prevention and treatment services throughout the region. In addition, the Minimum Standards will be profiled so that they ensure guidance in establishing the necessary links with non-clinical service platforms, as established in the SADC Strategic Framework and Programme of Action for Orphans and Vulnerable Children and Youth.⁷

The first step in the articulation of this initiative was to identify the existing policies and programming frameworks in the areas of child and adolescent HIV, TB and malaria, and appraise the extent to which those are integrated and harmonised in the SADC region. To that end, a Regional Assessment was conducted in the 14 active SADC Member States during the last quarter of 2011. Findings and results of the assessment have informed the development of the Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care.

This report contains the findings of the regional assessment. Its intended audience are policy makers, technical experts and implementers and other key stakeholders at national level in all Member States who can use it as a basis to explain the need and advocate for implementation of the Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and ensure the mainstreaming of these Minimum Standards into national policy documents.



BACKGROUND

The number of children under 18 years in the SADC region was estimated at over 122 million in 2010 (48% of total population), of whom 33% (40 million) were under five years (U5) of age. It is estimated that almost 13% (15.7 million) of all children in the SADC region are orphans (see Table 1).

While neonatal causes, diarrhoea and pneumonia overall remain the major killers of U5 children in the SADC region (estimated at >30% for neonatal causes and >15% for both diarrhoea and pneumonia) malaria, HIV and TB are also important sources of morbidity and mortality, together accounting for >20% of U5 mortality in the region. They impose a heavy burden on children's health, rendering them more vulnerable to dysenteric and pulmonary diseases. Malnutrition, also a common child ailment in the region, is closely linked to this vulnerability. Children living with HIV and/or with active TB disease are much more prone to malnutrition. Conversely, malnutrition may render them more susceptible to all childhood diseases.

Table 1: Indicators of child health in SADC Member States, 2010

Table 1. Indicator	rs of Children He	alth in SADC Mei	nber States						
Country	Under 18 year old population (thousands) 2010 ^a	Under 5 year old population (thousands) 2010 ^a	Total orphans (thousands) 2006 ^b	Number of deaths of children under 5 years old in 2010 (thousands) ^a	U5MR 2010 rank ^a	U5MR 2000 value ^a	U5MR 2010 value ^a	% Reduction in U5MR between 2000 and 2010 ^a	U5 AARR % 2000-2010 ^a
Angola	10,167	3,378	1,200	121	8	200	161	20	2.2
Botswana	785	225	150	2	61	96	48	50	6.9
DRC	35,056	11,848	4,200	465	6	181	170	6	0.6
Lesotho	970	274	150	5	35	127	85	33	4
Malawi	7,863	2,715	950	56	30	167	92	45	6
Mauritius	351	84	23	0	124	19	15	21	2.4
Mozambique	11,849	3,876	1,500	114	16	177	135	24	2.7
Namibia	989	286	140	2	65	74	40	46	6.2
Seychelles	43	14		0	126	14	14	0	0
South Africa	18,086	5,041	2,500	58	51	78	57	27	3.1
Swaziland	548	157	95	3	39	114	78	32	3.8
Tanzania	22,964	8,010	2,400	133	41	130	76	42	5.4
Zambia	6,937	2,412	1,200	60	21	157	111	29	3.5
Zimbabwe	5,866	1,692	1,200	29	37	115	80	30	3.6
SADC Total	122,474	40,012	15,708	1048	NA	NA	NA	NA	NA
SADC Median	6,402	2,052	1,200	42.5	NA	121.0	79.0	29.5	3.6

Sources: ^a UNICEF. 2012. The State of the World's Children Report, ^b SADC. 2008. Strategic Framework and Programme of Action 2008-1015: Comprehensive Care and Support for OVCY in SADC.

Key and definitions:

U5MR value: Under five year old mortality rate. Probablity of dying between birth and 5 years of age, expresssed per 1,000 live births. **U5MR rank** refers to the position of the country among UNICEF countries assessed, where 1 is the country with the highest U5MR. **U5 AARR**: Under 5 year old mortality average anual rate of reduction. Takes into account that the lower limits of U5MR are approached with increased difficulty. A dot represents data not available. NA, Not applicable.

HIV, TB and malaria affect children in the region in other ways, as well. It is estimated that HIV had orphaned more than 6.7 million children by 2009 (see Table 2). By affecting their caregivers and impoverishing households, these epidemics render children vulnerable to HIV, TB and malaria infection. They affect children's access to vital services such as education, social and child protection, food security and impose psychosocial burdens stemming from stigma and discrimination, care-giving responsibilities, death of family members and the loss of family security. Children affected by HIV, TB or malaria may not be able to benefit adequately from available clinical treatments, thrive and develop to their full potential in the absence of access to a broader comprehensive platform of support services. The SADC Assessment Report on Orphans and Vulnerable Children and Youth® provides further information on the status of children's access to these services in the region.

Regional and national engagement in the SADC countries around these and other diseases, and towards improving child survival and development has led to important reductions in child U5 mortality in the past decade (see Table 1). On average, SADC Member States have achieved a 29% reduction in U5MR between 2000 and 2010, with an average annual rate of reduction of 3.6%. Seven countries (Botswana, Lesotho, Malawi, Namibia, Swaziland, Tanzania and Zimbabwe) have achieved reductions of 30% or more in under-5 mortality rates (U5MR).

Improvements in primary health care services have contributed significantly to this progress. For instance, great strides have been made in routine immunisation towards meeting targets set in the Global Immunization Vision Strategy.⁹ By 2010, Botswana, Malawi and Tanzania had achieved >90% routine immunisation coverage and 5 countries (Lesotho, Namibia,

⁸ SADC. Report of a Rapid Assessment and Analysis of vulnerabilities of Orphans, Vulnerable Children and Youth and Quality of Projects and Progammes. Gaborone: SADC; 2008.

⁹ WHO, UNICEF. Global Immunization Vision and Strategy 2006-2015. Geneva: WHO; 2005.



Swaziland, Zambia and Zimbabwe) had reached >80% coverage, while others reported increasing coverage.

Nevertheless, further progress is needed if the MDGs are to be met. Important challenges remain. Patterns of inequity have to be addressed, appropriate service delivery channels and methods must be improved, and barriers to access on the supply and demand sides must be removed. In addition, surveillance and monitoring systems need to include a focus on equity, and accountability should be strengthened at all levels.

2.1 Epidemiological analysis

The information presented below sketches the situation related to HIV, TB and malaria in the SADC region. However, data on child and adolescent HIV, TB and malaria are limited and non-standardised across the diseases. For instance, data for HIV and TB is disaggregated by 0-14 year and 15-24 year categories. As a result, data for 15-18 year-old children are mixed with data for older individuals. Data on malaria are traditionally reported only for children U5, and data for children 5-18 years old are lumped together with data for adults. In addition, while SADC Member States report data to international organisations, annual reports from these organisations (particularly for TB and malaria) do not always include children-specific data for all countries. Table 2 shows the most recent available indicators for the HIV, TB and malaria epidemics among children in SADC Member States.

HIV and AIDS: Sub-Saharan Africa has the highest burden of HIV infection worldwide: an estimated 23.2 million people in the region were living with HIV in 2010¹⁰—approximately 68% of all HIV cases globally. The SADC region is hard-hit by the epidemic: in 2009, 9 of the 14 Member States were experiencing adult (15-49 years) HIV infection levels in excess of 10%, and HIV prevalence exceeded 20% in 3 of those Member States. ADC Member States account for approximately 42% of the estimated 2.1 million AIDS-related deaths globally.

Children are especially vulnerable in the SADC region: 11 SADC Member States are among the 27 countries that are estimated to account for 80% of all children living with HIV worldwide. In 2009, it was estimated that more than 1.1 million children younger than 15 years were living with HIV in SADC Member States. In 2010, mother-to-child transmission of HIV resulted in more than 176 000 new infant HIV infections (See Table 2), representing 45% of all 390 000 new infections globally in infants in that year.

Table 2: Status of HIV, TB and malaria paediatric epidemics in SADC Member States

Table 2 Status of	UIV TRand M	lalaria naodiati	ric anidamics i	SADC Mombe	r Ctator								
Table 2. Status Of	niv, ib aliu ivi	iaiaiia paeuiati	HIV	1 SADC WEILIDE	i States		ТВ				Malaria		
Angola Botswana DRC Lesotho Malawi Mauritius Mozambique Namibia Seychelles* South Africa Swaziland Tanzania¹ Zambia Zimbabwe	Estimated number of children 0-14 living with HIV in 2009 ^{a,*}	New children infections due to MTCT in 2010 ^b	from women living with HIV resulting in MTCT, Children 0- 17 years old orphaned by AIDS 2009 a		% of deaths among children under 5 years of age due to HIV- AIDS, 2010 ^e	Number of smear positive new TB cases in children 0-14 old, 2010 ^c	Number of total new TB cases in children 0-14 years old, 2010 ^c	% of new cases that are children 0-14 years old, 2010 ^c	Year of data	Number of malaria cases in children under 5 years old 2008-2009 ^d	% of malaria cases that are children under 5 years old, 2008-2009 ^d	Number of malaria deaths in children under 5 years old, 2008-2009 ^d	% of deaths among children under 5 years of age due to Malaria, 2010°
Angola	22,000	5,200	33	140,000	2	1,006			2008	1,246,884	36.33	5060	10
Botswana	16,000	500	3	93,000	15	113			2009	4,482	30.13	1	0
DRC		18,000	37		3	3,694	3,694	3.36	2008	2,450,304	45.62	13655	18
	28,000	3,700	26	130,000	18	43							
Malawi	120,000	16,000	22-42	650,000	13	153			2009	3,027,629	49.14	4546	13
Mauritius					1	0							
Mozambique	130,000	32,000	31	670,000	10				2008	2,304,974	47.71	1305	19
Namibia	16,000	1,100	14	70,000	14	103			2009	28,509	34.85	8	0
	9	0	0	3	0	0	0	Ü					· ·
South Africa	330,000	48,000	18	1,900,000	28	3,429	50,474	15.02	2009	485	7.99		0
Swaziland	14,000	1,300	14	69,000	23	81			2009	1,296	19.52	2	0
Tanzania ^f	160,000	24,000	25	1,300,000	5	480	5,216	8.74	2008	4,689	48.78	23	11
Zambia	120,000	16,000	20	690,000	10				2009	1,514,080	50.87	1924	13
Zimbabwe	150,000	11,000	25	1,000,000	20	323	4,371	10.19					8
SADC Total	1,106,009	176,800	NA	6,712,003	NA	9,425	63,755	NA		10,583,332	NA	26,524	NA
SADC Median	74,000	11,000	23	395,000	12	133	4,371	9		637,697	41	1,305	10

Sources: *UNAIDS.2010. Report on the Global AIDS Epidemic bWHO.2011. Global HIV-AIDS Response-Progress Report bWHO.2011. Global Tuberculosis Control Report. d'Confirmed+ probable cases as reported in WHO World Malaria Report 2010 (data from 2009 (data from 2008 for Angola, DRC and Mozambique) and WHO World Malaria Report 2010 (data from 2009 for Botswana, Namibia, South Africa, Swaziland, Tanzania, Zambia), data for Malawi come from Malawi HMIS 2010 Report. UNICEF. 2012. Progress Report. Commiting to Child Survival: A promise renewed. In the formal and the same from all Tanzania, data for malaria cases are from Zanzibar only. Data for Seychelles comes from the Disease Surveillance and Response Unit in Seychelles. Shaded areas represent Malaria-free countries. A dot represents data not available. NA, Not applicable.

¹⁰ WHO, UNAIDS, UNICEF. Global HIV/AIDS Response. Progress report 2011. Geneva: WHO; 2011.

¹¹ UNAIDS. Report on the Global AIDS Epidemic 2010. Geneva: UNAIDS; 2010.

¹² SADC. HIV and AIDS Strategic Framework (2010–2015). Gaborone: SADC; October 2009.

¹³ SADC. HIV and AIDS Strategic Framework (2010-2015). Gaborone: SADC; October 2009.



Adolescents experience high risks of HIV infection. The percentage of adolescents who reported that they initiated sexual activity before the age of 15 is estimated at 12% for girls and 11% for boys in the Eastern and Southern African Region (which includes all SADC Member States, except Mauritius and Seychelles).¹⁴

Although beyond the scope of the definition of children used in this report, the data shown in Table 3 refer to several important indicators for HIV prevention among adolescents aged 17-19 years. In 6 countries (Lesotho, Malawi, Namibia, Swaziland, Tanzania and Zambia) for which data are available, levels of comprehensive knowledge of HIV are low among both boys and girls. However, girls are less likely to report using a condom and HIV prevalence in girls is consistently higher than in boys in those countries.

Such data indicate that girls are more vulnerable than boys to HIV infection. A range of factors causes this vulnerability, including earlier initiation of sexual activity and early marriage, sexual violence, transactional sex, and a lack of empowerment to negotiate consensual safe sex. This calls for effective action to strengthen gender-based interventions that include school-based sexual health education programmes; youth-friendly health services that are complemented by community action; targeting adolescents to deliver interventions in geographically defined communities; and rendering children in their teens more visible in monitoring and routine data systems.

Table 3: Indicators of HIV prevention in young people aged 15-24 years

	HIV prevale	nce (%) 2009 a	mong young	Comprehensi	ve knowledge	% who used	condom at last
Country		people		of HIV (%)	2005- 2010	high-risl	c sex 2010
	total	male	female	male	female	male	female
Angola	1.1	0.6	1.6	32	25		
Botswana	8.5	5.2	11.8				
DRC					15		6
Lesotho	9.9	5.4	14.2	29	39	68	66
Malawi	4.9 3.1		6.8	42	42	58	40
Mauritius	0.3	0.3	0.2				
Mozambique	5.9	3.1	8.6	34	36		44
Nambia	4	2.3	5.8	62	65	81	64
Seychelles							
South Africa	9	4.5	13.6				
Swaziland	11	6.5	15.6	54	58	91	73
Tanzania	2.8	1.7	3.9	43	48	49	46
Zambia	6.6 4.2 8.9		8.9	41	38	39	33
Zimbabwe	5.1	3.3	6.9		53	68	42

Such efforts addressing teens are essential to sustain the progress seen in the past decade in reducing new HIV infections in children. Access to antiretroviral (ARV) drugs for preventing mother-to-child transmission (PMTCT) has increased significantly in the region, with coverage exceeding 95% in 2010 win 4 SADC Member States (Botswana, Namibia, South Africa and Swaziland). In SADC overall, median coverage was 64% (see Table 4). This has led to a reduction of new HIV infections in infants. For instance, 2010 estimates for Botswana, South Africa and Namibia show reductions of MTCT rates (using WHO Option A) to 4%, 11% and 12%, respectively. Similarly, coverage on ARV treatment for children was estimated at 34% in 2010 across SADC Member States (Table 4).

Tuberculosis: The SADC region is also struggling with an important TB epidemic. Eight Member States have TB prevalence rates higher than the African average and 5 Member States (Democratic Republic of Congo, DRC, Mozambique, South Africa, Tanzania and Zimbabwe) are among the 22 high-burden countries that together account for approximately 80% of the global total of new TB cases arising annually. The TB epidemic in the region is fuelled by the severe HIV epidemic. All SADC Member States, except Mauritius and Seychelles, are included in the WHO list of 47 countries with high HIV/TB burdens. Multi-drug resistant TB (MDR-TB) and extensively drug resistant TB (XDR-TB) have also emerged as serious threats. SADC Member States currently account for half of all MDR-TB cases in Africa. Member States currently account for half of all MDR-TB cases in Africa.

¹⁴ UNICEF. Progress for Children 2012. New York: UNICEF; 2012.

¹⁵ WHO, UNAIDS, UNICEF. Global HIV/AIDS Response. Progress report 2011. Geneva: WHO; 2011.

¹⁶ UNICEF. A Business Case for Options B and B+ to Eliminate MTCT of HIV by 2015. New York: UNICEF; 2012.

¹⁷ WHO, UNAIDS, UNICEF. Global HIV/AIDS Response. Progress report 2011. Geneva: WHO; 2011.

¹⁸ SADC. Harmonised Minimum Standards for the Prevention, Treatment and Management of TB in the SADC Region. Gaborone: SADC; 2010.

¹⁹ WHO. Global Tuberculosis Control. Geneva: WHO; 2011.

²⁰ SADC. Harmonised Minimum Standards for the Prevention, Treatment and Management of TB in the SADC Region. Gaborone: SADC; 2010.



The TB epidemic does not spare children, but the extent of TB-related paediatric morbidity and mortality is usually underestimated, due to difficulties in diagnosing TB in children.²¹ For example, in 2010 in the SADC region there were only 9,400 new smear-positive TB cases reported in children 0-14 years old (Table 2). Yet the majority of TB cases in children are smear-negative, which makes that an inaccurate indicator of the paediatric TB epidemic. A more accurate indicator would be the number of total TB cases (smear-positive and -negative). The WHO Global Tuberculosis Report 2011 presented data for total TB cases in children only for the 22 high-burden countries: only 157 135 cases of TB in children were reported (63,755 of them in the five SADC high-burden Member States; see Table 2). Yet the total estimated prevalence in those countries stood at 9.97 million cases.²² In an article published in Bulletin of the World Health Organization in 2011, the authors argued that "at conservative estimates we should expect the number of paediatric cases to range from 498 500 (5%) to 1.49 million (15%)" in those 22 high burden countries.²³ The underestimation is a concern because the risk of progression to TB disease is increased in children who are infected before they reach 10 years of age²⁴ and because children younger than 2-3 years of age are at higher risk of developing extra-pulmonary forms of TB.²⁵ The underestimation also undermines the planning, funding and implementation of child TB programmes.

There has been progress in the past decade in the management of TB. Overall, TB incidence rates have fallen in the WHO African region at a rate of 1.8% per year since 2004²⁶, including in all SADC countries. Limited data are available on the response to paediatric TB, but one indicator—routine Bacille Calmette Guérin (BCG) vaccination for infants under-one year-old—shows important progress, with median coverage of 94% in 2010 [range 85-99%] across all Member States (Table 4).²⁷

Table 4: Indicators on the status of the response to paediatric HIV, TB and malaria in SADC Member States

		Н	IV		ТВ	Mala	aria
Country	% of HIV positive pregnant women who received ART for PMTCT, 2011	Number of Children <15 receiving ART, 2010 ^b	Estimated number of children requiring ART (WHO 2010 guidelines), 2010 ^b	Estimated % ART coverage among children, December 2010 ^b	% of 1 year old children BCG immunized 2010 ^c	% of under five years old sleeping under ITN 2006- 2010 ^c	% of under five years old with fever receiving anti-malarial drugs ^c
Angola	16.0	1,916	19,000	10	93	18	29
Botswana	93.0	10,048	11,000	88	99		
DRC	2.2	5,937	72,000	8	85	36	39
Lesotho	78.0	4,801	21,000	22	95		
Malawi	83.0	22,509	93,000	19	97	57	31
Mauritius	95.7	6	<100	13-29	99		
Mozambique	66.0	17,395	91,000	19	90	23	37
Namibia	90.0	9,009	10,000	87	88	34	20
Seychelles *	100.0	6	6	100	99		
South Africa	87.1	108,682	300,000	36	86		
Swaziland	94.5	5,718	10,000	55	98	1	1
Tanzania	92.6	20,017	110,000	18	99	64	59
Zambia	84.5	25,388	98,000	26	89	50	34
Zimbabwe	98.1	32,215	100,000	32	90	17	24
SADC Total	NA	263,647	935,100	NA	NA	NA	NA
SADC Median	88.6	9,529	72,000	26	94.0	34.0	31.0

Sources: aSADC. HIV and AIDS Epidemic Report 2012. bWHO.Global HIV-AIDS Response. Progress Report 2011; UNICEF. The state of the world's children Report 2012. Data from Seychelles for HIV comes from the Disease Surveillance and Response Unit in Seychelles. Shaded areas represent Malaria-free countries. A dot represents data not available. NA, not applicable.

²¹ Moore DP, Schaaf HS, Nuttall J, Marais BJ. Childhood Tuberculosis Guidelines of the Southern African Society for Paediatric Infectious Diseases. South African Journal of Epidemiology and Infection. 2009; 24(3).

²² WHO. Global Tuberculosis Control. Geneva: WHO; 2011.

²³ du Cros P, Nyang'wa BT, Gale M, Venis S, Ford N. Counting children: comparing reporting for paediatric HIV and tuberculosis. Bulletin of the WHO Organization. 2011;89(12):855.

²⁴ WHO. Guidance for National Tuberculosis Programmes on the Management of TB in Children. Geneva: WHO; 2006.

²⁵ Moore DP, Schaaf HS, Nuttall J, Marais BJ. Childhood Tuberculosis Guidelines of the Southern African Society for Paediatric Infectious Diseases. South African Journal of Epidemiology and Infection. 2009; 24(3).

²⁶ WHO. Global Tuberculosis Control. Geneva: WHO; 2011.

²⁷ UNICEF. The State of the World's Children, 2012. New York: UNICEF; 2012.



Malaria: Globally, 216 million episodes of malaria and 655 000 malaria deaths were reported in 2010, with 81% of cases and 91% of deaths occurring in Africa.²⁸ In the SADC region, it has been estimated that more than 175 million people (approximately 70% of the total population) live in areas with a high transmission risk for malaria.²⁹ However, the malaria burden varies considerably among SADC Member States. For instance, Swaziland reports fewer than 100 cases per year (most of them "imported"), while Botswana, Namibia and South Africa report fewer than 1,000 cases per year. This is in stark contrast to the hundreds of thousands of cases that occur in Angola, DRC, northern Mozambique, Tanzania and Zambia. Due to this variation, countries have been categorised into four groups³⁰:

- High and stable malaria transmission: DRC, Malawi, Mozambique and Tanzania;
- Mesoendemic stable: Angola, Madagascar, Zambia and Zimbabwe;
- Malaria pre-elimination: Botswana, Namibia, South Africa and Swaziland; and
- No malaria: Lesotho, Mauritius and Seychelles.

In endemic areas, children are at a greater risk for malaria and severe malaria than adults. Of the 655 000 malaria deaths reported globally in 2010, 86% were in children under five years of age.³¹ In the SADC region, 35 million children under five years of age are estimated to be at risk of contracting malaria. In 2008-2009, in the 10 SADC countries for which information was available (in the 2009 and 2010 WHO malaria reports), there were more than 10.5 million cases of malaria in children under five years of age, and more than 26,000 deaths (see Table 2). A report, from the Institute for Health Metrics and Evaluation^{32 33} put the number of deaths at more than 150 000. It is estimated that malaria is responsible for 1 in 5 childhood deaths in the SADC region.³⁴ Pregnant women are also at increased risk due to reduced immunity, which in turn leads to low birth-weights (which is associated with morbidity and mortality in children).

Data show considerable progress in responding to malaria in the last decade. Between 2000 and 2010, the estimated incidence of malaria cases in adults and children in Africa declined by 23%, while malaria deaths declined by 33%. Four SADC countries (Botswana, Namibia, South Africa and Swaziland) have reduced malaria numbers enough to move towards pre-elimination phases. Malawi, Tanzania and Zambia have achieved at least 50% coverage of insecticide-treated nets (ITN) for under-five year-olds. Anti-malarial treatment has also been scaled up, with DRC, Malawi, Mozambique, Tanzania and Zambia reporting at least 30% coverage of anti-malaria drugs among under-five year-olds with a fever in the 2006-2010 period (Table 4). Secondary control of the contro

Basic services for children: Efforts to address HIV, TB and malaria in children will not be effective or sustainable unless those efforts are embedded in a wider set of interventions that focus on children's health and wellbeing generally, rather than treating particular diseases in an isolated fashion. Table 5 provides some indicators that depict the status of some basic services the SADC region. Although some countries (such as Botswana, Namibia and South Africa) have high rates of birth registration, others are lagging and this represents an important barrier to accessing health services. Overall in the region, the level of stunting is an important indicator of the need for strong interventions to tackle malnutrition in children and to avoid, for instance, the failure of antiretroviral therapy (ART) in children. The link between vulnerability to HIV infection and school attendance is well established, especially in older children. The drop seen in the rate of school attendance between primary and secondary levels has important implications for primary prevention of HIV infection in children.

²⁸ WHO. World Malaria Report 2011. Geneva: WHO; 2011.

²⁹ WHO. World Malaria Report 2011. Geneva: WHO; 2011.

³⁰ SADC. Regional Minimum Standards for the Prevention Treatment and Management of Malaria. Gaborone: SADC; 2010.

³¹ WHO. World Malaria Report 2011. Geneva: WHO; 2011.

³² IHME 2010. Data available at http://www.healthmetricsandevaluation.org/tools/data-visualization/deaths-due-malaria-age-region-country-and-year-global-1980-2010#/overview/explore

³³ Murray CJ, Rosenfeld LC, Lim SS, et al. 2012. Global malaria mortality between 1980 and 2010: a systematic analysis. Lancet. 2012;379(9814):413-31.

³⁴ SADC. Regional Minimum Standards for the Prevention Treatment and Management of Malaria. Gaborone: SADC; 2010.

³⁵ WHO. World Malaria Report 2011. Geneva: WHO; 2011.

³⁶ UNICEF. State of the World's Children. New York: UNICEF; 2012.



Table 5: Indicators of child wellbeing in SADC Member States

	Child Protection		Nutritio	n			Educ	ation		Water and	Sanitation
Country Angola Botswana DRC Lesotho	Birth registration 2000-2010 (%)	% of children 6 months old	% of U5 (2006 Moderate & severe underweight	wasting moderate	stunting moderate to severe	scho atter 2005-	mary ool net ndance 2010 %	Scho atter 2009	ondary ool net ndance 5-2010 %)	% of Population using improved drinking water	% of population using improved sanitation facilities 2008
							female		female		
Angola	29	11x	16y	8у	29y	77	75	21	17	50	57
Botswana	72	20	11	7	31	86	88	36x	44x	95	60
DRC	28	37	24	9	43	78	72	35	28	46	23
Lesotho	45	54	13	4	39	87	91	26	40	85	29
Malawi		72	13	4	47	76	79	19	20	80	56
Mauritius		21x								99	91
Mozambique	31	37	18	4	44	82	80	21	20	47	17
Nambia	67	24	17	8	29	91	93			92	33
Seychelles*	100					*	*	*	*	93	97
South Africa	92y	8x	9	5	24					91	77
Swaziland	30	44	6	1	31	83	86	31	41	69	55
Tanzania	16	50	16	5	42	79	82	26	24	54	24
Zambia	14	61	15	5	45	81	82	38	36	60	49
Zimbabwe	38	32			32	90y	92v	45	45	82	72

Sources: UNICEF.2012. State of the World's Children. x, Data refer to years or periods other than those specified in the column heading. y, Data differ from the standard definition or refer to only part of a country. * Data for Seychelles comes from the document "Seychelles in Figures", 2011. No school net attendance data are provided in this document, but number of children enrolled in 2010 are as follows: primary-male: 4358, primary-female: 4313, secondary-male: 3669, secondary-female: 3571. A dot represents data not available.

Definitions. Exclusive breastfeeding (<6 months): percentage of children aged 0–5 months who were fed exclusively with breast milk in the past 24 hours. **Moderate and severe underweight**: percentage of children aged 0–59 months who are below minus two standard deviations from median weight-for-age of the World Health Organization (WHO) Child Growth Standards. **Wasting Moderate and severe**: Percentage of children aged 0–59 months who are below minus two standard deviations from median weight-for-height of the WHO Child Growth Standards. **Stunting Moderate and severe**: Percentage of children aged 0–59 months who are below minus two standard deviations from median height-for-age of the WHO Child Growth Standards. **Primary school net attendance ratio**: Number of children attending primary or secondary school who are of official primary school age, expressed as a percentage of the total number of children of official secondary school age, expressed as a percentage of the total number of children of official secondary school age.

2.2 The SADC response, challenges and way forward

Aware of the toll that the HIV, TB and malaria infection is taking in the SADC region, Member States have signed a number of commitments. They include:

- The 2003 Maseru Declaration on the Fight Against HIV and AIDS in the SADC Region (Point 1e: Prevention and Social Mobilisation by "Rapidly scaling up the programmes for the Prevention of Mother-to-Child Transmission of HIV"; Point 2b: Improving care, access to counselling and testing services, treatment and support by "Strengthening family- and community-based care as well as support to orphans and other vulnerable children");
- The 2006 UNGASS Declaration of Commitment on HIV/AIDS (Point 32: "Address as a priority the vulnerabilities faced by children affected by and living with HIV);
- The 2006 Abuja Call for Accelerated Action Towards Universal Access to HIV and AIDS, Tuberculosis and Malaria Services;
- The 2006 Maputo Declaration of the 55th Regional Committee of the WHO African Region, which declared TB as an emergency in Africa; and
- The Millennium Development Goals 4 (Reduce child mortality) and 6 (Combat HIV/AIDS, malaria and other diseases).

Key articles in the SADC Protocol on Health specifically address HIV, TB and malaria programmes: Article 9 (Communicable Disease Control); Article 10 (Control of HIV/AIDS and Sexually Transmitted Diseases); Article 11 (Malaria Control); and Article 12 (Tuberculosis Control). Operational strategic frameworks have been established and endorsed by Member States to realise those commitments and include:

• The SADC Strategic Framework for HIV and AIDS (2009–2015),



- The SADC Strategic Plan for control of Tuberculosis in the SADC region (2007–2015);
- The SADC Malaria Strategic Plan (2007–2015): and
- The SADC Malaria Elimination Framework.

In view of facilitating harmonisation of the response in the region, the following guidance have been developed by the SADC Secretariat and adopted by member states: the SADC Regional Minimum Standards for the prevention of Mother-to-Child Transmission of HIV; the Minimum Standards for HIV Testing and Counselling; the SADC Minimum Standards for the Prevention, Treatment and Management of Tuberculosis and, the SADC Regional Minimum Standards for the Prevention, Treatment and Management of Malaria.

This accelerated commitment and progress attained in the past decades must be scaled-up further in order to achieve regional targets and MDGs 4 and 6. According to the UNICEF State of the World Children 2012, only one of the 11 SADC Member States included in the analysis was on-track to achieve MDG 4 (Malawi), four showed insufficient progress (Botswana, Lesotho, Mozambique and Tanzania), and six showed no progress (Angola, DRC, South Africa, Swaziland, Zambia and Zimbabwe).^{37 38} In this respect, the region faces important challenges, three of which are highlighted below.

Firstly, HIV, TB and malaria in children continue to represent major health challenges, and access to child and adolescent prevention and treatment services is still limited. This threatens child survival and development, and limits the ability of Member States to achieve their health goals. MTCT of HIV is still high in the region (see Table 2), and many Member States will not be able to achieve the goal of eliminating it by 2015.³⁹ ART coverage for children is lagging behind coverage for adults, and many children in Member States are still not accessing it. As for TB, the difficulty of diagnosing disease in children and the high TB-HIV co-infection rates put children at higher risk for developing extra-pulmonary or severe forms of TB. In countries with a high malaria burden, the number of children covered by prevention and treatment strategies has been improving but is still low, and morbidity and mortality remain high. Action is therefore needed to update policy and programming frameworks so that they specifically and consistently address children's needs.

Secondly, the responses of Member States to child and adolescent HIV, TB and malaria differ to significant degrees, mainly due to different levels of disease burden, resource availability and capacity. On one hand this suggests that there is limited harmonisation across the region. On the other hand, the existence of local best practices may allow Member States to learn from each other, strengthen their responses and eventually reach a minimum standard of services.

If positive health outcomes are to be attained in a harmonised manner in the SADC region, countries need to reinforce some of the basic structures and systems that are key for sustaining evidence-based and effective service delivery. For instance, monitoring and evaluation (M&E) systems are still failing to systematically generate children-specific routine data. At country level, for example, data on child TB are severely limited, and the underestimation of the numbers of children affected and the lack of indicators stand in the way of an accurate picture of the epidemic.

SADC Member States have adopted the SADC Harmonised Surveillance Framework for HIV and AIDS, TB and Malaria to ensure harmonised monitoring of progress in the response to the three diseases. However, the Framework does not include child and adolescent indicators. Additionally, consistent reporting from national to regional levels still needs reinforcing; this would allow for more consistent monitoring of the situation and would support evidence-based decision-making and programming.

The current status of M&E systems also creates a bottleneck for supply management systems and diagnostic services in a context of increasing demand. The supply chain for medicines and other commodities in the region faces various levels of challenges. These range from limited financial resources to weak capacity for procurement and distribution, all of which can result in stock-outs of medicines and rapid diagnostic tests. This can have an important impact on the health and development outcomes for children if prevention, diagnosis and mitigation services are negatively affected. The SADC Pharmaceutical Business Plan has been developed to ensure the availability of essential medicines in SADC Member States; this is an area of work that demands a great deal of coordination and joint decision-making.

Specific laboratory capacity for diagnosis (for example, for MDR-TB and XDR-TB) and treatment follow-up (for example, viral load testing) is an important challenge. Laboratories in the region do not all offer a full range of services that effectively respond to current demand. On this front, SADC has developed the Functions and Minimum Standards for National Reference Laboratories in the SADC Region, as well as the Functions and Minimum Standards for Supranational Reference Laboratories and Regional Centres of Excellence, which focus especially on HIV, TB and malaria diagnosis.

³⁷ UNICEF. State of the World's Children 2012. New York: UNICEF; 2012.

^{38 &}quot;On track" indicates that the under-five mortality rate for 2008 was less than 40 per 1,000 or that it was 40 or more with an average annual rate of reduction of 4% or higher for 1990–2008; "insufficient progress" indicates that the under-five mortality rate for 2008 was 40 or more with an average annual rate of reduction of 1%–3.9% for 1990–2008; "no progress" indicates that the under-five mortality rate for 2008 was 40 or more with an average annual rate of reduction of less than 1% for 1990–2008.

³⁹ UNAIDS. Report on the Global AIDS Epidemic. Geneva: UNAIDS; 2012.



Thirdly, the attainment of optimum health outcomes for vulnerable child depends on the level of integration of health services and basic services, such as clean water, sanitation, social and child protection services, education, food security and nutrition, and psychosocial support. HIV, TB and malaria create vulnerabilities in children and are direct sources of morbidity and mortality. In addition, they can also weaken household economies. These diseases also render children more vulnerable to other mortal risks such as pneumonia, diarrhoea and malnutrition. Vulnerabilities caused by poverty and lack of access to essential services can also render children more vulnerable to HIV, TB and malaria. Responses therefore need to be integrated and should encompass these other dimensions to achieve success in preventing and treating HIV, TB and malaria in a sustainable manner. Unfortunately, a lack of joint planning, coordination and collaboration among relevant sectors hampers efforts in the region.

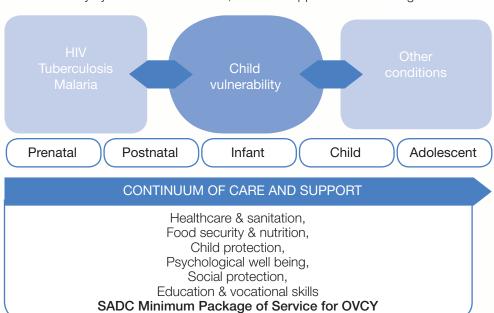
SADC has developed the Strategic Framework and Programme of Action (2008–2015): Comprehensive Care and Support for Orphans and other Vulnerable Children and Youth, the Minimum Package of Services for Orphans and other Vulnerable Children and Youth (the regional guidance for support services), and a Regional Conceptual Framework for Psychosocial Support for Orphans and other Vulnerable Children and Youth. The results of the current report informed the Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and Support in the SADC Region (2013-2017). Those results form part of the operationalisation of SADC's response and are closely linked to the Strategic Framework mentioned above.

2.3 The continuum of care and support approach

The magnitude, impact and interlinked nature of the HIV, TB and malaria epidemics demand a comprehensive and holistic service delivery approach. Such an approach, known as continuum of care and support, is outlined in the SADC Minimum Package of Services for Orphans, and other Vulnerable Children and Youth. It asserts that children and adolescents require a minimum of essential interventions and services in order to attain optimum development and become productive and responsible adults. These essential services include:

- Education and vocational skills;
- Health, clean water and sanitation;
- Food security and nutrition;
- Child and youth protection;
- Psychosocial support; and
- Social protection.

These services should be delivered in a comprehensive and holistic manner, through a continuum of interventions at various stages, from birth to early adulthood. The diminished capacity of many households to access or provide basic developmental services results in orphans and other vulnerable children and adolescents frequently being missed by service delivery systems. In such cases, external support is needed to guarantee access to essential services.



The continuum of care and support approach promotes a collective and holistic approach for addressing child and adolescent health that includes prevention, diagnosis, treatment, care and support for the three diseases, on the broader platform of primary health care. It also focuses on providing appropriate links to psychosocial support, food security and nutrition, child and adolescent protection services (such as national registration and protection for abused children), family and community care and support systems, and education and knowledge of the diseases.



According to the SADC Minimum Package of Services for Orphans, and other Vulnerable Children and Youth, delivering comprehensive essential services and a continuum of care and support requires a shift from vertical, sector-specific isolated service delivery to an approach that is holistic, and that takes into account the collective contributions of different service providers, as well as children and adolescents and communities.

This continuum of care and support approach serves as the conceptual framework for the Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and Support. Since the Regional Assessment informs the development of these Minimum Standards, the assessment pays close attention to the articulation of services and the integration of programmes and primary health care platforms. Such an approach recognises that attending to the full spectrum of children's needs, beyond the biomedical or clinical dimensions, is key for improving child survival and development in the SADC region.

3. RATIONALE

Confronted with the ongoing challenges of poor child survival and development, and in the context of SADC's regional integration agenda and the move towards harmonising the HIV, TB and malaria responses (as outlined in the SADC Protocol on Health), the SADC Secretariat is mandated to support the "Scaling up of the child and adolescent HIV, TB and malaria continuum of care in the SADC region." This regional effort focuses on enhancing the capacities of Member States for providing child and adolescent HIV, TB and malaria services.

Pivotal to this initiative is the development of a set of Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and Support in the SADC Region. These Minimum Standards aim to strengthen child- and adolescent-specific policy and programme frameworks for HIV, TB and malaria. They also aim to guide the integration of HIV, TB and malaria services/programmes with basic child care services within the primary health care system, and to facilitate harmonisation across Member States. This integration and harmonisation effort could improve access to standard child and adolescent services across the region, strengthen pooled procurement processes (and lead to savings through economies of scale in the procurement of drugs and commodities for the whole region). The effort also could help Member States strengthen and scale up efforts toward reaching the MDGs and other international and regional commitments, and enhance child survival and development beyond those targets.

A Regional Assessment of Policies and Programmatic Frameworks of Child and Adolescent HIV, TB and Malaria in the SADC region was undertaken to develop a pragmatic and realistic set of Minimum Standards that are based on the variations, successes and challenges in Member States, and that are strongly focused on the needs of children and adolescents

The assessment was conducted in 14 Member States from October 2011 to July 2012. It was aimed at evaluating current policies and programmes pertaining to child and adolescent HIV, TB and malaria and assessing the extent to which those efforts are integrated with primary health care and basic child care services, and are harmonised across Member States. The assessment forms a key part of the process for developing the Minimum Standards and for ultimately achieving the harmonisation and improvement of prevention, treatment, care and support for children and adolescents in the SADC region.

In addition, the information generated by this regional assessment will serve as a baseline to measure progress in the adoption and implementation of the Minimum Standards.

It is not envisaged that the results of this assessment will be published in peer review journals. SADC Member States will be the owners of the results of the assessment and of this report. In accordance with SADC standard procedures, the results of the assessment will be shared with SADC Member States and partners through the following channels:

- Technical review committee;
- Regional consensus involving all SADC member states; and
- Once validated and adopted by Ministers of Health, a printed official report that will be disseminated throughout the region.

4. PURPOSE AND OBJECTIVES

4.1 Purpose

The purpose of the Regional Assessment was to gain a better understanding of existing policies and implementation frameworks, and the extent to which these are integrated and harmonised in the SADC Region, with the aim of informing the development of a framework and minimum standards on the continuum of care for child and adolescent HIV, TB and malaria.



4.2 Objectives

The objectives of this regional assessment are to:

- 1. Describe and analyse the policy environment in the area of child and adolescent HIV, TB and malaria prevention, care and treatment.
- 2. Describe and analyse existing programming frameworks for child and adolescent HIV, TB and malaria in terms of:
 - Programming (including organisational structures, managerial processes and management of resources);
 - Provision of child and adolescent services; and
 - Community participation and service demand
- 3. Identify best practices in prevention, care and treatment of child and adolescent HIV, TB and malaria.
- 4. Conduct a gap analysis of regional policy and programming capacity, and identify related opportunities towards building on a continuum of care for child and adolescent HIV, TB and malaria.

In order to comprehensively address the interlinked purpose and objectives of the study, three main dimensions of analysis were used:

- Existence and content of policies and programming frameworks, covering objectives 1 and 2 for each of the three diseases, as well as best practices (objective 3) and analysing the gaps in this dimension (objective 4);
- Integration, linking information from objectives 1 and 2, proposing best practices in integration (objective 3) and analysing gaps in that dimension (objective 4);
- Harmonisation, consolidating information from the other two main dimensions.

Further disaggregation of the objectives into questions for analysis occurs in Section 5.2.

5. METHODOLOGY

This section summarises the design, focus and scope, data collection methods and tools, sampling and analysis used in the Assessment Report.

5.1 Design

The qualitative research design chosen was a cross-sectional rapid assessment, which has several advantages for obtaining a broad, regional description of the policy environment and programme framework on child and adolescent HIV, TB and malaria:

- It allows for a cost-effective focus on the required information;
- It uses multiple data collection methods and data sources that allow for the triangulation of data in order to strengthen data validity and reliability, which is key for a regional study of this scope; and
- It is highly focused and ideal for yielding practical recommendations as a basis for developing Minimum Standards for a child and adolescent HIV, TB and malaria continuum of care.

5.2 Scope and focus

The assessment was carried out in 14 SADC Member States: Angola, Botswana, Democratic Republic of the Congo (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe. The overall assessment, including the desk review and analysis, took place between October 2011 and July 2012, while the field assessment was done between October 2011 and February 2012. The report therefore captures the situation in Member States up to July 2012.

The regional assessment focused on three main dimensions and aimed at answering a total of eight, key questions:

- 1. Existence/ content of policy and programming frameworks
 - What are the existing child and adolescent-specific policy and programming frameworks on HIV, TB and malaria?
 - To what extent do these policy and programme frameworks conform to related regional and global guidance?
 - What are the best practices and working models/approaches in child and adolescent HIV, TB and malaria policy and programming?
 - What are the capacity gaps and needs related to the continuum of care in child and adolescent HIV, TB and malaria across the region?



2. Integration

- What is the level of integration among HIV, TB and malaria programmes?
- What is the level of integration between HIV, TB and malaria programmes, and orphan and vulnerable children programmes?
- What are the opportunities for adopting and implementing integrated policy and programme models for child and adolescent HIV, TB and malaria in a continuum of care?

Harmonisation

 To what extent is there harmonisation of child and adolescent HIV, TB and malaria policy and programming across the SADC region?

5.3 Data collection methods and tools

In order to answer those questions, a set of data collection methods and tools were selected by a team of regional experts, which developed the Assessment Methodology Protocol, on which the assessment is based. The data collection tools were further refined through in-house pre-testing before field assessments began.

• Desk review: A pre-defined set of seven core documents was collected from each Member State: a strategic plan/ framework for each of HIV, TB and malaria; a policy document for children and/or orphans, vulnerable children and youth; and clinical guidelines for the treatment/management of child and adolescent HIV, TB and malaria.

This set of national documents, together with relevant existing literature, was used to assess the existence and content of child-specific HIV, TB and malaria policy and programming frameworks in each country, and the extent to which they are integrated and harmonised across Member States. These documents were examined according to a clearly defined set of components and benchmarks (see Analysis section). Eighty-eight per cent of the identified documents were received and analysed. The complete set of core documents was obtained for 11 of the 14 Member States included in the assessment. The documents reviewed for each country are presented in Annex 5.

- Semi-structured interviews: These were done during the field assessment. They were used to appraise the views on child and adolescent policy and programming around the three diseases at national government level and among cooperating agencies, along with views and perceptions of service delivery on the supply (service providers) and demand (clients of health facilities) sides. The data collection tools used were:
 - Key informant interviews. A semi-structured questionnaire was used to interview key informants at national level (government decision-makers and development agency health focal points) on policy and programmes. A target sample size of 15 key informants was set (see sampling section below). Overall, 90% of the target sample size was attained. In seven of the Member States visited, the target was attained or exceeded, and it was above 70% for the others (with the exception of Mauritius).
 - Service provider interviews: A semi-structured questionnaire was used to interview health staff at primary, secondary and tertiary health facilities on policy, programming framework and service delivery. The target sample size was calculated at five service providers per country. The target sample size was attained or exceeded in all countries.
 - Client exit interviews: A semi-structured questionnaire was used to interview clients exiting child and adolescent HIV, TB and malaria services to explore client satisfaction and services issues. The target sample size was calculated at 25 clients per country, and overall 82% of that target was attained. The target was exceeded in 3 of the countries visited, and was above 70% in the others (except for Mauritius and Seychelles).
- Focus group discussions: Carried out during the field assessment, these were used to appraise community views on child and adolescent HIV, TB and malaria, as well as on challenges affecting the access to services for children affected by these diseases. The data collection tool consisted of a guide for open-ended discussions to obtain information from community members.

Data obtained from these collection methods and tools were compared and triangulated in order to assess the 3 main dimensions and answer the 8 questions posed by the assessment.

• Best practices identification: A literature review and a best practice submission form were distributed to key informants during field assessment. Existing and published local best practices found in the literature were used to exemplify opportunities throughout this report. Moreover, as part of Component 5—"Scaling up paediatric HIV, TB and malaria continuum of care"—the field assessment was also used to pre-identify local best practices (using the best practice submission form) which will be thoroughly documented as part of the Component 5 activities and which will lead to a separate report in the near future. Information from these best practice submission forms is therefore not included in this document.



5.4 Sampling

Qualitative sampling methods were used.

Selection of key informants: Purposive (targeted) sampling was used. The sample was constructed by determining categories of individuals, at national and sub-national levels, who were likely to have the most knowledge and experience. The positions of the key informants interviewed for each Member State are shown in Annex 2.

Selection of health facilities: Purposive (targeted) sampling was used in combination with two-stage random sampling. The Ministry of Health in each country selected one tertiary facility, while secondary and primary health facilities were selected using a two-stage randomisation approach. In the first stage, two provinces (or, where appropriate, regions or districts) were selected at random from a list of all provinces/regions/districts in each country. For the second stage, separate lists of secondary and primary facilities for each of the selected provinces/regions/districts were prepared and one secondary and one primary health facility was selected at random in each of the two provinces/regions/districts. Provinces/regions/districts and health facilities that were physically and logistically unreachable were excluded from the randomisation frame. The health facilities visited can be viewed in Annex 3.

Selection of health service providers: Purposive nominated sampling was used. The sample was constructed by asking the health facility manager of the selected health facility to nominate a member of staff (such as a maternal and child health nurse) for interviews, thus ensuring that the staff member selected was likely to have in-depth knowledge and experience in child and adolescent HIV, TB and malaria at the health facility. The positions of the service providers interviewed for each Member State can be viewed in Annex 2.

Selection of clients exiting health facilities: The sample was constructed using a systematic random approach by selecting every third patient leaving the health facility until the desired sample size of 5 clients per health facility (25 per country) was reached.

Selection of community members: The sample was constructed using a snowball (chain referral) approach. A first individual selected, referred and introduced a next member of the community who, in turn, introduced other member(s) of the community, until the desired sample size of seven community members per focus group discussion was reached.

The sampling methods were chosen to ensure that respondents, in particular the sample units of key informants and service providers, were knowledgeable of the main themes (i.e. child and adolescent HIV, TB, malaria, and support services) and that the main dimensions being surveyed (i.e. the existence and content of a policy and programming framework, integration and harmonisation) were comprehensively covered.

5.5 Data analysis

Analysis was carried out following a two-step approach: 1) analysis of data from different collection tools; and 2) triangulation of data.

5.5.1 Analysis of data from collection tools

Desk review data. The analysis of the policy environment and programming framework was based on a minimum of seven core documents from each country: a strategic plan/framework for each of HIV, TB and malaria, a policy document for children and/or orphans and other vulnerable children and youth, and clinical guidelines for treatment/management of child and adolescent HIV, TB and malaria. Data were examined focusing on the three main dimensions of the assessment:

- Existence and content: Tables were constructed for the strategic plan and guideline documents. These were divided into 3 main areas (HIV, TB and malaria), each of which was subdivided into 6 subareas: prevention; diagnosis; treatment, care and support; advocacy, communication and social mobilisation; and M&E. An additional section was included to explore child-friendly services, task-shifting, health systems strengthening and supply chain management systems. A set of components based on international recommendations was identified for each section (see Tables 6-13). Each component was then compared against three benchmarks: is the component covered in the documents, is it in line with international guidelines, and does it specifically address the needs of children.
- Integration: Desk review documents from each country were compared against a pre-set of components: planning and budgeting, collaboration across programmes, services (referrals, range of services provided under the same roof) and M&E. This served to evaluate the integration of HIV, TB and malaria programmes, and integration into



primary health care structures and basic child services. Each component was assessed against two benchmarks: Is the component covered in the documents, and does it specifically address the needs of children?

Harmonisation: This was assessed by comparing variation or similarity across Member States for each
of the variables examined in the previous two dimensions, along with the degree to which international
recommendations have been domesticated within national policies and programming frameworks.

Semi-structured interviews: Field data obtained from the KII, service provider interview (SPI) and client exit interview (CEI) collection tools were entered into a Microsoft Access database, and exported to SPSS. Regional frequency tables were produced using the data from each of the Member States tables. Qualitative data were collected from open-ended questions, catalogued and used for thematic analysis.

Focus group discussions: Based on the themes generated by the focus group discussion guide, a qualitative data analysis was performed using NVIVO software (which allows for easy classification of the data into themes) on the transcriptions of recorded interviews.

5.5.2 Triangulation of data from all collection tools

The main analysis was based on data from the desk review, which was enriched and crosschecked against the other sources of data. Views expressed in key informant interviews, SPI, CEI and focus group discussions were used to illustrate perceptions of child and adolescent HIV, TB and malaria policies and programmes, on both the supply and demand sides.

5.6 Ethical considerations

A pre-set of principles were followed during the assessment: Member States granted authorisation for desk reviews and field assessment. Researchers participating in field assessments were trained in the principles of do no harm, informed consent and confidentiality, to ensure that these principles were upheld when interviewing participants. The assessment team was also instructed in neutrality, and cultural and political sensitivity. Finally, the assessment team provided feedback to key informants and interviewees.

5.7 Limitations

The main findings of the assessment are based on strategic frameworks/plans (which are usually revised and updated every 5 years) and clinical guidelines (which are updated every 2-3 years). This means that the desk review analysis is necessarily retrospective, and might not adequately reflect ongoing updates in the documents or components that are already being implemented, even though they are not yet included in strategic frameworks/plans or guidelines for the three diseases.

Although input from key informants and services providers was used to complement this information, the field assessment was carried out between October 2011 and February 2012 and updates and changes that occurred after that period are not reflected in this document. Moreover, in order to harmonise the analysis a defined set of documents was revised for each country. Thus, it is possible that certain issues not covered in these documents are included elsewhere, and therefore are not reflected in the present assessment report.

The rapid assessment was designed to cover the 14 SADC Member States. Desk reviews were carried out for the 14 countries and only a small number of documents could not be obtained (a Strategic Plan and Guidelines for TB from the DRC and a National Action Plan for Children from each of Mauritius and Seychelles). Field assessments (semi-structured interviews) could not be carried out in the DRC (where elections were being held at the time of the assessment) and Mozambique (where flooding hampered access to study sites). Other than that, the vast majority of documents from all Member States were received and reviewed, and field data were obtained from the majority of countries. That information, together with the triangulation of data used in the rapid assessment, ensured that the gaps did not affect the validity of the findings and recommendations at the regional level.

Finally, due to the breadth of an assessment covering 3 diseases across 3 main areas of analysis in 14 countries, it was not possible, within the scope of the study, to explore in greater depth issues that emerged during data analysis, such as the quality of care and M&E systems. Quality of care is key to ensuring positive outcomes in treatment and care, while strong and well-functioning M&E systems are required for adequate planning and implementation. These key issues require more intensive investigation in the ambit of other studies. Nevertheless, the information gathered in this rapid assessment was adequate for achieving the objectives of the study, and provides solid information on which to base the Minimum Standards for a Continuum of Care in Child and Adolescent HIV, TB and Malaria.



6. FINDINGS

This section presents the findings organised according to the three main dimensions of analysis:

- Existence and content of policy and programming frameworks on child and adolescent HIV. TB and malaria,
- Integration, and
- Harmonisation.

Findings from the desk review analysis were complemented with qualitative data from key informants, service provider and client exit interviews, and focus group discussions. Additionally, documented local best practices encountered during the desk review have been included to showcase opportunities.

6.1 Existence and content of policy and programming frameworks on child and adolescent HIV, TB and malaria

Strategic frameworks/plans for HIV, TB and malaria provide an overview of the country strategy to tackle the diseases, allowing for a more broad-spectrum analysis. For each of the HIV, TB and malaria areas, six main sub-sections of analysis were reviewed (prevention; diagnosis; treatment care and support; advocacy, communication and social mobilisation; M&E; other issues). For each of those sub-areas, we analysed a pre-defined set of components that are recommended by international guidelines, and verified whether they specifically take children's issues into account.

Clinical guidelines for HIV, TB and malaria provide the concrete operational guidance for translating strategies into service delivery, thus providing a more detailed level of analysis. For each area (HIV, TB and malaria), three subareas of analysis (prevention; diagnosis; treatment, care and support) were reviewed.

The same pre-defined set of components that were used for the strategic frameworks/plans, was used and divided into sub-components. For each sub-component, we evaluated three benchmarks: Is the subcomponent being covered in the documents; is it in line with international recommendations; and does it specifically address the needs of children?

6.1.1 Existence and content of policy and programming frameworks on child and adolescent HIV

HIV and AIDS strategic frameworks/plans and guidelines from 14 Member States were reviewed. Where available, accompanying M&E strategic frameworks as well as separate policy documents (for example, for voluntary male medical circumcision) were also reviewed (see Annex 5). Some Member States also had independent, stand-alone HIV testing and counselling guidelines—either for all ages or paediatric-specific PMTCT guidelines, and/or post-exposure prophylaxis (PEP) guidelines (see Annex 5). Table 6 shows the analysis of HIV strategic frameworks and plans, and Tables 7-11 depicts those of clinical guidelines, according to sub-area. Their findings are detailed below.

Prevention. The components assessed in strategic frameworks and plans were HIV testing and counselling; PMTCT; prevention of sexual transmission of HIV through sexual and reproductive health, PEP and male circumcision; and additional sub-components of these were analysed for the guidelines.



Subarea		P	reventio	on			Diagnosi	is			Treatm	ent, Ca	re and 9	Support			ACSM	M	&E		Other	issues	
Component	нтс	PMTCT	Sexual transmission/SRH	Post Exposure Prophylaxis	Male Circumcision	Rapid tests	Serology	Early Infant Diagnosis	ART and OI	HIV-TB coinfection	Routine patient follow up	Nutritional counselling and support	Psychosocial support	Child and social protection	Community and Home-Based Care	Drug resistance testing	Advocacy, Communication and Social Mobilisation	Reporting of age & sex dissagregated data	Paediatric HIV indicators	Child and adolescent-friendly services	Task-shifting	Health System Strengthening	Supply Chain management Strengthening
Angola	NSPC	Υ	Υ	N	Υ	NSPC	NSPC	Υ	Υ	NSPC	NSPC	NSPC	NSPC	Υ	NSPC	NSPC	NSPC	N	N	Υ	NSPC	NSPC	NSPC
Botswana	NSPC	Υ	Υ	NSPC	NSPC	N*	N*	Υ	Y ³	NSPC	Υ	NSPC	Υ	Υ	NSPC	NSPC	NSPC	N	N	Υ	NSPC ¹³	NSPC	NSPC
DRC	NSPC	Υ	NSPC	NSPC	NSPC	NSPC	N*	N*	Y	NSPC	NSPC	NSPC	NSPC	NSPC	NSPC	NSPC	NSPC	N	N	N	N	NSPC	NSPC
Lesotho	NSPC	Υ	Υ	NSPC	Υ	N*	N*	N*	Υ	NSPC	Υ	NSPC	NSPC	Υ ⁸	NSPC	N	NSPC	Y ¹²	Υ	Υ	N	NSPC	NSPC
Malawi	NSPC	Υ	Y	NSPC	Υ	NSPC	NSPC	Υ	Υ	NSPC	Υ	Y ⁴	NSPC	Y ⁸	NSPC	N*	NSPC	N	Υ	Υ	Y ¹⁴	NSPC	NSPC
Mauritius	NSPC	Υ	Y	N	N	N*	N*	N*	NSPC	N	NSPC	N	N	NSPC	N	N	NSPC	N	У	N	N	NSPC	NSPC
Mozambique	Υ	Υ	Y ²	N	Υ	N*	N*	N*	NSPC	NSPC	NSPC	γ ⁵	Υ ⁵	Υ ⁵	NSPC	N	NSPC	N	N	Υ	Y ¹⁵	NSPC	NSPC
Namibia	Υ	Υ	Υ	NSPC	Υ	N*	N*	Υ	Υ	NSPC	Υ	NSPC	NSPC	NSPC	NSPC	N*	NSPC	Υ	Υ	Υ	NSPC ¹⁶	NSPC	NSPC
Seychelles	Y ²²	Υ	Υ	NSPC	N	N	N	N*	NSPC	N	NSPC	NSPC	NSPC	NSPC	NSPC	N	NSPC	N	N	γ ²³	N	NSPC	NSPC
South Africa	Y ¹	Υ	Υ	Υ ¹	NSPC	Υ ¹	Y ¹	Υ ¹	Υ	Υ	Υ	Υ	Υ	Υ	Υ ⁹	N	NSPC	Υ	Υ	Υ	NSPC ¹⁷	NSPC	NSPC
Swaziland	NSPC	Υ	NSPC	NSPC	Υ	N*	N*	Υ	Υ	NSPC	NSPC	Υ	NSPC	γ8	NSPC	N	NSPC	N	у	Υ	NSPC ¹⁸	NSPC	NSPC
Tanzania	Υ	Υ	Y	Υ	Υ	N*	N*	Υ	Υ	NSPC	Υ	Y ⁶	NSPC	Y ¹⁰	NSPC	NSPC	Y ¹⁰	N	у	Υ	NSPC ¹⁹	NSPC	NSPC
Zambia	NSPC	Υ	Υ	NSPC	Υ	N*	N*	N*	Υ	NSPC	NSPC	Y ⁷	Υ ⁸	Υ ⁸	NSPC	N	NSPC	N	Υ	Υ	Y ²⁰	NSPC	NSPC
Zimbabwe	Υ	Υ	Υ	NSPC	Υ	NSPC	NSPC	Υ	Υ	NSPC	NSPC	Υ	NSPC	NSPC	NSPC	N	γ ¹¹	Υ	Υ	Υ	NSPC ²¹	NSPC	NSPC
Total countries																							
Covered (Y+NSPC)	14	14	14	11	12	5	4	8	14	12	14	13	13	14	13	4	12	4	9	11	10	14	14
Child specific (Y)	6	NA	12	2	9	1	1	NA	11	1	6	7	4	9	1	0	2	NA	NA	NA	3	0	0
Not covered (N)	0	0	0	3	2	9	10	6	0	2	0	1	1	0	1	10	0	10	5	2	4	0	0

Notes: Y= Included in document and children specifically addressed; N=Not specified in documents reviewed; N*,= Not specified in strategic framework/plan, but covered in guidelines; NA= Not applicable, the item is by definition children specific; NSPC= included in document but not specifically addressing children. Shaded areas, component is not relevant for specific country, see text. ¹National HTC Policy guidelines (specific section for children). ²Specific emphasis on girls. ³Specifically addresses children lost to follow up when transitioning to adult services. ⁴Counselling for all, support for infants and children. ⁵Part of a child specific package. ⁵As part of CHBC, specifically for Most Vulnerable Children and OVC in particular. ⁵For OVC only, as part of impact mitigation strategies. ⁴Also covered in National Norms and Minimum Standards for Home and Community Based Care, which have a child-specific section. ¹O Specific for Most Vulnerable Children (MVC, term used by Tanzania, instead of OVC). ¹¹ Covered in PMTCT and paediatric National Plan 2006-2010 (in ZNASP II 2011-2015, it is NSPC). ¹² Sex dissagregated only. ¹³ Mentioned in National HIV-AIDS Treatment Guidelines 2012. ¹⁴All certified clinical PMTCT/ART providers are authorized to prescribe and dispense ART (Doctors, Clinical officers, Medical Assistants, Registered Nurses, Nurse/Midwife Technicians). ¹⁵ Manual De Tratamento Da Criança Com Infecção Pelo VIH-Sida 2011: Start training of technicians in medicine for initiation and follow up of ART in children. ¹⁵ in 2005 the MOHSs adpoted WHO IMAI strategy that enabled nurses to expand service provision to HIV patients (screening, counselling and treatment of Ols, managing ART medication for stable patients). ¹¹ Nursing Act 2005 section 56(6). ¹³ The country is considering task shifting for some HTC activities to lay counsellors, and a policy review on task shifting for nurses. ¹³ The National Multisectorial Strategic Framework 2008-2012 proposes exploring task-shifting for ART and neonatal MC. ²¹ Task s









Table 7. HIV Guidelines on Prevention															
Country	Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles*	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
нтс															
All children presenting to a health facility must be offered an HIV test															
(PIHTC= Provider Initiated HTC).		Y		Y	Υ		Υ			Y	Y	Y	Υ	Y	9
HTC should be provided in particular: when it is in the best interest of the child for treatement or care		Υ		Υ			Υ ¹			Υ	Υ	Υ	Υ	Υ	8
All HIV testing is voluntary. Declining an HIV test will not prejudice the client		Υ		Υ	γ	Υ	Υ		Υ	γ	Υ	Υ	Υ	Υ	11
access to services.		<u>'</u>		<u> </u>						<u>'</u>	<u> </u>	<u>'</u>			
Pre-test and post-test counselling are necessary and the principles of	Ιγ	Y		Ιγ		Ιγ	Υ		Ιγ	Ιγ	Ιγ	Ιγ	Υ	Ιγ	11
consent, counselling and confidentiality must be observed															
Age above which children can provide full informed consent.	15	16		12			18		15	12	16	18	16	16	10
Circumstances under which children under age of consent are considered "mature minors" and allowed to give full informed consent		М, В							SA	M,P, C	P, STI, FP, SA, A	M, C, SA	M, P, C	M, P, C	7
HIV test performed on a child under age of consent or mentally incapacitated require consent of the parents /legal guardian	Y	Y		Υ		Υ	Υ		Y	Υ	Y	Y ²	Υ	Υ	11
If there is no parent, caregiver or custody, and it is in the best interest of the child, health care workers may test the child										Υ	Υ	N ³	N ⁴		2
SRH															
SRH counselling including HIV and STI prevention information and															
contraceptives must be available for adolescents in an adolescent friendly service.	Y	Y		Y	Y ⁵		NSPC	Y	Y	Y		Y	Y	Υ	11
Adequate counselling for adolescent serodiscordant couples in reduction of HIV transmission should be provided.	Υ	Υ		Υ					Υ	Υ		NSPC		Υ	7
PMTCT															
PMTCT Prong 1: Primary prevention of HIV infection among women of childbearing age	Υ	Υ		Υ	Υ		Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	12
PMTCT Prong 2: Preventing unintended pregnancies among women living with HIV	Υ	Υ		Υ	Υ		Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	12
PMTCT Prong 3: Prevention HIV transmission from women living with HIV to their infants during pregnancy, delivery and breastfeeding	Y	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Y	Υ	Υ	Υ	14
PMTCT Prong 4: Providing appropriate treatment, care and support to mothers living with HIV, their children and families	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	14
Counselling and recommendation of exclusive breastfeeding for 6 mo in HIV infected women unless replacement feeding is AFASS	Υ	Υ		Υ	Y ⁶		Υ	Υ ⁶		Υ	Υ ⁶	Υ		Υ	10
POST EXPOSURE PROPHYLAXIS (PEP)															
Access to rapid HIV testing and PEP should be ensured for all children victims of sexual assault	NSPC	Υ		Υ	NSPC ⁷	NSPC	Υ	Υ	NSPC	Υ	Y	Υ	Υ	Υ	13
An HIV rapid test must be offered in the first 72 hours to assess previous HIV status.	Y	Y		Υ	Υ	Υ	Υ	Υ		Y	Y	Υ	Υ	Υ	12
PEP should be initiated if rapid test is negative or unavailable or delayed	Y	Υ		Υ	Υ	Υ	Υ	Υ		Υ	Y	Υ	Υ	Υ	12
Dates at which HIV testing must be repeated to determine whether HIV was acquired during the assault.	0w, 12w &	4–6w & 3–6mo		4–6w & 3–6mo	3mo & 6 mo	2.5mo	3mo,	12w &		4–6w & 3–6mo		3mo		4–6w & 3–6 mo	10
Victims of sexual assault should be referred for medical and psychological treatment.	Y	Y		Υ			Υ	Υ		Y	Y	Υ		Υ	9
Appropriate training on PEP for staff at all referral points must be ensured.										Y	Y	Y	Υ	Υ	5
MALE CIRCUMCISION															
Promote/provide neonatal circumcision															0
Promote/provide circumcision for children not circumcised at birth		Υ									Υ	>10 yr			3

Notes: * National HIV-AIDS treatment -management guidelines were not received for review, but information from National HIV-AIDS policy and Strategic framework was used. Y=included in document and children specifically addressed; NSPC=Included in document but nos specifically addressing children; N= Included in a partial or modified way, see notes; Blank=not included in documents reviewed. Shaded areas = component is not relevant for specific country, see text. A= adolescents presenting alone to health facility, B= operating their own bussiness, C=Have children, AFASS: Acceptable, Feasible, Affordable, Sustainable and Safe; FP= accessing family planning services, IA= If available, M= Married, P=Pregnant, SA= sexually active, STI= being treated for an STI, TF=Treatment Failure. ¹No need for parental consent in this scenario. ²If under 16 years old; It is not clear what is the status for consent of children between 16 and 18 years old. ³Religious leader, teacher or relative can provide consent. ⁴Seplacement for one of the consent of t

HIV testing and counselling: The HIV testing and counselling (HTC) component was covered in the strategic plan/frameworks (See Table 6), and guidelines (see Table 7) from all 14 Member States were assessed. Further information on the status of HTC in the SADC region (with a section on children) can be found in the SADC Assessment Report on the Status of HIV Testing and Counselling Policies.⁴⁰

The strategic plans/frameworks of 6 of 14 countries (Mozambique, Namibia, Seychelles, South Africa, Tanzania and Zimbabwe) specifically address expanding the coverage and quality of HTC for children (including adolescents). Namibia, for example, has a specific target of expanding the number of children 10-14 years old who have been tested in the past 12 months, while Seychelles is targeting expansion of HTC for 15-17 year-olds and Tanzania is addressing the need to reduce the age of consent for HTC. Guidelines from 9 of the 14 Member States (Botswana, Lesotho, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) specified provider-initiated HTC to ensure



that all children attending a health facility for any reason are offered an HIV test. Guidelines from 10 of 14 Member States (Angola, Botswana, Lesotho, Mozambique, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) specified the age of consent for HTC. This varied from 12 to 18 years, as did the specific provisions for minors who are under age but who are still allowed to give consent (for example, pregnant, married, or child-parents) (see Table 7). Field assessment interviews with service providers reported widespread availability and use of HTC guidelines, while interviews with clients of health facilities showed good knowledge of existence of HTC services.

Sexual and reproductive health for prevention of sexual transmission of HIV: The sexual and reproductive health (SRH) for prevention of sexual transmission of HIV component (for example, condom distribution, diagnosis and treatment of sexually transmitted infections, STIs. and reproductive health services) was covered in the strategic plan/framework of all 14 Member States assessed (see Table 6), and in the guidelines of 11 Member States (see Table 7).

The SRH component of the strategic plans/frameworks was specifically geared towards adolescents and/or youth in 12 of 14 Member States (Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South

Africa, Tanzania, Zambia and Zimbabwe; see Table 6). Guidelines from 9 countries (Angola, Botswana, Lesotho, Malawi, Namibia, South Africa, Tanzania, Zambia and Zimbabwe) covered the provision of SRH counselling, including HIV and STI prevention information and contraceptives for adolescents in adolescent-friendly services. Others covered SRH for the general population without particular emphasis on adolescents (see Table 7).

Counselling for serodiscordant adolescent couples was covered by guidelines from 7 countries (Angola, Botswana, Lesotho, Seychelles, South Africa, Tanzania and Zimbabwe). SRH services are key for the prevention of HIV in the second decade of life of children, but effectively addressing these adolescents has always been a challenge.

Promising local programmes have been developed in this area, as shown in Box 1. Interviews with service providers reported widespread knowledge of SRH guidelines, although in general SRH services were less well known by clients of health facilities than HTC services.

Box 1. Best practice on sexual and reproductive health for adolescents in Namibia: The "My future is my choice" Programme.

This programme provides life skills training to children aged 10-18 years, focusing on HIV prevention, teen pregnancy reduction, youth empowerment and behaviour change. Using a highly interactive approach involving ten sessions provided by trained young facilitators, the programme aims to provide adolescents with information and life skills they need to make informed choices about their future. The programme attempts to build young people's confidence and skills to make informed choices about their sexual lives and to take independent decisions.

Results showed that young people who participated in the programme were more likely to delay their sexual debuts and use condoms when they did become sexually active, compared with young people who had not participated.

Source: UNAIDS. Summary Booklet of Best Practices in Africa. Geneva: UNAIDS; 2000.

Prevention of mother-to-child transmission of HIV. The PMTCT component was included in the strategic plans/ frameworks and guidelines of all the Member States that were assessed. PMTCT guidelines from all Member States were in line with international recommendations, i.e. they covered the four PMTCT prongs defined by WHO, namely:

- Primary prevention of HIV among women of reproductive age within services related to reproductive health;
- Prevention of unwanted pregnancies in women living with HIV;
- Prevention of mother to child-transmission during pregnancy, delivery and breastfeeding; and
- HIV care, treatment and support for women found to be HIV-positive, and their families.

Only 2 countries did not cover prongs 1 & 2 (see Table 7). For prong 3, which concerns the prevention of HIV transmission from mothers to babies, WHO recommendations include 3 programmatic options:

- Option A involves AZT antepartum treatment, complemented with single-dose nevirapine intrapartum and 7 days of AZT+3TC postpartum;
- Option B involves providing a triple ARV regimen during pregnancy and until breastfeeding stops; and
- Option B+ involves starting pregnant women living with HIV on lifelong ART (see Appendix 7).



Assessment of prong 3 showed that eight Member States were implementing Option A (Lesotho, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe), 5 Member States were implementing Option B (Angola, Botswana, DRC, Mauritius and Seychelles), and only one Member State (Malawi) was implementing Option B+ (Table 8). PMTCT strategic plans/frameworks and guidelines from all 14 countries systematically cover both mother and child, in line with international recommendations. Further information on the status of PMTCT in SADC Member States can be found in the Assessment Report on the Status of PMTCT Programmes in the SADC Region.⁴¹

Table 8. PMTCT Programmatic options															
Country	Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
OPTION of PMTCT used in country	В	В	В*	Α	B+	В	Α	Α	В	Α	Α	Α	Α	Α	
OPTION A characteristics															8
Treatment for mother: Lifelong triple ARV if CD4 count <350 or WHO clinal stages 3 or 4				Υ			Υ	Υ		Y	Υ	Υ	Y	Y	8
Antepartum prophylaxis for mother: AZT starting at week 14 of gestation				Υ			Υ	Υ		Y	Υ	Υ	Υ	Y	8
Intrapartum prophylaxis for mother: sdNVP at onset of labour and first dose of AZT/3TC				Υ			Υ	Υ		Y ⁵	Υ	Υ	Y	Υ	8
Postpartum prophylaxis for mother: daily AZT/3TC through 7 days post-partum				Υ			Υ	Υ		N	Υ	Υ	Y	Υ	7
Infant receives, if mother on treatment, daily NVP through age 6 weeks				Υ			Y ³	Υ		Υ	Υ	Υ	Y	Y	8
Infant receives, if mother on prophylaxis and breastfeeding, daily NVP from birth through 1 week beyond complete cessation of breastfeeding				Υ			Υ	Y ⁶		Υ	Y	Υ	Y	Υ	8
Infant receives, if mother on prophylaxis, and NOT breastfeeding, daily NVP from birth through age 6 w				Υ			AZT	Υ		Y	Υ	Υ	Y	Y	8
OPTION B characteristics															5
Treatment for mother: Lifelong triple ARV if CD4 count <350 or WHO stages 3, 4	Υ	Y	<200			Y			Υ						5
Prophylaxis for mother: Triple ARV starting at week XX of gestation, and continued intrapartum and through childbirth if not breasfeeding or until 1 week after cessation of all breastfeeding	Y w20	Y w14 ¹	Y w14			Y 6 th month			Y 6 th month						5
Infant receives daily NVP or AZT from birth through 4-6 weeks regardless of infant feeding method	AZT, 4w	AZT, 4w²	ND			AZT, 6w			AZT, 6w						4
OPTION B+ characteristics															1
Treatment=Prophylaxis: Lifelong triple ARV for all pregnant women living with HIV regardless of CD4 count or WHO clinical stage					Υ										1
Infant receives daily NVP or AZT from birth through 4-6 weeks regardless of infant feeding method					NVP, 6w										1

Notes: Y= Included in document; Shaded areas, not applicable; ND= no data in reviewed documents; 3TC=lamivudine; AZT=zidovudine; FTC=emtricitabine; ; NVP=nevirapine; sd=single-dose; TDF=tenofovir. * DRC treatment guidelines do not include a PMTCT component, data from the 2010 DRC UNGASS report was used instead. The report states that sdNVP for the mother and the infant is still used in some parts of the country, and in other parts the 2007 PMTCT revised protocol, which provides triple ARV prophylaxis to the mother, is being used, which would be compatible with option B. ¹Women who choose to breastfeed continue triple ARV until their infants are at least six months of age and completely after weaning. ²Plus sdNVP immediately after birth. ³ If not breastfeeding, provide AZT instead of NVP for 6w. ⁴Breasfeeding is not recommended. ⁵sdNVP+ 3-hourly AZT + single dose TDF+FTC . ⁴Until 4w after complete cessation of breastfeeding.

Post-exposure prophylaxis. PEP for non-occupational exposure to HIV, notably rape or sexual abuse, was included in the strategic frameworks/plans of 10 of 14 Member States (Botswana, DRC, Lesotho, Malawi, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe), but only 2 of them (South Africa and Tanzania) specifically addressed the need for PEP in sexually abused children.

PEP for non-occupational exposure to HIV was covered in the guidelines of 13 Member States, and in 9 of them children who are victims of sexual assault were specifically addressed. These guidelines include offering an HIV rapid test within the first 72 hours to assess previous HIV status, initiation of PEP if the rapid test is negative or unavailable or delayed, and re-testing for HIV after the window period has passed. This is in line with international recommendations. However, referring child victims of sexual assault to medical and psychological treatment were covered in the guidelines of only 9 Member States (Angola, Botswana, Lesotho, Mozambique, Namibia, South Africa, Tanzania and Zimbabwe). In addition, PEP training for staff at all appropriate child-referral points was covered in the guidelines of only 5 countries (South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) (see Table 7).



Male medical circumcision. In line with international recommendations, male medical circumcision was covered in the strategic frameworks/plans of 12 of the 14 countries with high HIV prevalence (Angola, Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe). In line with international recommendations, it was not considered in Mauritius and Seychelles, countries with low HIV prevalence in the general population. Strategic plans/frameworks from 9 Member States (Angola, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe) specifically covered neonatal or child circumcision in conjunction with adult male circumcision (see Table 6). However, guidelines from only 3 Member States covered male medical circumcision for children (Botswana, Swaziland and Tanzania), and none covered neonatal circumcision (see Table 7). Interviews with service providers reported that knowledge of male medical circumcision guidelines (in contrast with SRH, HTC and PMTCT guidelines) was not widespread at health facilities. Moreover, interviews with clients of health facilities showed that clients were not as aware of the existence of male medical circumcision programmes.

Diagnosis. Three diagnostic components were evaluated: rapid tests, serological assays and virological assays (early infant diagnosis).

Table 9. HIV Guidelines on Diagnosis															
Country	Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles*	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
DIAGNOSIS															
HIV serological tests as screening assay to determine HIV exposure in infants younger than 18 months.				Υ				Υ		Υ	Υ	Υ	Υ		6
HIV serological tests as diagnostic assay to determine HIV infection in children older than 18 months.	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ		Υ	Υ	Υ	Υ	Υ	13
An HIV virological test (Early Infant Diagnosis) must be performed to determine HIV infection in infants younger than 18 months.	Y ¹	Υ	Y ¹	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	14
In HIV exposed infants: Virological test should be performed at 4-6 weeks after birth or at earliest opportunity thereafter.	Y ¹	Υ		Υ	Υ		Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	12
In HIV exposed infants: Serological tests should be performed at X months and if positive, HIV infection confirmed with a virological test	9		18	9	12		9	9		9	12-18	9	9	9	
If child is still breastfeeding an additional test (serological or virological, as appropriate), must be performed 6 weeks- 3 months after breastfeeding has stopped.	Y	Υ		Υ	Y ²		Υ	Υ		Υ	Y	Υ	Υ	Υ	11

Notes: * There are no written National HIV-AIDS treatment -management guidelines, country uses WHO guidelines, where available, data from PMTCT guidelines was used. Y=Included in document and children specifically addressed; NSPC=Included in document but nos specifically addressing children; Blank=not included in documents reviewed ¹If available, if not, use clinical diagnosis. ²Assume breast feeding until infant is at least 18 months old.

Rapid tests. The component of rapid tests is addressed in the strategic frameworks/plans of 5 countries (Angola, DRC, Malawi, South Africa and Zimbabwe; see Table 6). Guidelines from 13 countries cover the use of rapid tests for children, and specify the use of rapid tests after 18 months of age, in line with international recommendations (see Table 9).

Serological assays. In line with international recommendations, serologic tests were included in the strategic frameworks/plans of 4 Member States (Angola, Malawi, South Africa and Zimbabwe), but only in South Africa did they specifically cover children (see Table 6). Guidelines from 13 countries specified the use of serological tests after 18 months of age, in line with international recommendations (see Table 9).

Virological assays (early infant diagnosis): In line with international recommendations, use of early infant diagnosis tests was included in the strategic frameworks/plans of 8 Member States (Angola, Botswana, Malawi, Namibia, South Africa, Swaziland, Tanzania and Zimbabwe; see Table 6). Guidelines from all 14 countries reviewed the specified the use of virological tests for early infant diagnosis before 18 months of age, in line with international recommendations (see Table 9).

Treatment, care and support. The components assessed were ART and treatment of opportunistic infections, treatment of HIV/TB co-infection, routine patient follow-up, drug resistance testing, nutritional counselling and support, psychosocial support, child protection services, and community- and home-based care.









Table 10. HIV Guidelines on Treatment, Care and Support															
Country	Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles*	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
ART AND TREATMENT OF OPPORTUNISTIC INFECTIONS															
ARV prophylaxis for HIV exposed infants	Y	Y	Y ¹	Y	Y	Y	Y	Y	Y	Y	Υ	Y	Y	Y	14
ART in infants under 2 years of age with confirmed HIV infection, irrespective of clinical or immunological stage.	N ⁷	Υ	N ²	Y	Υ	N ⁷	Y	Y		N ⁷	Υ	Υ	N ⁷	N ⁷	7
ART in HIV-infected children between 2 and 5 years of age if CD4 count is ≤750 cells/mm³ or %CD4 ≤25, irrespective of WHO clinical stage.	Y ³	Υ	N ²	Y	Υ	N ²¹	Y	Y ⁵		Y ⁶	Υ	Υ	Y ³	Υ	11
ART in HIV-infected children older than 5 years of age with a CD4 count ≤350 cells/mm3, irrespective of WHO clinical stage.	Y ⁴	Υ	N ²	Y	Y	N ²¹	Y	Υ		Y	Υ	Υ	N ⁸	Υ	10
ART in HIV-infected children with WHO clinical stages 3 and 4, irrespective of CD4 count.	Y	Υ	Υ	Y	Υ	Y	Y	Y		Y	Y	Υ	Y	Y	13
Use paediatric fixed dose combinations		IA		Y	Y	IA	Y	Y		IA	Y	IA	IA	Y	11
ose paediatric rised dose combinations		IA.		'	1	IA	'	1		IA	1	IA.	IA.	,	
HIV-exposed infants must start cotrimoxazole preventive treatment at 4–6 weeks after birth and continue until HIV infection has been excluded and infant is no longer at risk of acquiring HIV through breastfeeding.	Y	Y		Y	Y	Y	Y	Y		Y	Υ	Y	Y	Y	13
Cotrimoxazole prophylaxis in HIV-infected children younger than 2 years old.	N ⁹	N ⁹		Y ¹⁰	Y ¹²		Y	Y		N ⁹	Y ¹²	N ⁹	N ⁹	N ⁹	5
Cotrimoxazole prophylaxis in HIV infected children between 2 and 5 years of age with WHO clinical stage 2, 3 or 4 or %CD4<25 or CD4 count <350 cells/mm3.	Y (1-5 yr)	Y (1-5 yr)		Y ¹⁰	Y ¹²		Y	Y ¹⁰		Y (1-5 yr) ¹¹	Y ¹²	Y (1-5 yr)	Y (1-5 yr)	Y	11
Cotrimoxazole prophylaxis in children over 5 years of age with WHO clinical stage 2, 3 or 4 or CD4 <350 cells/mm3	Y ¹³	Y		Υ	Y ¹²					N ¹⁴	Y ¹²	Υ	Υ	Υ	9
HIV-TB COINFECTION															
Screening for TB	Y			Y	Y		Y	Y			Y	Y	Y		8
ROUTINE FOLLOW UP															
CD4 measured:At the time of HIV diagnosis and every 3 to 6 months thereafter	Υ	Y	Υ	Y	Υ		Y	Υ		Y	Υ	Υ	Υ		11
CD4 measured Prior to initiating ART and every 3-6 months thereafter.	Y	Y	Y	Y	N ¹⁵		Y	Y		Y	Υ	Y	Y (IA)	Y (IA)	11
Viral load pre ART		every 3 mo	at diagnosis				1 per yr								3
Viral load post ART		every 3 mo	at 6 mo	ifTF	at 6mo, 2 yr and every 2 yr		every 6 mo	at ART start and every 6 mo		at ART start, 6 mo, 1 yr and yearly		if TF	if TF	IA	10
Drug resistance testing		Y	if TF, IA		Y ²⁰			Y ²⁰					N ²²		4
Follow up (clinical evaluation) every 3 months at least	Y	Y		Y	Y		Y	Y				Υ			7
Monitor growth, development and nutrition of HIV-infected children	Υ	Y		Y	Υ		Y	Υ		Y	Υ	Υ	Υ	Υ	11
Screening for Malaria												Y	Υ		2
NUTRITIONAL AND PSYCHOSOCIAL SUPPORT															
Nutritional counselling and support	Υ	Y	Y ¹⁶	Y	Y ¹⁷		Y	Y	NSPC	Y	Y	Y	Y	Y	13
Pyschosocial support	Υ	Y	Y	Y	Υ		Y	Y	NSPC	Y	Υ	Y	Υ	Y	13
Community and home based and		NCDC	 		_	_	V		NCDC	v.18			19	V	-

Notes: * There are no written National HIV-AIDS treatment -management guidelines (country uses WHO guidelines), information from National HIV-AIDS policy and Strategic framework was used for the analysis. Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but nos specifically addressing children; Blank=not included in documents reviewed; Shaded areas= component is not relevant for specific country, see text. IA =If available, TF=Treatment Failure. ¹If no possibility of HIV or CD4 test, not recommended if asymptomatic. ²If child <18 months, start if %CD4<20, if child>18 months, start if %CD4<15. ³In children 1 to 3 years: if %CD4<20 or CD4 counts/500 cells/mm3; in children 3 to 5 years: if %CD4<15 or CD4 counts/200 cells/mm3. °CTP in all HIV infected children under 1 years of age. ¹¹Or In all HIV infected children under 1 years

Antiretroviral treatment and treatment of opportunistic infections. Strategic plans/frameworks and guidelines from all 14 Member States included this component (see Tables 6 and 10, respectively). Eleven countries (Angola, Botswana, DRC, Lesotho, Malawi, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) of 14 the Member States had strategic frameworks/plans that specifically addressed the need to expand or strengthen ART and treatment of opportunistic infections services, including co-trimoxazol prophylaxis, to children (see Table 6).

Guidelines from all the Member States that were assessed specifically address ART and the treatment of opportunistic infections in children (see Table 10). Seven Member States (Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland and Tanzania) follow the latest WHO guidelines, which support ART for all HIV-positive children under 2 years, irrespective of clinical or immunological status, while the others include ART for all children under 1 year only (see Table 10). Provisions on when to start ART for children older than 2 year, according to age and immunological/clinical status, were fairly homogeneous across Member States and followed WHO guidelines, although there were some exceptions (see Table 10). Differences were found with respect to the first-line ART regimens recommended for children across (see Table 11). The most common regimen is AZT+3TC+NVP, with some countries choosing either 3TC or d4T instead of AZT, all of which are recommended by WHO as first-line treatment. However, guidelines from one country still include ddl (didanosine), which is no longer recommended by WHO as a first-line drug (see Table 11).

As for the non-nucleoside reverse transcriptase inhibitors (NNRTI) component, guidelines from six countries specify the use of EFV instead of NVP for children older than 3 years or heavier than 10 kilograms (Angola, Botswana, Lesotho,



Mozambique, Tanzania, Zambia), in line with WHO recommendations. Guidelines from 9 countries (Botswana, Lesotho, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania and Zimbabwe) use a protease-inhibitor containing regimen (usually LPV/r, as it is the only one available in paediatric formulation) when children have been exposed to maternal or neonatal NNRTI (see Table 11), as recommended in international guidelines.

	First line regimen for children NON exposed to maternal or infant non- nucleoside reverse transcriptase inhibitor (NNRTI)									line regin nucleo			posed to criptase i	Changes between children non exposed/exposed to maternal or neonatal NNRTI						
Country		2nd 3rd ARV			1rst ARV				2nd 3rd ARV											
	AZT	ABC	d4T	ddI	ЗТС	NVP	EFV	LPV/r	AZT	ABC	d4T	ddI	зтс	NVP	EFV	LPV/r				
Angola	Х	Х		Х	Х	<3yr	>3yr		Х	Х		Х	Х	<3yr	>3yr		No changes, surveillance if exposure to AZT			
Botswana	Х				Х	<3yr	>3yr		Х				Х		>3yr	<3yr	Change NVP for LPV/r in child <3yr			
DRC	>3yr		<3yr		Х	Х			>3yr		<3yr		Х	Х			No changes			
Lesotho	Х	Х			Х	<3yr	>3yr		Х	Х			Х			Х	Change NNRTI for LPV/r			
Malawi	Х				Х	Х			Х				Х	Х			No changes			
Mauritius	Х				Х			Х	Х				Х			Х	No changes			
Mozambique	Х		Х		Х	<3yr	>3yr		Х		Х		Х			Х	Change NNRTI for LPV/r			
Namibia	>2yr		<2yr		Х	Х			>2yr		<2yr		Х			Х	Change NVP for LPV/r			
Seychelles*																				
South Africa		Х			Х		>3yr	<3yr		Х			Х		>3yr	<3yr	No changes			
Swaziland	Х				Х	Х			Х				Х	>2yr		<2yr	Change NVP for LPV/r in child <2yr			
Tanzania	Х	Х	Х		Х	<3yr	>3yr		Х	Х	Х		Х			х	Change NNRTI for LPV/r			
Zambia	Х	Х	Х		Х	<3yr	>3yr		Х	Х	Х		Х	<3yr	>3yr		No changes			
Zimbabwe	Х				Х	Х			Х				Х			Х	Change NVP for LPV/r			

Guidelines from Malawi and Swaziland cover co-trimoxazole preventive therapy for children of all ages living with HIV, irrespective of immunological/clinical status. Guidelines from Lesotho cover co-trimoxazole preventive therapy for all children younger than five years, while those from Mozambique and Namibia cover it for all children under 2 years, and those from Angola, Botswana, South Africa, Tanzania, Zambia and Zimbabwe cover it for all children younger than 1 year. For older children, guidelines for co-trimoxazole preventive therapy from all countries are aligned with international recommendations (see Table 10).

Treatment of HIV/TB co-infection. HIV/TB co-infection was a central component of 12 of 14 strategic plans/ frameworks, in line with standard international recommendations (see Table 6). HIV/TB co-infection specifically in children is addressed in the strategic plan/framework of only one country (South Africa), which offers child- and adolescent-friendly HIV-TB service packages. Guidelines from all Member States covered HIV/TB co-infection, and specifically addressed children. Screening for TB in children living with HIV was included in guidelines from 8 countries (Angola, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania and Zambia). Other issues concerning child and adolescent HIV/TB infection are discussed in Section 6.2 (see Table 11).

Routine patient follow-up. Routine patient follow-up was addressed in all strategic framework/plans (see Table 6), but only 6 of 14 Member States (Botswana, Lesotho, Malawi, Namibia, South Africa and Tanzania) specifically covered routine patient follow-up for children. Clinical guidelines from all Member States cover routine follow-up, specifically addressing children (see Table 11). In line with international recommendations, guidelines from 11 countries included CD4 immuno-monitoring and clinical monitoring, with assessment of growth, development and nutritional status as part of routine follow-up. However, only 7 countries (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Tanzania) specified that clinical monitoring should take place every 3 months or sooner in children. Use of viral load for follow-up was covered in guidelines from 10 Member States (Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe) but its use was reserved for treatment failure in 3 of these cases (Lesotho, Tanzania and Zambia). Drug resistance testing was only covered in the guidelines of 4 countries (Botswana, Lesotho, Malawi and Namibia), usually for third drug regimen changes (see Table 11).

Drug resistance testing. Strategic plans/frameworks from only 4 countries (Angola, Botswana, DRC and Tanzania) addressed drug resistance, and none of the strategic plans/frameworks from those 4 countries specifically include children (see Table 6). Drug resistance is covered in guidelines of 4 countries (Botswana, DRC, Malawi and Namibia; see Table 11).

Nutritional counselling and support. Thirteen of 14 Member States (Angola, Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) included nutritional counselling and support in their strategic framework/plans, but only 7 Member States (Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) specifically address the need for nutritional support in children.



Strategic plans/frameworks that do include nutritional counselling and support are in accordance with international recommendations, which recognise the need for nutritional counselling and support for children living with HIV because of their increased nutritional needs, and the links between adequate nutrition and ART adherence and success. Similarly, guidance for nutritional counselling (explaining links between nutrition, HIV and AIDS and child development, dietary needs including micronutrients, recommendations on diet and ART side effects) and nutritional support (food assistance, therapeutic feeding) was delineated, specifically addressing children, in clinical guidelines from these countries (see Table 11).

Psychosocial support. Psychosocial support was covered in the strategic frameworks/plans from 13 Member States (Angola, Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe). However, only four of those Member States (Botswana, Mozambique, South Africa, Zambia) specifically addressed the needs of children in this area. In line with international recommendations, guidelines from the countries mentioned addressed psychosocial support and did so specifically for children. They dealt with psychological support and counselling on adherence, disclosure, living with HIV, dealing with stigma, and providing support for siblings and affected children, children with sick caregivers, and children who have lost a parent or caregiver.

Social and child protection services. These were covered in the strategic plans/frameworks of all countries, and were not analysed in guidelines. Nine Member States (Angola, Botswana, Lesotho, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia) specifically addressed protection issues for children and for orphans and other vulnerable children (see Table 6) in their strategic plans/framework (Section 6.2 discusses the links between these basic care services for children and HIV, TB and malaria in further detail). A comprehensive evaluation of services for vulnerable children in the SADC region can be found in the SADC Report on Rapid Assessment and Analysis of Vulnerabilities facing OVCY and the quality of OVCY Projects and Programmes.⁴²

Community- and home-based care. Community- and home-based care was covered in the strategic frameworks/ plans of 13 Member States (Angola, Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe; see Table 6). However, guideline documents from only 5 Member States (Botswana, Mozambique, South Africa, Zambia and Zimbabwe) covered this component. In line with international recommendations, the countries mentioned recognise that community services are key to expanding services and reaching an increased number of individuals needing support, particularly those encountering barriers to service access. Only one strategic plan/framework (South Africa) addressed the specificities of community and home-based care for children. An interesting best practice that integrates health, nutritional, psychosocial and child protection needs for vulnerable children affected by HIV is presented in Section 6.2 (Box 3).

Advocacy, communication and social mobilisation. These components were included in strategic frameworks/plans of all Member States, and were not analysed in the guidelines. In Tanzania, the strategies target most-vulnerable children (see Table 6) within the country's strategic framework/plan for HIV and AIDS.

Monitoring and evaluation. Two components of M&E that directly concern children were assessed: reporting of routine M&E data disaggregated by age and sex, and the inclusion of child- and adolescent-specific indicators in strategic frameworks/plans. Other M&E issues have been assessed in various SADC documents and were not assessed here. 43 44 The strategic plans/frameworks of only 2 Member States (Namibia and Zimbabwe) stipulated the need to disaggregate data by age and sex, while that of Lesotho notes the need to disaggregate data by sex only. Member States report HIV and AIDS data at least in the two age-disaggregated categories used by UNAIDS (i.e. 0-14 years and 15-24 years). Data are only sex-disaggregated in the 15-24 year and 15-49 year categories. As for child indicators, a number of them (for example, the number of children aged 0-14 years receiving treatment at 12 months, and the number of children living with HIV) were included in the strategic plans/frameworks of 9 of 14 Member States (Lesotho, Malawi, Mauritius, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe; see Table 6).

⁴² SADC. Report on Rapid Assessment and Analysis of Vulnerabilities Facing Orphans, Vulnerable Children and Youth, and the Quality of Orphans, Vulnerable Children and Youth Projects and Programmes in SADC. Gaborone: SADC; 2008.

⁴³ SADC. Assessment Report on the Status of HIV, TB and Malaria Surveillance Systems in the SADC Region. Gaborone: SADC; 2012.

⁴⁴ SADC. Assessment report on the Status of Monitoring and Evaluation Systems for Orphans, Vulnerable Children and Youth in the SADC Region. Gaborone: SADC; 2012.



Other issues. Overarching components recognised as being important for the other sub-areas (prevention, diagnosis, treatment, care and support) were also assessed. They are:

Child- and adolescent-friendly services. The importance of developing and/or strengthening child- and/or adolescent-friendly services was recognised in the strategic plans/frameworks of 12 Member States (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe). All of them featured strong emphasis on orienting HTC and SRH services more towards adolescents.

Task-shifting policies. Task-shifting or task-sharing policies (already in existence or under consideration) were mentioned by 10 of 14 Member States (Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe; see Table 6). These policies include provisions for nurses to initiate ART treatment, provide follow-up for stable patients and, in some cases, perform neonatal male medical circumcision. The policies also make provision for shifting HTC tasks from health facility personnel to lay counsellors and community health care workers. However, unambiguous articulation of task-shifting/task-sharing policies and strategies was found to be lacking in the majority of Member States' strategic plans/frameworks (with the exception of those for Malawi, Namibia and South Africa) and the implications of these task-shifting/task-sharing policies for children was not clearly addressed.

Strengthening of health systems. Health system strengthening (especially in relation to human resources and infrastructure) was covered in the strategic frameworks/plans of all Member States. Due to the broad scope of this component, however, it was not specifically geared towards children. Interviews with key informants and service providers indicated that human resources are among the most critical challenges. Health personnel are limited, particularly physicians, doctors and specialists, but also nurses, and in some cases, nutritionists, pharmacists and laboratory technicians. Interviewees also reported limited skills in relation to children and adolescents; for example, a limited number of staff are adequately trained in ART initiation and HIV management for children.

Supply chain management. Supply chain management (for example, procurement, supply and logistics for drugs, diagnostics and other commodities) was covered in HIV and AIDS strategic framework/plans of all Member States, although it was not specifically geared towards children (see Table 6). Key informants reported that supply chain management systems tended to be functional at the central but faced challenges at district level. Service providers in all countries reported some stock-outs of HIV drugs or diagnostic kits in the previous six months, and some clients reported having to buy their own medicines because stocks were not available at the health facility. It was reported that stock-outs were usually managed by redistributing drugs from other regions and facilities. In addition, emergency procurements, liaison with donors to replenish stocks and, worryingly, even the use of alternative drugs or drug rationing were mentioned.

Overall, key international recommendations for each of the sub-areas related to HIV reviewed in this assessment are covered in the strategic plans/frameworks and guidelines of Member States. However, a number of aspects require strengthening:

• In the prevention sub-area, children's specific needs around HTC are not always addressed. Thus issues such as when testing is in the best interests of the child, or whether heath care workers can provide HTC without parental/guardian consent, need to be clearly spelled out, and age-appropriate counselling is needed. While the desk review showed that the neonatal and child male circumcision components are covered to a certain extent, service providers reported widespread use of SRH, HTC and PMTCT guidelines but not of male medical circumcision guidelines at the health facility level.

Interviews with clients of health facilities showed that HTC and PMTCT prevention services were widely known, but there was less awareness of male circumcision programmes. Therefore, both the supply and demand sides need to be strengthened. One useful step would be guidelines that instruct service providers to offer male medical circumcision as part of a comprehensive package of prevention in PMTCT and HTC services, and to provide referrals when male medical circumcision cannot be provided at the health facility. Information, education and communication strategies to inform the public of the availability and benefits of male medical circumcision should also be considered.

 With respect to PMTCT, in view of the 2011 Global Plan Towards the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive⁴⁵ and recent study findings showing the advantages of

⁴⁵ UNAIDS. Countdown to Zero: Global Plan for the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive 2011-2015. Geneva: UNAIDS; 2011.



Options B and B+, it could be important for countries using Option A to review their policies and implementation experiences and evaluate whether Options B or B+ can be supported, funded, scaled up and sustained. Option B+ has been shown to provide extended protection against MTCT of HIV in subsequent pregnancies, as well as protection against sexual transmission in serodiscordant couples and benefits to the health of women living with HIV. Moreover, it could also result in cost savings in the long term, due to averted new HIV infections, opportunistic infections and maternal deaths. 46 Malawi provides an encouraging example of how the move towards Option B+ can be made.

- Post-exposure prophylaxis programmes need to be more clearly geared towards children who are victims of sexual abuse, and training at key child-referral sites is required such as schools, care-centres, orphanages, shelters for abused children, and all relevant orphans and other vulnerable children and youth services (as well as at police stations and hospitals).
- In the treatment, care and support sub-area, as ART availability expands, all Member States should ensure that adequate protease-inhibitor-based regimens are provided to children exposed to NNRTI. They should also expand the use of viral load as part of routine monitoring and clearly state scenarios for drug resistance testing in order to avoid costly treatment failures. Not all countries specify close, routine follow-up of children, which is essential due to the fact that HIV disease progression can be faster in children and because children are typically dependent on caregivers for achieving treatment adherence.

Nutritional and psychosocial support services, although covered in strategic plans and guidelines, are not always child-specific. Moreover, interviews with clients of health facilities showed that clients were less aware of nutritional and psychosocial support services, compared with HTC, PMTCT and ART services. This is worrying since service providers and community members alike cited stigma and discrimination, difficulty of disclosure of HIV status to children, and a lack of psychosocial support as challenges when taking care of a sick child, while clients named low household incomes, and stigma and discrimination in the community as two of the main factors causing problems for the family when a child becomes ill. In addition, community members in focus group discussions identified a lack of food and proper nutrition as a challenge when taking care of a sick child, and expressed the hope that their governments would provide nutritional support. This suggests that the services are not well known among clients, for two possible reasons: either the services are not actually being provided or they are not sufficiently promoted and publicised.

- In the area of advocacy, communication and social mobilisation, these components need to be geared towards specifically addressing the needs of children.
- As for other issues, task-shifting and task-sharing policies are generally addressed only in vague terms in strategic frameworks/plans and guidelines, particularly in relation to applying those practices for the benefit of children. Clear practical and legal guidance is needed in the strategic plans/frameworks and clinical guidelines, both to protect health care workers and ensure the adequate provision of services for children.
- While health system strengthening and supply chain management are included in all documents, those sections
 do not address the specific needs of children. Limited human resources and limited child and adolescent skills,
 along with issues relating to procurement and distribution, particularly at the sub-national level, are significant
 challenges.
- In the M&E sub-area, there is a need for greater data disaggregation by age and sex. UNAIDS reports require that HIV data are disaggregated for children (as defined in the present document) in the age categories of 0-14 years and 15-24 years. However, data are only disaggregated by sex starting in the 15-24 year category. Member States report HIV data at least in the 2 age-disaggregated categories used by UNAIDS. However, the use of these wide age categories for reporting makes it difficult to assess patterns and trends in morbidity, mortality, service coverage and treatment adherence among children of different ages. Moreover, data on children aged 15-18 years are being "buried" because they are compiled together with data for youth older than 18 years.



6.1.2 Existence and content of policy and programming frameworks on child and adolescent TB

TB strategic frameworks/plans and guidelines from 12 Member States were reviewed (see Annex 5). Table 12 shows the analysis of TB strategic frameworks/plans, while Tables 13-15 provide the clinical guidelines. The findings are detailed below. Additional information on the status of TB policies and programmes in the SADC region can be found in the SADC Assessment Report for the Development of Harmonised Minimum Standards for TB.⁴⁷

Table 12. Component	s of stra	tegic pla	ns/fram	neworks	on TB																			
Subarea	P	reventio	n				Diagnosi	s				Tr	eatment	t, Care aı	nd Supp	ort		ACSM	M	&E		Other	issues	
Component	BCG immunisation	Screening 1	Isoniazid Preventive Treatment (IPT)	Clinical history and examination	Chest radiography	Tuberculin	Sputum smear microscopy	Bacteriological culture	Xpert MTB/RIF	Drug sensitivity testing (DST)	TB treatment (DOT)	HIV-TB coinfection	Routine child follow up	Nutritional support	Psychosocial support	Child and social protection	Community and home based care (CTBC)	Advocacy, Communication and Social Mobilisation	Reporting of age & sex dissagregated data	Paediatric TB indicators	Child and adolescent- friendly services	Task-shifting	Health System Strengthening	Supply Chain management Strengthening
Angola	N*	N*	NSPC	Υ	N*	Υ	NSPC	NSPC	N	NSPC	NSPC	NSPC	NSPC	N	NSPC	N	NSPC	NSPC	N	Υ	N	N	NSPC	NSPC
Botswana	N*	NSPC	NSPC ²	Y	Y	N*	NSPC	NSPC	N*	NSPC	Y ³	NSPC	NSPC	N*	NSPC ⁴	NSPC ⁴	NSPC	NSPC	Y	N	N	N	NSPC	NSPC
DRC	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Lesotho	N*	Υ	Y	Y	Y	Y	NSPC	NSPC ²⁴	N	NSPC ²⁴	NSPC	Y	Y	NSPC ²⁵		N	NSPC	NSPC	N	N	N	N	NSPC	NSPC
Malawi	N*	Υ	Υ	Υ	Y	N*	NSPC	NSPC	NSPC ²⁹	NSPC	NSPC	NSPC	NSPC	NSPC ²⁶	NSPC ²⁷	NSPC	NSPC	NSPC	N	Y ²⁸	N	N	NSPC	NSPC
Mauritius	Υ	NSPC	NSPC ²	NSPC	NSPC	NSPC ²¹	NSPC	NSPC	N	NSPC ²⁰	NSPC	NSCP	NSPC	N	N	N	NSPC	NSPC	N	Ν	N	Ν	NSPC	NSPC
Mozambique	N*	NSPC	NSPC ²	N*	NSPC	N*	NSPC	NSPC	N	NSPC	NSPC	Y ⁵	N	N	N	N	NSPC	NSPC	N	N	N	N	NSPC	NSPC
Namibia	N*	NSPC	NSPC ²	N*	N*	N*	NSPC	NSPC	N	NSPC	NSPC ⁶	NSPC	NSPC	N	NSPC ¹⁷	NSPC ¹⁷	NSPC	NSPC	N	N	N	N	NSPC	NSPC
Seychelles	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
South Africa	Y ⁸	Y ⁹	Y ⁹	Υ	Υ	Υ	NSPC	NSPC ¹⁰	N	NSPC ¹²	Υ	Υ	Υ	Υ	Υ	Y ¹¹	NSPC	NSPC	Υ	Υ	N	Ν	NSPC	NSPC
Swaziland	N*	Y ¹³	Υ	N*	NSPC	N*	NSPC	NSPC	NSPC14	NSPC	Υ	Υ	Υ	NSPC	NSPC ¹⁵	NSPC	NSPC	Υ	N	Y ¹³	N	N	NSPC	NSPC
Tanzania	N*	NSPC	NSPC ²	N*	N*	N*	NSPC	NSPC	N	NSPC	Y ¹⁶	Y	N	NSPC ¹⁷	NSPC ¹⁷	NSPC ¹⁷	NSPC	Y ¹⁸	N	N	N	NSPC ²²	NSPC	NSPC
Zambia ¹⁹	N*	N*	NSPC	N*	N*	N*	NSPC	NSPC	N	NSPC	NSPC	NSPC	N	NSPC	NSPC	NSPC	NSPC	NSPC	N	N	N	N	NSPC	NSPC
Zimbabwe	N*	NSPC	NSPC ²	NSPC	Υ	N*	NSPC	NSPC	N	NSPC	NSPC	NSPC	NSPC	NSPC	N	N	NSPC	Υ	N	N	N	NSPC ²³	NSPC	NSPC
Total countries																								
Covered (Y+NSPC)	2	10	12	7	8	4	12	12	2	12	12	12	9	6	8	7	12	12	2	4	0	2	12	12
Child specific (Y)	2	4	4	5	5	3	0	0	0	0	4	5	3	0	1	1	0	3	NA	NA	NA	0	0	0
Not covered (N)	10	2	0	5	4	8	0	0	10	0	0	0	3	6	4	5	0	0	10	8	12	10	0	0

Notes: Y= Included in document and children specifically addressed; N=Not specified in documents reviewed; N*= Not specified in strategic framework/plan, but covered in guidelines; NSPC= included but not specifically addresing children; NA= Not applicable, the item is by definition children specific; NR= Documents not received for review; ND= There is no National Strategic Framework for TB, country uses WHO guidelines, so analysis was not done. Screening of all children who are contacts of an adult with smear positive TB. ²IPT for all people living with HIV including children. ³Fixed-dose combinations and paediatric formulations for children introduced in 2009. ⁴Patient education and counselling to all, psychosocial support to HIV-TB patients. ⁵Specifically target vulnerable groups, which include children. ⁶Consolidate provision of FDC. ⁶Aim of 100% coverage of BCG immunisation. ⁹Specially children under 5 years old and children living with HIV. ¹⁰For smear negative and HIV positive individuals. ¹¹Support for all TB eligible persons, birth registration for children. ²² First line DST on all drug resistance suspects, second line DST on all confirmed MDR-TB cases. ¹³Increase notification rate of childhood TB cases by 40%. ¹⁴ Introduce molecular tests as they become available. ¹⁵Counselling for adherence. ¹⁶Include paediatric formulations. ¹⁷TO MDR-TB patients on treatment. ¹⁸School children targeted in particular. ¹³Since no TB Strategic Plan was available for review, analysis was based on National Health Strategic Plan 2011-2015 and HIV-AIDS, STI and TB Policy 2005. ²⁰DST is done in all sputum and culture samples. ²¹For screening of all contacts of index case. ²²Train ex-patients on active case finding. ²³Community HCW for contact tracing, sputum collection and relaying results. ²⁴In cases of MDR-TB suspicion, treatment failure or multiple previous treatments. ²⁵To HIV-TB co-infected TB patients. ²⁶Psychosocial support from community volunteers and patient groups.

Prevention. The components assessed were BCG immunisation, screening of children that are household contacts of a source case, and provision of isoniazid p7reventive therapy (IPT).

Country	Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
BCG Immunisation															
Provide BCG vaccination to infants as soon as possible after birth	Υ	Υ	NR	Υ	Υ	Υ	Υ	Υ	ND	Υ	Υ	Υ	Υ	Υ	12
HIV-exposed children should also receive BCG vaccination at birth	Υ	Y ²	NR		Υ	N^1	Υ	N^1	ND	Υ	Υ	Υ			7
Children with symptomatic HIV should not receive BCG vaccination	Υ	Υ	NR		Υ	Υ	Υ	Υ	ND	Υ	Υ	Υ		Υ	10
Infants breastfeeding from a mother with smear-positive pulmonary TB should receive BCG immunisation <u>after</u> completing 6 months of IPT	Υ	Υ	NR	Υ	Y		Υ	Υ	ND	Y	Υ	Υ	Y	Υ	11
Screening															
All children in household contact with a newly diagnosed adult or adolescent with pulmonary TB should be screened for TB disease	Υ	Υ	NR	Υ	Υ	Υ	Υ	Υ	ND	Υ	Υ	Υ	Υ	Υ	12
Children living with HIV should be screened for TB at each visit	Υ	Υ	NR		Υ		Υ		ND		Υ		Υ		6
Provide HTC to children with TB			NR	Υ	Υ		Υ	Υ	ND			Υ	Υ		6
Isoniazid Preventive Therapy (IPT)															
Provide IPT to all children under 5 years without symptoms of TB that have been in close contact with a source case	Υ	Υ	NR	Y ³	Υ	Υ	Y	Y	ND	Υ	Υ	Y	Y	Υ	12
Provide IPT to all HIV-infected children (irrespective of age), without symptoms of TB, that have been in close contact with a source case	Υ	Υ	NR	Υ	Y ⁴	Y	Y ⁵	Y ⁵	ND	Y	Y ⁵	Y ⁵	Y	Υ	12
Provide IPT to all children under 5 years with positive Mantoux		Υ	NR			Υ			ND	Υ				Υ	4
Provide IPT to all children HIV positive with a positive Mantoux	Υ	Υ	NR						ND	Υ				Υ	4

Notes: Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but not specifically addressing children; Blank=not included in documents reviewed; ND= There is no NationalGuidelines document for TB, country uses WHO guidelines, so analysis was not done; NR=Documents not received for review. ¹Do not give to HIV exposed children. ²Do not give BCG to children living with HIV. ³If child is >1 and <5 years old, provide IPT even if no contact with source case. ⁴If child > 2 years old and not on ART, provide IPT until start of ART even if no contact with source case. ⁵If child > 1 year old provide IPT even if no contact with source case.



BCG immunisation. BCG immunisation, which can protect children against severe forms of TB, was addressed only in the strategic frameworks/plans of Mauritius and South Africa (2 of 12 Member States) (see Table 12). However, it is clear in the guidelines (Table 13) and the Expanded Programme for Immunisation that BCG immunisation is indicated for newborn infants in all Member States. In line with international recommendations⁴⁸, guidelines from 7 Member States (Angola, Botswana, Malawi, Mozambique, South Africa, Swaziland and Tanzania) recommend BCG vaccination for HIV-exposed children with adequate follow-up to monitor BCG-related adverse effects.⁴⁹ Two countries (Mauritius and Namibia) do not recommend BCG for HIV-exposed children. Guidelines from 10 countries (Angola, Botswana, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania and Zimbabwe) also specify that children with symptomatic HIV should not receive the vaccine (Table 13).

Screening. Screening of contacts of an index case was covered in the strategic framework/plans of 10 of 12 Member States, (Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania and Zimbabwe), but only 4 of 12 Member States (Lesotho, Malawi, South Africa, and Swaziland) specified targeting the screening of children in a household of an index case (Table 12). However, this was covered in the guidelines of all 12 countries reviewed (see Table 13). Those Member States that trace contacts of a source case are heeding international recommendations by recognising that children are usually acquire TB from an adult or adolescent household contact with active TB disease.

Providing HTC to all children diagnosed with TB was only covered in the guidelines of 6 countries: Lesotho, Malawi, Mozambique, Namibia, Tanzania and Zambia. Similarly, screening children living with HIV for TB at each visit was only covered in the guidelines of 6 countries (Angola, Botswana, Malawi, Mozambique, Swaziland and Zambia) (see Table 13).

Provision of isoniazid preventive therapy. The provision of IPT treatment for people living with HIV and children under 5 years who are in contact with a source case was addressed in the strategic plans/frameworks and guidelines of all 12 Member States that were reviewed. Member States' strategic plans/framework and guidelines are in line with international recommendations, and recognise that IPT has been shown to provide protection against TB disease to vulnerable individuals, including for children and people living with HIV. Member States' guidelines recommend IPT for all children under 5 years, irrespective of HIV status, and for all children living with HIV, irrespective of age (see Table 13).

Service providers reported that TB clinical guidelines for prevention were widely used at health facilities and that TB prevention services were known to more than half the clients interviewed in all Member States—except in Mauritius and Seychelles, where the number of TB cases was much lower than in the rest of the region.

Diagnosis. Given the difficulty of confirming TB diagnoses in children, international guidance recommends the use of several tools for achieving accurate diagnosis. The following components were assessed: history of contact with source case and clinical examination; chest X-rays; tuberculin tests; smear-microscopy on sputum for older children that can produce it and bacteriological culture in sputum, induced sputum or gastric aspirate in younger children who are usually smear-negative; culture for drug sensitivity testing; and the new molecular diagnostic tool, Xpert MTB-RIF.

Table 14. TB Guidelines on Diagnosis															
Country	Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
DIAGNOSIS															
All children with prolonged productive cough, fever, night sweats, weight loss or failure to thrive should be evaluated for TB	Υ	Υ	NR	Υ	Υ	Υ	Υ	Υ	ND	Y	Υ	Υ	Y	Υ	12
Use careful clinical examination and history as part of diagnosis	Υ	Υ	NR	Υ	Υ	Y	Υ	Υ	ND	Υ	Υ	Υ	Υ	Υ	12
Use chest X-rays as part of diagnosis, if available	Υ	Y	NR	Υ	Υ	Υ	Υ	Υ	ND	Y	Υ	Υ	Y	Υ	12
Use tuberculin test as aid tool for diagnosis	Y ¹	Y ²	NR	Y	Y	Y	Y	Y	ND	Y	Y	Y	Y	Υ	12
Use sputum smear microscopy to confirm diagnosis in older children capable of expectorating	Υ	Υ	NR	Υ	Y ³	Y ⁴	Υ	Y	ND	Y	Υ	Υ	Y	Y ³	12
Use culture in sputum, induced sputum, gastric aspirate or other samples to confirm diagnosis, if available	Υ ⁵	Y ²	NR	Y ⁶	Υ	Υ	Υ	Υ	ND	Υ	Υ	Υ	Υ	Υ	12
Use Xpert MTB/RIF to confirm diagnosis in MDR-TB suspect cases or children living with HIV		Υ ⁷	NR		Υ ⁸			N ¹⁰	ND		Υ ⁹				3

Notes: Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but not specifically addressing children; Blank=not included in documents reviewed; ND= There are no national guidelines for TB, country uses WHO guidelines, so analysis was not done; NR=Documents not received for review. ¹Specially in younger children and children living with HIV. ² In all children suspected of TB. ³ Where possible. ⁴Induced sputum and gastric aspirate not mentioned. ⁵For smear negative cases and in children living with HIV. ⁶ Only in MDR-TB suspected cases will be come availabale in 2013. ⁸ For smear negative cases, hospitalized cases and MDR suspects. ⁹For all persons suspected of having TB or MDR-TB regardless of HIV status. ¹⁰ Guidelines indicate use of line probe assays, a different molecular diagnostic test, for cases of suspected drug resistant TB.

⁴⁸ WHO. Revised BCG Vaccination Guidelines for Infants at Risk for HIV Infection. Weekly Epidemiol Rec. 2007;82(21):193-6. Available at www.who.int/wer/2007/wer8221.pdf.

⁴⁹ WHO does not recommend BCG immunisation in children with symptomatic HIV infection or children who are known to be HIV-infected. However, in countries with highly endemic tuberculosis and "settings where diagnostic and treatment services for mothers and infants are limited ... BCG vaccination should continue to be given at birth to all infants regardless of HIV exposure".



History of contact with source case and clinical examination. Use of clinical history and examination is addressed in the strategic frameworks/plans of 7 of 12 Member States (Angola, Botswana, Lesotho, Malawi, Mauritius, South Africa and Zimbabwe, Table 12), but it is addressed in relation to children in the strategic frameworks/plans of only 5 of 12 Member States (Angola, Botswana, Lesotho, Malawi and South Africa). However, the use of clinical history and examination is covered in the guidelines of all 12 Member States that were reviewed (see Table 14).

Chest X-rays. Chest radiography, which can be particularly useful in the diagnosis of TB in children, is covered in only 8 of 12 frameworks/plans reviewed (Botswana, Lesotho, Malawi, Mauritius, Mozambique, South Africa, Swaziland and Zimbabwe), and its use for children is specifically addressed in the strategic plans/frameworks of Member States (Botswana, Lesotho, Malawi, South Africa and Zimbabwe) (see Table 12). However, this component is covered in relation to children in the guidelines of all 12 countries that were reviewed (see Table 14).

Tuberculin tests: Tuberculin tests, specifically addressing children under 5, are covered in strategic frameworks/plans from only 4 (Angola, Lesotho, Mauritius, South Africa) out of 12 Member States reviewed (Table 12). This is, however, covered in guidelines from all 12 Member States reviewed (Table 14).

Sputum smear microscopy / bacteriological culture in sputum, induced sputum or gastric aspirate. Sputum-smear microscopy and culture are covered in the strategic plans/frameworks, but not specifically in relation to children's needs (for example, children under 8 years usually cannot produce sputum, so induced sputum or gastric aspirate techniques are recommended internationally) (see Table 12). However, the guidelines of all 12 Member States refer to these techniques in relation to children (see Table 14).

Culture for drug sensitivity testing. Provisions for TB drug sensitivity testing, which have become crucial in the context of the growing MDR-TB epidemic, were addressed in all 12 Member States' strategic plans/frameworks and guidelines, although not specifically for use in children.

Molecular diagnostic tool Xpert MTB-RIF. The new molecular diagnostic tool, Xpert MTB/RIF⁵⁰, is covered only in the most recent strategic plans and guidelines (in Malawi and Swaziland), and in the guidelines from Botswana (see Tables 12 and 14).⁵¹

Treatment, care and support. The components that were assessed were TB treatment (directly-observed treatment, short-course, or DOTS); HIV-TB co-infection; routine follow-up; nutritional counselling and support; psychosocial support; child and social protection and community- and home-based care.

ble 15. TB Guidelines on Treatment, Care and Support			_					e e		s	8	l _			a)	
ountry		Angola	Botswana	DRC	Lesotho	Malawi	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
TREATMENT																
eatment for children diagnosed with first time, non-severe for	ms of IR I	2RHZ + 4RH	2HRZE + 4HR	NR	2HRZE + 4HR	2HRZE + 4HR	2HRZE + 4HR ⁷	2HRZ + 4HR ²	2HRZE + 4HR	ND	2HRZE + 4HR	2HRZE + 4HR	2HRZ + 4HR	2HRZ + 4RH	2HRZE + 4HR	
ug dosages should be calculated according to weight		Y	Y	NR	Y	Y	Y	Y	Y	ND	Y	Y	Y	Y	Y	12
sages should be adjusted accordingly if children gain weight w treatment	vhile under		Υ	NR	Y	Y		Y	Y	ND	Υ	Y			Y	8
red dose combinations should be preferred to facilitate adhere	ence	Υ	Υ	NR	Y	Y	Υ	Y	Y	ND	Y	Υ	Y	Y	Y	12
nce TB treatment is started it must be completed. (i.e. no "trea ided diagnosis")	tment	Υ	Υ	NR	Y	Y	Y	Y	Y	ND	Υ	Y	Y	Y	Y	12
rectly Observed Treatment, short course (DOTS) should be pro ildren of all ages	ovided for	Υ	Υ	NR	Y	Y	Y	Y	Y	ND	Y	Y	Y	Y	Y	12
herence counselling for parents or DOTS provider		Υ	Υ	NR	Y	Y		Y	Y	ND	Y	Y	Y	Y	Y	11
mmunity DOTS: HCW or CHW to visit family where child is und	der DOTS by			ND				v		ND	.,			Y	Y	
rent or caregiver				NR				Y		ND	Y			Y	'	4
ovide pyridoxine supplementation if on Isoniazid		Υ	Υ	NR	Y	N ⁴			Y	ND		Y			N ⁵	5
V-TB COINFECTION																
children with TB/HIV should receive CPT and ART		Υ	Υ	NR	N ³	Y		Y	Y	ND	Y	Y	N ³	N ³	Y	8
HIV-infected children require four drugs in the intensive phase atment	e of	Υ	Y ¹	NR	Y ¹	Y ¹		Y	Y ¹	ND	Y ¹	Y ¹			Y	9
DUTINE FOLLOW UP																
llow up			monthly	NR	2w, 2mo, 4mo, 6mo			2w, 2mo, 4mo, 6mo	2w, 4w, 2mo, 4mo, 6mo	ND		2w, 4w and monthly			2w and monthly	6
ildren with suspected treatment failure should be referred for sessment and possibility of MDR-TB	further		Υ	NR		Y		Y	Y	ND		Υ	Y	Y	Y	8
JTRITIONAL AND PSYCHOSOCIAL SUPPORT																
itritional support			Υ	NR	Y ⁶	Υ				ND	Y	Υ				5
				NR						ND						0
itritional support ychosocial support ites: Y=Included in document and children specifically addressed: N=	Included in a part	tial or m		NR			locument h	out not spe	cifically add	ND			ided in do	ruments re	l	ewed: NI

Notes: Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but not specifically addressing children; Blank=not included in documents reviewed; ND= There are no national guidelines for TB, country uses WHO guidelines, so analysis was not done; NR=Documents not received for review. H=Isoniazid, R=Rifamplicin, Z= Pyrazinamide, E=Ethambutol, 2 = two months, 4 = four months, mo= months, w-weeks. ¹In all children, irrespective of HIV status. ²Add Ethambutol (E) in intensive phase if zone with high Isoniazide resistance or HIV incidence. ³Provide CPT but ART only if "indicated". ⁴For HIV-infected children only. ⁵Only in malnourished children, HIV-breastfeeding infants, adolescents, if high dose Isoniazid, diabetes mellitus or renal failure. ⁶For HIV infected children only. Not provided by government but by partner organizations. ⁷ Ethambutol should not be given to children under N wears of age.

⁵⁰ WHO. Automated Real-time Nucleic Acid Amplification Technology for Rapid and Simultaneous Detection of TB and Rif Resistance. Geneva: WHO; 2011.

⁵¹ The test detects TB and identifies the most common first-line drug resistance in a single step that can be completed in 2-4 hours. It was approved by WHO in 2011 as an initial diagnostic test in adults and children suspected to have MDR-TB or HIV-associated TB.



TB treatment (directly-observed treatment, short course, or DOTS). DOTS, the standard treatment for TB, is covered in all 12 strategic framework/plans (see Table 12), although children were specifically addressed in only 4 of 12 Member States (Botswana, South Africa, Swaziland and Tanzania). DOTS was covered in the guidelines of all the countries that were reviewed (see Table 15), all of which specifically addressed children.

WHO recommends a 4-drug regimen (i.e. including ethambutol) for children in the first 2 months of treatment in countries with high HIV co-infection rates and/or isoniazid resistance. Guidelines from 8 countries (Botswana, Lesotho, Malawi, Mauritius, Namibia, South Africa, Swaziland and Zimbabwe) recommend this four-drug regimen for children irrespective of HIV status. With two exceptions, Tanzania and Zambia, the remaining countries include the use of ethambutol for children living with HIV.

WHO states that it is desirable to use pyridoxine in all children receiving isoniazid, to protect against side effects (such as peripheral neuropathy) associated with the latter drug. However, only 5 of 12 Member States (Angola, Botswana, Lesotho, Namibia, Swaziland) specify the use of pyridoxine. Provisions for the use of fixed-dose combinations that facilitate adherence, for weigh-adjusted drug dosages and for insistence on treatment completion are components covered in the guidelines from all 12 of the reviewed Member States. However, only 4 Member States (Mozambique, South Africa, Zambia and Zimbabwe) have clear guidelines on how to implement DOTS for children (i.e. is the parent/guardian the sole DOTS provider or does the need exist for additional DOTS supervision by health workers at community level or health facility (see Table 15). Importantly, DOTS service providers reported widespread use of TB treatment guidelines at health facilities, and clients that were interviewed were familiar with TB treatment services.

HIV/TB co-infection. HIV/TB co-infection is covered in all 12 of the strategic frameworks/plans that were reviewed, but it was addressed in a child-specific manner in only 5 Member States (Lesotho, Mozambique, South Africa, Swaziland and Tanzania). WHO recommends provision of co-trimoxazole preventive therapy (CPT) and ART to all children with TB disease, irrespective of clinical or immunological status. However, delivery of CPT and ART to all co-infected children was only covered in the guidelines of 8 of 12 Member States (Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Swaziland and Zimbabwe). In the remaining Member States, provision of CPT was recommended, while provision of ART was recommended only "if indicated".

Routine follow-up. Routine follow-up was covered in the strategic frameworks/plans of 9 of 12 Member States (Angola, Botswana, Lesotho, Malawi, Mauritius, Namibia, South Africa, Swaziland and Zimbabwe). Only 3 (Lesotho, South Africa and Swaziland) of 12 the strategic frameworks/plans specifically addressed children in terms of routine follow-up (see Table 12). Guidelines of the International Union Against Tuberculosis and Lung Disease (IUALTD) recommend monthly follow-up during the intensive treatment phase and two-monthly follow-up during the continuation phase for children who have not acquired HIV. Among children living with HIV, follow-up is recommended at 2 and 4 weeks, and monthly thereafter. Not all countries comply with the international guidelines. Guidelines from only 6 countries (Botswana, Lesotho, Mozambique, Namibia, Swaziland and Zimbabwe) provided clear recommendations on time frames for follow-up among children, guidelines from 8 countries (Botswana, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe) provide guidance on treatment failure in children (see Table 15).

Nutritional counselling and support. Nutritional counselling and support was covered in the strategic frameworks/plans of 7 of 12 Member States (Lesotho, Malawi, South Africa, Tanzania, Zambia and Zimbabwe), but only in South Africa did it specifically address children (see Table 12). This component was covered in a child-specific manner in the guidelines of 5 Member States (Botswana, Lesotho, Malawi, South Africa and Swaziland) (see Table 15). However, provision of nutritional support was usually limited to HIV/TB co-infected or MDR-TB patients. This is not in line with IUALTD guidelines, which recommend weight monitoring and provision of nutritional support for all malnourished children.

Psychosocial support. Psychosocial support was covered in the strategic framework/plans of 8of 12 Member States (Angola, Botswana, Malawi, Namibia, South Africa, Swaziland, Tanzania and Zambia). However, only in South Africa did the framework or plan specifically address children. The strategic plans that covered psychosocial support tended to focus on HIV/TB co-infected patients or MDR-TB patients, and often included only adherence counselling. Psychosocial support was absent from the TB guidelines of all countries. IUALTD guidelines do not specify coverage of psychosocial support for children, but the SADC Minimum Package of Services for Orphans, and other Vulnerable Children and Youth includes this component for all vulnerable children (including children with TB disease).

Social and child protection. Child and social support was covered in the strategic frameworks/plans of 7 of 12 Member States (Botswana, Malawi, Namibia, South Africa, Swaziland, Tanzania and Zambia) but only in South Africa did it specifically cover children. This component was not analysed in guidelines.



Community and home-based care or community TB care. Community-based TB care was included in the strategic framework/plans of the 12 countries that were reviewed, as recommended by STOP TB and WHO. None of the reviewed 12 strategic plans/frameworks specifically addressed children within their community-based TB care strategies (see Table 12). This component was not analysed in clinical guidelines.

Advocacy, communication and social mobilisation. In line with the STOP TB strategy recommendations, all the reviewed strategic framework/plans included provisions for advocacy, communication and social mobilisation, although the strategies were not specifically geared towards children, except in Swaziland, Tanzania and Zimbabwe. Advocacy, communication and social mobilisation were not assessed in clinical guidelines (see Table 12).

Monitoring and evaluation. All 12 TB strategic framework/plans that were reviewed contained entire chapters or sections on M&E, but only in Botswana and South Africa did they address the need for age- and sex-disaggregated data. However, countries report TB data to international organizations in 0-4, 5-14 and 15-24 year age categories, so that data are disaggregated at least according to those categories. The need to address TB paediatric indicators was recognised in the strategic plans/frameworks of only three countries (Malawi, South Africa and Swaziland), with Swaziland aiming to increase notification rates of TB in children by 40% (see Table 12).

Other issues

Child-friendly TB services. None of the Member States' strategic plans/frameworks that were reviewed included provisions for child- and youth-friendly TB services.

Task-shifting. Task-shifting or task-sharing practices were mentioned in the strategic framework/plans of 2 countries (Tanzania and Zimbabwe) (see Table 12). But contrary to the situation found in HIV programmes, practices that could qualify as task-shifting or task sharing have been used in TB programmes for some time, even though they are not referred to as such. For example, nurses usually provided basic diagnosis and treatment for TB at primary health care level. In addition, in community DOTS strategies, community health care workers normally identify subjects for further TB screening, provide contact-tracing services, and ensure adequate adherence to TB drugs.

Health system strengthening. This component was covered in the TB strategic frameworks/plans of all 12 Member States that were reviewed, but they not specifically address children's needs. Interviews with key informants and service providers showed that human resources in particular are a key challenge for policy, programme implementation and service delivery. The numbers of available personnel are limited as are their paediatric skills, in particular for TB diagnosis.

Supply chain management. This component includes procurement, supply and logistics for drugs, diagnostics and other commodities. It was also covered in the strategic frameworks/plans of all 12 Member States that were reviewed, although not specifically in relation to children. Key informants suggested that supply chain management strategies are in place at the central level, but that challenges exist at the district level. Some service providers reported stock-outs of TB drugs and diagnostics in the previous six months, although less so for than for HIV medicines and diagnostics.

Overall, policy and programming frameworks for TB in all Member States cover the key, internationally recognised elements of TB strategies. However, stronger emphasis is needed on children. Internationally, childhood TB has belatedly been recognised as an urgent health priority: WHO and the STOP TB Partnership have developed a roadmap of key actions to address TB in children⁵², which includes important new guidance on how best to tackle this epidemic.

Meanwhile, the assessment of SADC Member States indicates that TB prevention services for children are covered adequately in clinical guidelines and are well known by service providers and clients.

There is an urgent need to facilitate TB diagnosis in children. Childhood TB cases may account for 15% or more of all TB cases in SADC region, but they are seriously under-diagnosed. The challenge of diagnosing TB in children may decrease as the use of new molecular techniques, such as the Xpert MTB/RIF, becomes incorporated into policies and features in programmes.



As for treatment, clear guidelines for the successful implementation of the DOTS strategy in children should be pursued; relying solely on parents/guardians may prove insufficient, particularly given the large numbers of orphans and vulnerable children in the region. The fact that DOTS service providers reported widespread use of TB treatment guidelines at health facilities, and that TB treatment services were well known to clients indicates an opportunity for further improvement.

There is worryingly limited coverage of nutritional and psychosocial support, and child and social protection issues in the policy and programming frameworks for child and adolescent TB. Weight loss and a failure to thrive are among the hallmarks of TB disease in children, and once treatment begins, children may need additional calorie intake to recover lost weight. In addition, as reported by service providers and clients, a great deal of stigma is associated with the disease, which can discourage caregivers from the children to care.

Knowledge is also lacking on how to recognise symptoms suggestive of active TB. Treatment lasts 6-10 months and adherence must be ensured throughout, with children usually needing a birth certificate or other form of identification in order to be enrolled in those programmes. The importance of these services in fighting a poverty-linked disease such as TB should not be underestimated. These key support services must be made available to all children with TB disease, and should not be limited to HIV-TB co-infected children or MDR-TB cases. Children who are not infected with TB but are rendered vulnerable because their parents or caregivers are infected must also have access to these services.

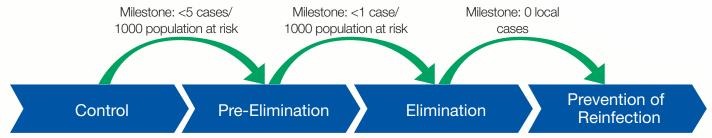
In light of the global push towards recognising and addressing the paediatric TB epidemic, community-based TB care and advocacy, communication and social mobilisation strategies must be fine-tuned and adapted to address children adequately. There is a need to include child-and adolescent-friendly TB services in policy and programming frameworks and to cover child-specific needs in strengthening health and supply chain management systems. As with the HIV response, human resources are a key challenge for programme implementation and service delivery.

Finally, reliable M&E data on diagnosis and treatment of child and adolescent TB for different age categories of boys and girls should be consistently obtained, recorded and redistributed in order to enhance the efficiency of TB programmes. Some data are available from international organizations (notably WHO) on new sputum smear-positive and (for some countries) total TB cases, but there is a global underestimation of TB cases in children. Moreover, there is also a lack of child indicators, and of information on the numbers of children receiving treatment, treatment success in children, and child HIV/TB co-infections.

6.1.3 Existence and content of policy and programming frameworks on child and adolescent malaria

The malaria strategic frameworks/plans of 11 Member States were reviewed (Annex 5). Malaria risk differs considerably between SADC Member States and the strategic frameworks/plans reflect this pattern. Seven countries have malaria control plans (Angola, DRC, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe), while four countries (Botswana, Namibia, South Africa and Swaziland) that are moving towards elimination by 2015-2020 have developed malaria elimination plans. Lesotho, Mauritius and Seychelles are mostly malaria-free, except for imported cases. Figure 1 depicts the WHO malaria elimination continuum.

Figure 1: WHO Malaria Elimination Continuum



Clinical guidelines for treatment and management of malaria in 12 Member States were assessed (see Annex 5). Some countries had guidelines for prevention in addition to those for treatment/management (see Annex 5). Table 16 shows the analysis of malaria strategic frameworks/ plans, while Tables 17-19 present the analysis of clinical guidelines. Their findings are detailed below. Additional information on malaria policies and programmes in SADC Member States can be found in the SADC Situation and Response Analysis Report on Malaria.⁵³



Table 16. Componer Subarea		Preventi				Diagnosis			т.	reatment	Cara and	d Cummort			ACSM		&E		oss cutt	na icens	-
Juparea		rieveilu	UII			Diagnosis				leatinent,	, care and	Jupport	1	Τ	ACSIVI	IVI	<u> </u>		USS CULL		:5
Component	Malaria Phase	N	IRS	SP-IPT in pregnancy (SP-IPTp)	Microscopy	RDT	Drug resistance testing/monitoring	Aretemisinin based combination treatment (ACT)	Antimalarials for severe malaria	Pre-referral treatment	Nutritional support	Psychosocial support	Child and social protection	Community-based care	Advocacy, Communication and Social Mobilisation	Reporting of age & sex dissagregated data	Paediatric Malaria indicators	Child and adolescent-friendly services	Task-shifting	Health System Strengthening	Supply Chain management Strengthening
Angola	MC	Y ¹	NSPC	Υ	NSPC ³	NSPC	NSPC	Y ⁴	NSPC ²⁴	N*	N	N	N	Y ⁵	NSPC	N	Y	N	N	NSPC	NSPC
Botswana	ME	NSPC ⁶	NSPC	N	NSPC ⁷	NSPC ⁷	NSPC	NSPC ¹⁸	NSPC	N*	N*	N	N	N	NSPC	N	Y	N	N	NSPC	NSPC
DRC	MC	Υ ⁸	NSPC	Y	NSPC ⁹	NSPC	NSPC	Y ¹⁰	NSPC ²⁴	Y ¹¹	N	N	N	NSPC	NSPC	N	Y	N	N	NSPC	NSPC
Lesotho	MF																				
Malawi	MC	NSPC ¹²	NSPC	Υ	NSPC ¹³	NSPC	NSPC	NSPC	N*	N*	N	N	N	Y ¹⁴	NSPC	N	Υ	N	NSPC ²⁷	NSPC	NSPC
Mauritius	MF																				
Mozambique	MC	Y ¹	NSPC	Υ	NSPC ¹⁵	NSPC	NSPC	NSPC ¹⁶	NSPC ²⁵	Y ¹¹	N	N	N	NSPC	NSPC	N	Y	N	NSPC ²⁸	NSPC	NSPC
Namibia	ME	NSPC ⁶	NSPC	N*	NSPC ⁷	NSPC ⁷	NSPC	NSPC ¹⁸	N*	N	N	N	N	NSPC	NSPC	N	N	N	NSPC	NSPC	NSPC
Seychelles	MF																				
South Africa	ME	NSPC ³³	NSPC	N	NSPC ⁷	NSPC ⁷	NSPC	NSPC ¹⁸	NSPC ²⁵	N*	N	N	N	NSPC	NSPC	N	Y	N	N	NSPC	NSPC
Swaziland	ME	NSPC ⁶	NSPC	N	NSPC ⁷	NSPC ⁷	NSPC	NSPC ¹⁸	NSPC ²⁴	NSPC ²⁶	N	N	N	N	NSPC	Y	Y	N	N	NSPC	NSPC
Tanzania	MC	Υ	NSPC	Y	NSPC	NSPC ¹⁹	NSPC	NSPC ^{18,20}	NSPC ²¹	NSPC ²¹	N	N	N	NSPC	NSPC	Y ²²	Y	N	Y ²⁹	Y ³¹	NSPC
Zambia	MC	Y ¹	NSPC	Y	NSPC ²³	NSPC	NSPC	NSPC ¹⁸	NSPC	N*	N	N	N	NSPC	NSPC	N	Y	N	NSPC ³⁰	NSPC	NSPC
Zimbabwe	MC	NSPC	NSPC	Y	NSPC	NSPC	NSPC	NSPC ¹⁸	NSPC	N*	N	N	N	NSPC	NSPC	N	Y	N	N	NSPC	NSPC
Total countries																					
Covered (Y+NSPC)		11	11	7	11	11	11	11	9	4	0	0	0	9	11	2	10	0	4	10	11
Child specific (Y)		5	0	7	0	0	0	2	0	2	0	0	0	2	0	NA	NA	0	1	1	0
Not covered (N)		0	0	4	0	0	0	0	2	7	11	11	11	2	0	9	1	11	7	0	0

Notes: MC=Malaria Control, ME=Malaria Pre-Elimination/Elimination, MF=Malaria Free, Y= Inlcuded in the document and children specifically addressed; N=Not specified in documents reviewed; N*= Not specified in strategic framework/plan, but covered in guidelines; NA= Not applicable, the item is by definition children specific; NSPC= included but not specifically addressing children; Shaded areas= malaria free countries. ¹ Pregnant women and children under five specifically targeted. ³ In provinces with access to ACT. ⁴ Priority to children under five and pregnant women in provinces were the first phase of ACT (Arthemeter-Lumefantrine) is being rolled out, in other provinces, quinine and SP. ⁵ Community IMCI as pilot project in certain communities. ⁶ Universal coverage by 2012. ⁹ Where available. ¹⁰ Artesunate-Amodiaquine. ¹¹ Rectal artesunate. ¹² Universal Coverage. ¹³ In all secondary and tertiary health facilities. ¹⁴ Roll out community case management through village clinics, with specific emphasis on reaching children under five. ¹⁵ For main health units. ¹⁶ Strategic Plan for Malaria control in Mozambique 2006-2009 states Artesunate + SP is first line treatment for uncomplicated malaria. Mozambique Main MPR Report states that the Moh changed the policy and now Arthemether Lumenfantrine is first line treatment. ¹⁷ For use at primary level health facilities. ¹⁸ Artivenous and intramuscular quinine. ¹⁷ Roll out community case management through village clinics. ²⁶ Community Health Agent (CHA) or other type of community activist trained in fever management and malaria diagnosis. ²⁹ Evaluate the possibility of involving community owned resourceful persons (CORPS) in pre-referral treatment with rectal artesunate given to children with severe febrile illness. ³⁰ CHW to provide diagnosis and ACT. ³¹ Strengthen capacity particularly to treat children under five years old. ²² In malaria free areas, only microscopy confirmated cases will be considered malaria acses. ³³ Preven

Prevention. Components that were assessed were indoor residual spraying (IRS), provision of insecticide-treated nets (ITNs) and sulfadoxine-pyrimethamine intermittent preventive therapy (SP-IPT).

Table 17. Malaria Guidelines on Prevention															
Country	Angola	Botswana	DRC**	Lesotho	Malawi**	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
Insecticide-Treated bed Nets (ITN)															
Children and pregnant women should be priority recipients of ITNs	Υ	N ¹	Y		N ¹		Υ	Υ			N ¹	Υ	Υ	Υ	7
ITNs should be provided free of charge to pregnant women and children	Υ	Y ¹	Υ		Y ¹		Υ				Y ¹	Υ		Y ¹	8
Ensure ITN are available in all antenatal and child health clinics	Υ	Υ	Υ		Υ		Υ					Υ	Υ	Υ	8
Ensure provision is accompanied by adequate counselling on importance of regular and correct use	Υ	Υ	Υ		Υ		Υ				Υ	Υ	Υ	Υ	9
Indoor Residual Spraying (IRS)															
Establish and sustain high quality annual IRS services in epidemic areas	Υ	Υ	Y		Υ	Y ⁷	Υ	Υ		Υ	Υ	Υ	Υ	Υ	12
Ensure adequate monitoring, quality assurance and quality control of ITN and IRS programmes	Υ	Υ	Υ		Υ		Υ			Y ²	Υ	Υ	Υ	Υ	10
Sulfadoxine-Pyrimethamine Intermittent Preventive Therapy (SP	IPT)														
All pregnant women living in region with moderate to high malaria transmission receive two doses of SP-IPT	Υ	N ³	Y		Υ		Υ	Υ		N ⁶	N ⁶	Υ	Y ⁴	Υ	8
In countries with high HIV prevalence, pregnant women should receive three doses of SP-IPT	Y ⁵	Υ	Y ⁵				Υ	Y ⁵			N ⁶	Υ	Y ⁴	Υ	8
Pregnant women living with HIV and on co-trimoxazole prophylactic treatment should not receive SP-IPTp		Υ						Υ			N ⁶	Υ	Υ	Υ	6

Notes: ** We did not receive and have no knowledge of existence of Malaria specific treatement/management guidelines in these countries, but Malaria programme implementation issues are covered in the USAID Malaria Operational Plans 2012 and these were used for analysis. Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but nos specifically addressing children; Blank=not included in documents reviewed; Shaded areas= malaria free countries. AL= Arthemeter Lumefantrine; AQ=Amodiaquine; AS=Artesunate; IPT=Intermitent Preventive Therapy, im=intramuscular, iv=intravenous, Q=Quinine, SP=Sulfadoxine-Pyrimethamine. ¹To all. ²For IRS only. ³Not recommended, give chloroquine, proguanil as chemoprophylaxis. ⁴Give three doses of IPT to all pregnant women. ⁵Give three doses to all pregnant women living with HIV. ⁶Low endemic malaria country, IPT not recommended. ⁷In ports of entry to the country, and in households with introduced cases.



Indoor residual spraying. IRS, an internationally recommended strategy for controlling mosquito populations, is endorsed as a prevention strategy by all Member States, whether in the control or elimination phase. All the reviewed strategic plans/frameworks (see Table 16) and guidelines (see Table 17) therefore cover it. Since IRS affects entire households and communities, it is not specifically geared towards children as it affects whole households and communities.

Provision of insecticide-treated nets. In accordance with international guidance, strategic plans (see Table 16) and guidelines (see Table 17) from all the Member States that were reviewed recommend ITNs for personal protection of people at risk for contracting malaria. Countries in the control phase specifically target provision of ITNs to children under five and to pregnant women (see Table 17). Those in the elimination phase (Botswana, Namibia, South Africa and Swaziland), along with Malawi and Zimbabwe, have moved towards universal coverage, aiming to provide one net for every 2 people. Nevertheless, provision of ITNs in antenatal and child health clinics is a good way for ensuring effective routine "keep-up" distribution, and it is covered in the guidelines of 8 of 12 Member States (Angola, Botswana, DRC, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe).

Sulfadoxine-pyrimethamine intermittent preventive therapy. Strategic frameworks/plans (see Table 16) and guidelines (see Table 17) from countries in the control phase (Angola, DRC, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe) have SP-IPT provisions for pregnant women, in line with WHO recommendations⁵⁴ for malaria prevention among pregnant women in areas with high risk of malaria transmission. Two countries that are in the elimination phase (Botswana and South Africa) include chemoprophylaxis with mefloquine or other drugs for pregnant women travelling to malaria-risk areas, but not SP-IPT. Guidelines from Namibia, a country in the elimination phase, include SP-IPT to pregnant women in areas with moderate to high transmission risk (see Table 17).

Malaria prevention guidelines were reported to be in use at health facilities by service providers in all countries except in countries with no endemic malaria, and health facility users in high-transmission countries reported knowledge of the existence of these services.

Diagnosis. Tools for diagnosing malaria are used equally in children and adults. In accordance with WHO policy recommendations, the strategic plans (see Table 16) and guidelines (see Table 18) of countries in the malaria elimination phase aim to provide parasitological confirmation of every case, either by microscopy or rapid diagnostic tests (RDTs). The plans and guidelines of countries in the control phase, while aiming to strengthen diagnostic capabilities, still allow for treatment upon clinical diagnosis where diagnostic tools are not available. In addition, guidelines from the 12 Member States that were reviewed all specify that in cases of suspected severe malaria, treatment should be started without awaiting parasitological confirmations, since delays can be fatal. Clear guidance on when microscopy should be preferred over RDTs (i.e. in cases of suspected severe malaria or non P. falciparum malaria) is provided in the guidelines of 5 of 12 Member States (Angola, Namibia, South Africa, Swaziland and Zambia; see Table 18). Drug resistance monitoring was addressed in the strategic plans of all 12 Member States (see Table 16), and in the guidelines of 9 Member States (Angola, Botswana, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) (see Table 18).

Table 18. Malaria Guidelines on Diagnosis															
Country	Angola	Botswana	DRC**	Lesotho	Malawi**	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
DIAGNOSIS															
All children suspected of malaria should be confirmed by parasitological diagnosis using microscopy or RDT	Y ¹	Υ	Υ		Υ	Y ^{1,6}	Υ	Y ²		Υ	Υ	Υ	Υ	Υ	12
Antimalaria treatment on the basis of clinical suspicion alone should only be considered in cases were parasitological diagnosis is not accessible.	Υ	Υ			Υ	Y ⁵	Υ	Y ²		Υ	Y ³	Y ⁴	Υ	Υ	11
Microscopy should be the preferred option in cases of suspected severe malaria or non <i>P.faciparum</i> malaria.	Υ							Υ		Υ	Υ		Υ		5
Strong drug resistance monitoring systems should be in place.	Υ	Υ			Υ		Υ			Υ	Υ	Υ	Υ	Υ	9

Notes: ** We did not receive and have no knowledge of existence of Malaria specific treatement/management guidelines in these countries, but Malaria programme implementation issues are covered in the USAID Malaria Operational Plans 2012 and these were used for analysis. Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but nos specifically addressing children; Blank=not included in documents reviewed; Shaded areas= malaria free countries. \(^1\)Recommended. \(^2\)Treatment can be started on clinical grounds because negative tests do not exclude malaria. \(^3\)If symptoms of severa malaria, treat without waiting for diagnostic test. \(^4\)In children under five, if clinical suspicion and RDT negative, still treat for malaria. \(^5\)Clinical diagnosis following WHO guidelines is considered adequate, and cofrimation of diagnosis is recommended. \(^6\) Use RDTs only where microscopy is not available.

⁵⁴ In accordance with WHO standards, SP-IPT for pregnant women is recommended in high- but not in low-transmission areas (i.e. not in countries in the elimination phase), nor in areas with high resistance to SP.



Treatment, care and support. All 12 Member States that were reviewed address malaria treatment in their strategic plans (see Table 16) and guidelines (see Table 19). As for severe malaria, treatment is covered in the strategic plans of 9 of 11 Member States (Angola, Botswana, DRC, Mozambique, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe), with 4 of 11 emphasising the need for pre-referral treatment in order to diminish mortality (DRC, Mozambique, Swaziland and Tanzania). While severe malaria and pre-referral treatments may not be included in strategic plans from all countries, they are specified in the treatment/management guidelines of all the countries.

Treatment of uncomplicated malaria. All SADC 12 Member States are following WHO standards and have moved towards the use of artemisinin combination treatment (ACT) for uncomplicated Plasmodium falciparum malaria, as first-line regimen in adults and children weighing above 5 kilogrammes, and this is stated in strategic plans and guidelines. Guidelines also show that all 12 Member States use fixed-dose combinations of Arthemeter-Lumefantrine, except for the DRC which uses Artesunate-Amodiaquine. Both options are recommended by international guidelines (see Table 19). Malaria treatment guidelines were reported to be in use at health facilities by service providers of all countries except in countries with no endemic malaria. The majority of health facility users in high-transmission countries reported that they were aware of malaria treatment services, but awareness was lower in countries with low-transmission of malaria.

Treatment of severe malaria. The WHO has recently changed the recommendation for treatment of severe malaria in children from quinine to intravenous artesunate, which clinical trials have shown reduces mortality and is safe for use in children.⁵⁵ It also has advantages at the implementation level—unlike quinine, it does not require rate-controlled infusion or cardiac monitoring. However, these are recent changes and they were introduced subsequent to the drafting of the guidelines evaluated in this report. Thus the guidelines of 10 of 12 Member States still recommend quinine, either intravenous or intramuscular as first-line treatment of severe falciparum malaria, with only the DRC implementing intravenous artesunate (see Table 19).

Referral and pre-referral treatment. Referral of children with severe malaria to the highest level of care is specified in the guidelines of 10 of 12 Member States (Angola, Botswana, DRC, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe). Provision of pre-referral treatment, which can reduce the risk of death or permanent disability in young children, was specified in 9 of those Member States (Namibia was the exception; see Table 19). Six of the 9 Member States (Angola, Botswana, South Africa, Swaziland, Tanzania and Zambia) used intramuscular quinine as the pre-referral treatment option, and 3 of the 9 (DRC, Mozambique and Zimbabwe) used rectal artesunate. Both options are recommended by WHO (see Table 19). Moreover, guidelines for the integrated management of childhood illnesses, although not analysed in this assessment, also clearly outline referrals.

Provisions for the use of antipyretics in children for whom acetyl-salycilic acid is not recommended are addressed in 8 of 12 Member States (Botswana, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) (see Table 19).

Nutritional and psychosocial support and child and social protection. Nutritional and psychosocial support and child and social protection were not covered in the malaria strategic plans (see Table 16) or guidelines of any of the 12 Member States that were reviewed—with the exception of Botswana, where the guidelines included nutritional support (see Table 19). Nutritional issues relating to children who are affected by malaria may be covered in additional documents (such as nutritional guidelines) that were not subject to review during this assessment.

Since malaria is not associated with stigma or discrimination, the need for psychosocial support and child and social protection services for children do not appear to be as key as they are in relation to HIV and TB. Nevertheless, these services may be crucial for households with recurrent cases of malaria that render families and children vulnerable to household impoverishment. In addition, in countries with a high risk of malaria transmission, seeking treatment for malaria may be the first contact with health and care services for children and families, and therefore could be used as an entry point for additional basic care services, such as birth registration, access to care and education.









Table 19. Malaria Guidelines on Treatment, Care and Suppo	rt														
Country	Angola	Botswana	DRC**	Lesotho	Malawi**	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Swaziland	Tanzania	Zambia	Zimbabwe	Total
TREATMENT FOR UNCOMPLICATED MALARIA (ACT)															
Treatment for children with uncomplicated malaria*	AL^1	AL ^{1, 2}	AS-AQ		AL ¹	AL ¹	AL 1, 3	AL ^{1,3}		AL ^{1,2}	AL ¹	AL ^{1, 2}	AL ^{1,3}	AL ^{1, 2}	12
Sulfadoxine-Pyrimethamine (SP) plus Cloroquine (CQ) or Amodiaquine (AQ) should no longer be used in the treatment of uncomplicated malaria*						N ⁷	Υ			Y	Y		Y	Υ	5
Fixed dose combinations should be used	Y ⁴	Y ⁴	Y ⁴		Υ	Y ⁴	Y ⁴	Y ⁴		Y ⁴	Y ⁴	Y ⁴	Υ	Y ⁴	12
Children with fever should receive antipyretics		Y					Υ	Υ		Υ	Υ	Y	Υ	Υ	8
Acetylsalicylic acid should not be used in children because of risk of Reye's syndrome		Υ					Y			Υ		Υ	Υ	Υ	6
TREATMENT FOR SEVERE MALARIA															
First line treatment for children with severe malaria*	Q iv	Q iv	Q iv		Q iv	Q iv	AS iv	Q iv		Q iv	Q iv/im	Q iv	Q iv/im	Q iv ⁵	
Strong referral systems should be in place for children with severe malaria to limit case fatality.	Υ	Υ	Υ		Υ		Υ	Y ⁶		Υ	Y	Υ	Υ	Υ	11
Children with severe malaria should be hospitalized for intensive management.	Υ	Υ	Υ		Y			Υ		Υ	Y	Υ	Υ	Υ	10
PRE-REFERRAL TREATMENT															
Pre-referral treatment	Q im	Q im	AS rectal		Q im		AS rectal			Q im ⁸	Q im	Q im	Q im	AS rectal	10
NUTRITIONAL AND PSYCHOSOCIAL SUPPORT															
Nutritional support		Y ⁹													1
Psychosocial support															0

Notes: * *Plasmodium falciparum* malaria. ** We did not receive and have no knowledge of existence of Malaria specific treatement/management guidelines in these countries, but Malaria programme implementation issues are covered in the USAID Malaria Operational Plans 2012 and these were used for analysis. Y=Included in document and children specifically addressed; N= Included in a partial or modified way, see notes; NSPC=Included in document but nos specifically addressing children; Blank=not included in documents reviewed; Shaded areas= malaria free countries. AL= Arthemeter Lumefantrine; AQ=Amodiaquine; AS=Artesunate; im=intramuscular, iv=intravenous, Q=Quinine, SP=Sulfadoxine-Pyrimethamine. ¹Treatment for children and adults. ²If child weights less than 5 kg, treat with quinine. ³If child weights less than 5 kg, treat with SP. ⁴Arthemeter Lumefantrine is formulated as Co-arthemeter in FDC. ⁵Or AS im where available. ⁶Refer all children under five with malaria to the next level of care. ⁷ Use of SP for uncomplicated P. falciparum malaria is still included in treatment guidelines. ⁸ Guidelines state: "Rectal artesunate not yet registered for use in South Africa, when it becomes available it may provide a safer alternative to quinine". ⁹ Maintain adequate nutrition by offering small, frequent, high energy density foods.

Community- and home-based care. Community-based care strategies were addressed in the strategic plans of 9 of 11 countries (Angola, DRC, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe), but detailed descriptions of the strategies were limited and the strategies did not specifically mention children (see Table 16). Community-and home-based care was not analysed in the guidelines.

Advocacy, communication and social mobilisation. Advocacy, communication and social mobilisation was included in various ways (mostly as part of behavioural change communication and information, education and communication strategies) in the strategic plans of all the reviewed countries. However, specific ways of incorporating children in these strategies were not addressed (see Table 16). Advocacy, communication and social mobilisation were not analysed in the guidelines.

Monitoring and evaluation. The strategic plans of all 12 Member States that were reviewed contained chapters or sections on M&E. However, the need for age- and sex-disaggregated data was addressed only in the plans of Swaziland and Tanzania (see Table 16). Internationally, malaria cases and deaths are usually reported only in 2 age categories: under 5 years and over 5 years. As a result, data for children aged 6-18 years are reported alongside those of adults. Paediatric indicators (i.e. for children under five years) were included in the strategic frameworks of 11 Member States (see Table 16). In countries moving towards elimination of malaria, as the numbers of cases diminish, the focus tends to shift from reporting cases in children under 5 and over 5 years, to reporting all cases collectively.

Other issues

Child-friendly malaria service. Child- and youth-friendly services were not covered in any of the 12 strategic plans that were analysed.

Task-shifting. Task-shifting/task-sharing was mentioned in the malaria strategic plans of 4 Member States (Malawi, Mozambique, Tanzania and Zambia). Similar to the situation for TB, these numbers are misleading, since task-shifting/task-sharing has long been used as a strategy to strengthen coverage for malaria. Nurses in primary health care facilities perform diagnosis and treatment, and some of those functions have also been shifted to trained community health care workers, village workers, etc. However, legal issues can still pose a challenge. In South Africa's Malaria Elimination plan, legal issues relating to health workers diagnosing and providing immediate malaria treatment at the community level appeared to be a barrier hampering the strengthening of the malaria response.

Health system strengthening. All malaria strategic plans cover health system strengthening (for example, human resources and infrastructure), although special requirements for strengthening health systems to provide improved child and adolescent services are not included. Interviews with key informants and service providers indicated that the main challenges were financial, human and infrastructure resource limitations. Limited human resources and



limited skills and training appeared to be less of a concern than for HIV and TB responses, but were still considered to be a challenge. According to service providers, various methods are available for training on new guidelines for HIV, TB and malaria, including workshops, circulars and national trainings. Effective dissemination of policies and guidelines for the three diseases at local levels was deemed to be a challenge, however, due to the costs of printing and distributing documents, along with geographical constraints, and in some cases, language barriers.

Box 2. Avoiding stock-outs of anti-malarial drugs: The SMS for Life Project in Tanzania

This public-private initiative between the Roll Back Malaria Partnership, Novartis, Vodafone, and IBM exploits the availability, wide use and low cost of cell phones and SMS text messaging to help eliminate stock-outs of essential anti-malarial medicines in health facilities. Key focal points at participating health facilities receive weekly, automated text messages that prompt them to check anti-malarial drug supplies. They then transmit information on current stocks via text messages which are linked to a central database system, allowing for the timely delivery of new drug supplies to the health facility. A pilot project in Tanzania in 2009 showed that the proportion of stock-outs fell from 78% to 26% in 21 weeks. An additional 300 000 people had access to ACTs. The programme is being continued in Tanzania and a pilot study is planned in the DRC.

Source: RBM. SMS for Life. http://www rollbackmalaria.org/psm/smsWhatlsIt.html Supply chain management. All malaria strategic plans cover supply chain management (for example, procurement, supply and logistics for drugs, diagnostics and other commodities). Service providers reported stock-outs of malaria drugs and diagnostic tests (although less so than for HIV and TB commodities). However, interesting local solutions that exploit mobile technology are emerging and could have an important impact in maintaining steady supplies of drugs and other commodities, for all three diseases (see Box 2).

In summary, as the background information section shows, progress in tackling malaria in the region has been impressive. The strategic plans and guidelines for malaria that were analysed are strongly aligned with international recommendations. Documents clearly outline the provision of ITNs and IRS, and the strengthened use of rapid diagnostic tests and microscopy to provide parasitological confirmation and avoid over-treating, as well as use of ACTs as first-line treatment, coupled with strong advocacy, communication and social mobilisation strategies.

However, recent changes in the WHO recommendations (from quinine to intravenous artesunate as first-line treatment for severe malaria in children and adults) are not yet reflected in country documents; the strategic frameworks and plans

that were analysed had been drafted prior to the changes in the WHO guidelines.

Nutritional and psychosocial support, and child and social protection for children with malaria are absent from the strategic plans and guidelines of the Member States that were reviewed. Given the high malnutrition rates in children in many Member States, and the fact that up to 30% of outpatient visits are due to malaria, malaria services should function as a point of entry to link children to key basic services. Service providers and clients report that these services are more frequently linked with HIV services.

M&E of child and adolescent malaria would benefit from further age and sex disaggregation of data, in addition to the current categories that distinguish between people younger and older than 5 years.

Community- and home-based care, which has become a pillar of malaria diagnosis and treatment, has to be adapted further to specifically cover children's needs. In several SADC Member States, malaria community case management is being integrated with the treatment of pneumonia and diarrhoea through equity-oriented, integrated community case management programmes. The aim is to expand community health interventions to provide treatment to the 60% of children who currently have no access to services for treating pneumonia, diarrhea and malaria in the SADC region.

Advocacy, communication and social mobilisation strategies must be fine-tuned and adapted to educate children adequately on malaria control by using schools, orphanages and other venues were children congregate to provide community malaria services. Finally, there is a need to include child- and adolescent-friendly malaria services in policy and programming frameworks, as well as clearly outline task-shifting/task-sharing policies for child and adolescent malaria in order to protect health care workers and clients, and cover child-specific needs in strengthening of health systems.

Despite these challenges, interviews with clients indicated a high level of satisfaction with HIV, TB and malaria services. The most common reason cited for this satisfaction was "good services from doctors and nurses". Reasons for dissatisfaction mainly involved long queues and waiting times, shortages of drugs and staff, particularly doctors, and service provider attitudes.



6.1.4 Gaps and opportunities in policy and programming frameworks

o. 1.4 Gaps and opportunitie	es in policy and programming frameworks
	Gaps
	Common for the three diseases
Community services & community- and home-based care	CHBC components in strategic frameworks/plans do not address children needs.
Advocacy, communication and social mobilisation	Advocacy, communications and social mobilisation sections in strategic frameworks/plans do not address children needs.
M&E	The majority of strategic frameworks/plans do not articulate the importance of disaggregating data by age and sex.
Health system strengthening and supply chain management	Major gaps reported by interviewees: financial, in infrastructure and limited numbers and child and adolescent skills of human resources.
Task-shifting	Clear articulation of task-shifting policies for prevention, treatment and management of HIV, TB and malaria, particularly where children are involved, is limited in the majority of strategic framework/plans.
Child- and adolescent- friendly services	The need for child- and adolescent-friendly TB and malaria services was not covered in strategic framework/plans. It was covered for HIV, but interviews suggest that adolescent HIV services that encompass the transition from paediatric to adult services, and appropriate SRH, prevention interventions and PSS are limited.
	HIV
	Non-medical interventions for prevention are limited.
	HTC. In the strategic frameworks/plans of many Member States, the HTC component is covered but does not specifically address the needs of children. In guidelines, the age of consent for HTC and specific provisions for (i) minors who can give consent before that age, or (ii) scenarios in which a health care worker can perform an HIV test without parental or guardian consent, are not always clearly stated.
Prevention	PMTCT. The majority of Member States are implementing PMTCT programmatic Option A. The new recommendations from WHO propose a move towards Opions B and B+ towards elimination of MTCT, but were made after most of the strategic frameworks/plans analysed in this report had been drafted.
	PEP. Guidelines from some Member States do not include training on the availability and importance of PEP at referral points that are relevant for children, nor do they include recommendations that clearly refer sexually-abused children to adequate legal, medical and psychological services.
	Male medical circumcision. Interviews suggest there is limited knowledge of neonatal and child male circumcision services, both on the supply and demand sides.
	ART. Not all Member States' guidelines have moved towards universal ART for all children living with HIV under two years of age, and some lack provisions for alternative protease-inhibitor-based drug regimens in children exposed to maternal or neonatal NNRTI.
	CPT. Universal co-trimoxazole prophylaxis for all children living with HIV and younger than two years is not included in the guidelines from some Member States.
Treatment, care and support	Routine follow-up. This is not specifically geared towards children's needs in all Member States' strategic frameworks/plans. Many guidelines fail to recommend strict routine clinical monitoring for children, with screening for TB at each visit, as well as for malaria in case of fever or other clinical symptoms.
	Adolescents living with HIV are not receiving the adolescent-friendly services they need to help them transition succesfully from paediatric to adult services.
	Drug resistance testing. The majority of Member States' guidelines do not specify provisions for the use of drug resistance testing.
	Nutrional and psychosocial support. This is not adequately geared towards children and adolescents in the strategic frameworks/plans from many Member States.
	Tuberculosis
Prevention	Several strategic frameworks/plans do not specifically address the screening of children's household contacts from sources cases nor do they address the provision of IPT to children. Not all Member States cover recommendations to provide HTC to all children that are suspected of, or diagnosed with TB, and to evaluate children living with HIV for TB at each visit.
Diagnosis	In strategic frameworks/plans there is limited coverage of tools that are important for the diagnosis of TB in children, such as tuberculin skin test, chest radiography, induced sputum and gastric aspiration for sputum-smear and culture samples, and molecular diagnostics with Xpert MTB/RIF technology. TB diagnosis using Xpert MTB/RIF technology is lacking in guidelines from the majority of Member States.



	There is limited attention to child-specific needs in routine follow-up, and nutritional and psychosocial support, and there is a lack of child and social protection components in TB strategic frameworks/plans.
Treatment, care and support	Guidelines from several Member States lack clear recommendations on how the DOTS strategy should be applied for children and lack special considerations for TB treatment in children living with HIV, such as providing four drugs in the initial phase of treatment, and ensuring access to ART and CPT.
	Malaria
Treatment, care and support	Intravenous quinine is used as first-line treatment for severe malaria in children. The latest WHO guidelines, which were published after strategic frameworks and plans analysed in this report had been drafted, recommend a shift towards intravenous artesunate.
mounting, our and dappoin	Provision of nutritional and psychosocial support, and child and social protection is not incorporated into the strategic frameworks/plans or guidelines of any Member States.

	Opportunities
	Common for the three diseases
	There is strong political will to tackle child and adolescent HIV, TB and malaria, but variable action from Member States.
Health system strengthening	A wide array of development partners is active in SADC Member States, providing technical and financial support.
and supply chain management	Health system strengthening and supply chain management are key issues that are covered in all Member States' policy documents.
	Informal redistribution systems to manage stock-outs of diagnostic kits have been reported, and these could be used as models for developing formal versions for the region.
Adolescent- friendly services	There are local best-practices on how to engage adolescents living with HIV or who are affected by HIV and how to provide them with life skills in an adolescent-friendly programme.
	HIV
	All Member States have strategic frameworks/plans with a combination prevention approach that includes multiple components (such as HTC, PMTCT, SRH, PEP and male medical circumcision) which, when appropriately implemented, can have an important impact.
	HTC. HTC in adolescents is recognised as an entry point for prevention services.
Prevention	SRH. The importance of gearing SRH services towards adolescents and youth is recognised in strategic frameworks/plans, which is crucial given the high HIV infection rates in the 15-24 year category. This provides a solid basis for implementation of adolescent-friendly services.
	PMTCT. PMTCT strategic plans have been developed and implemented in all Member States. Thus far one country—Malawi—has adopted Option B+ and has clearly articulated it in its strategic framework/plan and guidelines for HIV and AIDS. Given the advantages of moving towards this option, the existence of a local model could present a key opportunity for the region.
Treatment, care	ART. Many countries are already proposing universal ART coverage for all children under the age of two years, in accordance with the latest international recommendations, and this provides a basis for increasing coverage to this age cohort in the region.
and support	Nutrition and psychosocial support. The majority of HIV and AIDS strategic plans/frameworks (unlike those focusing on TB and Malaria) have strong nutritional and psychosocial support components, which offer a basis for also including these components in TB and Malaria plans.
	Tuberculosis
Diagnosis	Strategic frameworks/plans or guidelines from three Member States already cover the new molecular diagnostic tool, Xpert MTB-RIF, thus providing a basis for incoporating this promising new technology also for TB diagnosis in children.
	Malaria
Prevention	Four countries in the region have moved towards the pre-elimination phase and have elaborated strategic plans for elimination. This shows the potential for tackling malaria in the region and for opening opportunities for other countries to follow suit.
Supply chain management	Local best practices based on mHealth technology have been shown to facilitate supply chain management of malaria drugs and commodities, and this model could be adapted and expanded for malaria in other Member States, as well as for HIV and TB.



6.2 Integration of HIV, TB and malaria policy and programming frameworks

The strategic frameworks/plans for HIV, TB and malaria, as well as the national plans for children or orphans and other vulnerable children were reviewed to assess:

- The integration of the three diseases into primary health care platforms and among the disease-specific programmes (i.e. HIV/TB, TB/malaria, HIV/malaria); and
- Integration between each programme and basic care services for vulnerable children.

Information from semi-structured interviews was also used for analysis.

6.2.1 Integration of HIV, TB and malaria policy and programming frameworks into primary health care

Strategic frameworks/plans for HIV (from 14 Member States), TB (from 12 Member States) and malaria (from 11 Member States) were reviewed for coverage of four components related to integration: planning and budgeting, collaboration across programmes, services (referrals, range of services provided under the same roof) and M&E (see the Methodology section). They were reviewed to ascertain whether the component was covered in the documents, and whether it specifically addressed the needs of children.

Integration was assessed by examining the extent to which the programmes were integrated into primary health care, and whether the vertical, disease-specific programmes were articulated. Table 20 shows the findings in the strategic frameworks/plans for HIV, TB and malaria in terms of their integration into primary health care and the integration between various disease-specific programmes. Results are detailed below.

Integration of HIV services into primary health care is covered in HIV and AIDS strategic frameworks/plans of all 14 Member States that were reviewed. Integration included the provision of HTC, SRH and STI services in primary health care and antenatal care facilities, as well as referrals to PMTCT and pre-ART and ART services. However, these documents do not clearly articulate the specific ways in which integration into primary health care services can be geared towards children. The only exception was South Africa's document, which proposes, for instance, provider-initiated testing and counselling for children at child healthcare services as well as the strengthening of early infant diagnosis at immunisation points (see Table 20).

Integration of TB services into primary health care is also addressed in the TB strategic frameworks/plans of all 12 Member States that were reviewed (see Table 20). Basic diagnostic services and treatment for TB are provided in primary health clinics, as well as referrals for more complicated diagnosis and for severe TB cases. However, these strategic framework/plans do not clearly articulate how such integration can be achieved or strengthened specifically for children.

Table 20. Integration of	of HIV, TB a	and malar	ia into PH	С			
Subarea	_	ation to P	•	dis	ration bet ease-spec ammes/se	cific	
Country	HIV to PHC	TB to PHC	Malaria to PHC	HIV-TB	HIV-Malaria	TB-Malaria	Notes: Y=Included in document and children specifically addressed; N= Not included; NR=Documents not received for review; NSPC=Included in document but nos specifically addressing children; Shaded areas=Mlaria free countries, analysis not done. ¹ Malaria as part of Integrated
Angola	NSPC	NSPC	Y ¹	NSPC ²	NSPC	NSPC ⁶	Management of Childhood Illnesses. ² Covered in HIV as well as TB policy
Botswana	NSPC	NSPC	Y ³	NSPC ^{2,4}	NSPC	NSPC	documents. ³ Provide LLIN and SP-IPT in antenatal clinics and maternal and
DRC	NSPC	NR	Y ³	NSPC	NSPC ⁷	N	child health clinics. ⁴ Collaborative activities between HIV and TB
Lesotho	NSPC	NSPC		NSPC	Y ¹²		programmes, integrate CHBC for both diseases. 5 Collaboration between
Malawi	NSPC	NSPC	Y ³	NSPC	N	N	programmes, aiming towards a "one-stop" approach for services.
Mauritius	NSPC ¹⁰	NSPC ¹¹		NSPC	N		⁶ "Establish protocols of collaboration with Malaria programmes", in Plano
Mozambique	NSPC	NSPC	NSPC	NSPC ^{2,5}	NSPC	N	Estratégico Nacional da Tuberculose 2008-2013. ⁷ In Malaria policy
Namibia	NSPC	NSPC	NSPC	NSPC	N	N	documents, until 2010, PLWA targeted for priority ITN reception. 8 Implemet
Seychelles	NSPC	N		N	N		PI-HTC for children of adults living with HIV accessing services, increase EID
South Africa	Y ⁸	NSPC	NSPC	NSPC ⁹	N	N	in facilities offering immunisation. ⁹ South Africa has developed a "Practical
Swaziland	NSPC	NSPC	NSPC	NSPC	N	N	Guidelines on integration of HIV-TB services' document. ¹⁰ Services for HIV
Tanzania	NSPC	NSPC	NSPC	NSPC ^{2,5}	N	N	are centralised in the National Day Care Center for the Immunosuppressed.
Zambia	NSPC	NSPC	NSPC	NSPC	Y ¹³	N	¹¹ All tuberculosis cases in Mauritius are treated under the supervision of
Zimbabwe	NSPC	NSPC	NSPC	NSPC ²	N	N	Chest specialists at Poudre d'Or Chest Hospital or Chest Clinic. 12 Provide
Total countries							supportive care and treatment for malaria, TB and STI to women living with
Covered (Y+NSPC)	14	12	11	13	6	2	HIV and their infants. ¹³ Use the existing HIV/AIDS home-based care, c-IMCI,
Child specific (Y)	1	0	4	0	2	0	and IEC programmes as vehicles for delivery of malaria control interventions
Not covered (N)	0	0	0	1	8	11	



Malaria services are strongly integrated into primary health care in all Member States. Malaria diagnosis and treatment are part of routine care in all levels of health care, including at the community level. Malaria is handled through the Integrated Management of Childhood Illnesses (IMCI) approach at health facility level and services are being expanded to reach children through integrated Community Case Management (iCCM) programmes in countries where access to health care is poor. Antenatal and child health clinics serve as access points for the provision of ITNs and SP-IPT for pregnant women and children under 5 years. However, 7 of the 11 strategic framework/plans that were reviewed (Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) did not clearly specify the needs of children and how can they be covered with this integration framework (see Table 20).

As for integration between diseases, South Africa was the only one of the 14 reviewed Member States not to have a separate strategic plan for HIV and TB. Zambia had a single policy for HIV/TB/STI (see Annex 5), but still had separate strategic plans for HIV and TB. The HIV and TB strategic framework/plans of all Member States address HIV/TB co-infection as a main strategic point and cover the other components that were assessed, namely collaboration between programmes and services. South Africa has developed a single strategic framework/plan for HIV, TB and STIs, as well as joint budgeting and planning, thus providing a much stronger framework for addressing the epidemics at all levels. However, the documents do not specifically address children's needs in relation to HIV and TB. Integration of HIV and TB services under one roof presents challenges because of the risk of TB transmission to patients who have acquired HIV. Some Member States have developed specific TB infection control guidelines (see Annex 5) that are particularly important in service integration scenarios. South Africa has published a "Practical Guide for TB and HIV Service Integration at Primary Health Care Facilities" that comprehensively covers this topic.

The integration of HIV with malaria is not addressed as clearly as the integration of HIV and TB. None of the strategic frameworks/plans for HIV and malaria addresses joint budgeting and planning, collaboration between programmes or joint M&E. Some mention of HIV/malaria services occurs in the malaria strategic frameworks/plans of three Member States (Angola, DRC, Mozambique)—in relation to the provision of three doses of SP-IPT to pregnant women living with HIV. Malaria infection is mentioned in the HIV strategic frameworks/plan of Botswana but not specifically with respect to children. Zambia's Malaria Plan proposes using the existing HIV/AIDS home-based care, c-IMCI, and information, education and communication programmes for delivery of malaria control interventions. Moreover, for paediatric purposes, IMCI strategies cover both diseases. However, clear collaboration between HIV and malaria programmes and services were limited and no joint child M&E indicators were found. Because of the links between these two diseases, integration of programmes is important for expanding the reach of health services for children.

Integration of TB and malaria was not addressed in strategic frameworks/plans of any of the Member States that were reviewed, although passing references did occur. Angola's TB Strategic plan proposes "to establish protocols of collaboration with malaria programmes" and Botswana's HIV and AIDS Strategic Plan for the health sector aims to achieve "integration of malaria/HIV/TB/STI/PMTCT/SRH services". However, there were no details on how the integration would be achieved, children's needs were not specified (see Table 20). Integration of programmes should be treated as an opportunity to reach a larger number of children with health care services.

In line with the information obtained from the national documents, interviews with key informants showed that programme administration for the three diseases is not integrated. All three diseases fall under the same ministry (the Ministry of Health or equivalent), but usually do not fall under the same department. HIV and AIDS programmes have their own national institution/council/body (which may include TB), while TB and malaria programmes often fall under a separate department/council/body.

Key informants also report that joint strategic and operational plans, budgets and operational guidelines for the three diseases are not common. However, the development of HIV and TB co-infection sections in the strategic plans/ frameworks of all the Member States that were reviewed indicates that this may be changing. This would signal opportunities for Member States to emulate the joint national strategic plans that exist in South Africa, for example.

M&E systems for HIV, TB and malaria were reported to be independent and in most cases lacked any interface between the platforms or databases. However, coordinating committees exist for HIV and TB, and these sometimes include malaria, as well. For instance, Namibia has a committee for HIV, TB and malaria that coordinates research and development of a central database, and Tanzania mentions a National Coordinating Mechanism (or TNCM, a "multi-sectoral forum for sharing information and coordination of resources from various sources for HIV, TB and malaria, and any other health-related emergency requiring multi-sectoral action and monitoring their implementation"). Despite the low level of integration at administrative and programmatic level, service providers reported integration of services at the health facility level, particularly at primary health care facilities, where nurses tend to provide all services.



6.2.2 Integration of HIV, TB and malaria with basic services for children

The integration between HIV, TB, malaria and basic services for children (including orphans and vulnerable children) was assessed it two ways:

- By evaluating whether basic service components are included in strategic framework/plans for HIV, TB and malaria (as shown in Table 21); and
- By analysing whether national action plans for children (including orphans and vulnerable children) include provisions and links to child and adolescent HIV, TB and malaria (as shown in Table 22).

Table 21. Coverage of basic care services for vulnerable children in HIV, TB and malaria strategic framework/plans In Malaria Country In HIV In TB Angola Ν Botswana Υ Ν N DRC Υ NR Ν Υ Lesotho Ν Malawi Υ Ν Ν Mauritius Ν Ν Mozambique Υ Ν Ν Namibia Υ Ν Ν Seychelles ND South Africa Υ Υ Ν Swaziland Υ N N Tanzania Υ Ν Ν Zambia Ν Zimbabwe N N Total countries 13 2 0 1 9

Notes: Y=Included in document; N= Not included; NR=Documents not received for review; N= There is no national strategic framework for TB, so analysis not done; Shaded areas=Malaria free countries.

Table 22. Comp	Table 22. Components covered in National Action plans for Children and/or OVC												
		disease- ogramm	•	Components covered									
Country	to HIV	to TB	to Malaria	Health Care	Food security & nutritional support	Shelter/ Placement in foster families	Birth registration	Early Childhood Development	Primary education	Secondary Education/Vocation al training	Psychosocial support	Social/Legal protection	Income generation skills
Angola	Υ	N	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	N
Botswana	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
DRC	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Lesotho	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Malawi	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Mauritius	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Mozambique	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Namibia	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
Seychelles	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
South Africa	Υ	N	N	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ
Swaziland	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
Tanzania	Υ	N	N	Υ	Y	Y	Υ	Y	Υ	Y	Υ	Y	Υ
Zambia	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ
Zimbabwe	Υ	N	N	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ
Total countries													
Υ	11	0	0	11	11	10	11	10	11	9	11	11	9
N	0	11	11	0	0	1	0	1	0	3	0	0	2



HIV and AIDS strategic frameworks/plans from the 14 Member States that were reviewed (with the exception of Mauritius, which has very few children who are infected with or infected by HIV) included components of basic services for vulnerable children and orphans. These were not covered in the TB strategic framework/plans of any of the 12 Member States that were reviewed, except for South Africa. Although not specifically addressing children needs, the TB strategic plans of 6 Member States (Lesotho, Malawi, Swaziland, Tanzania, Zambia and Zimbabwe) did cover at least nutritional support, while the plans in 7 Member States (Angola, Bostwana, Malawi, Namibia, Swaziland, Tanzania and Zambia) covered psychosocial support, and 6 Member States' plans (Bostwana, Malawi, Namibia, Swaziland, Tanzania and Zambia), covered child and social protection services (see Table 12). There was no mention of basic services for children in the malaria strategic frameworks/plans of any of the 11 Member States that were assessed (see Table 21).

National action plans for children and/or orphans and vulnerable children from 11 Member States were evaluated (see Annex 5). All included issues concerning children who are infected with or affected by HIV. However, issues concerning children affected by TB or malaria were not specifically included. Although TB and malaria were not specifically addressed, provisions for health care in children, and orphans and vulnerable children were addressed in documents from 11 Member States, with health care including TB and malaria (see Table 22).

The assessment did not aim to perform a detailed analysis of policy and programming framework on orphans and vulnerable children (which is covered in other SADC assessments). However, the assessment did analyse the coverage of a number of components pertaining to the SADC Minimum Package of Services for Orphans and other Vulnerable Children and Youth in those documents. Health care, food security and nutrition, shelter/placement in foster families, birth registration, early childhood development, primary education, secondary education/vocational training, psychosocial support, social/legal protection and income-generating skills were all covered in the documents from all Member States, with a few exceptions (see Table 22).

In line with the findings from the desk review, interviews with service providers indicated that basic children services (nutritional support, psychosocial support, birth registration, cash transfers, skills training and social assistance) are not common in the health facilities that were assessed. HIV service providers in some of the health facilities in Botswana, Mauritius, Seychelles, South Africa and Zimbabwe reported availability of birth registration, psychosocial and nutritional support, but this was rarely the case for TB services (and mostly for nutritional support only), and it was almost never reported for malaria services.

There is large demand for basic services. Families and communities caring for children with HIV, TB or malaria have to contend with several challenges, including low household income, transportation costs to health facilities, limited nutritional and educational support for the children, complications in accessing medicines at health facilities, stigma and discrimination, and limited support services for orphans and vulnerable children (such as shelter, food, clothing and education). However, examples of local best practices for providing integrated services for children (and especially adolescents) at health facilities (see Box 3) or through community-based care (see Box 4) do exist in the region.

Box 4. Integration of services through community and home-based care for vulnerable children: The Inkwanca Project in South Africa

Based in Molteno, in South Africa's Eastern Cape province, the Inkwanca Project has successfully employed the Integrated Home/Community Based Care Centre Model to provide support to orphans and vulnerable children, and to people living with HIV in the community. The project has a day centre that runs an early development programme for children from HIV-affected families, as well as an aftercare facility that caters to 7-17 year-old children. Children receive services from a social worker and the professional nurse in the after-care programme, as well as educational activities, assistance with homework, and a programme of sports, art and psychosocial support. The centre acts as a referral centre for the hospital and clinic, as well as for the police and the criminal justice system. The Inkwanca Project also runs a home-based care programme for children with ill parents or in child-headed households. Workers support children with their homework and ensure that the children have had breakfast, and are prepared for school each morning. Children on ART receive support to increase their adherence treatment, as well as nutritional support. Inkwanca has shown promising results: children who were not able to attend school due to a lack of uniforms are now back in school and showing improved performance. Nutritional support provided to people living with HIV has enhanced the quality of life in affected households. Access to treatment for people living with HIV has also improved, with the centre providing transport to clinics. There has been a reduction in the number of people who need to attend the nearby hospital and clinic.

Source: SADC. 2008. HIV and AIDS Best Practices Series. The Inkwanca Home- and Community-Based Care Model in South Africa.

⁵⁶ SADC. Report of a Rapid Assessment and Analysis of Vulnerabilities of Orphans, Vulnerable Children and Youth and Quality of Projects and Progammes. Gaborone: SADC; 2008.

⁵⁷ SADC. Assessment Report on the Status of M&E for Orphans, Vulnerable Children and Youth. Gaborone: SADC; 2010.



Box 3. Best practice on integrated services for adolescents living with HIV: The Teen Club

As the availability of ART for children expands, more children living with HIV survive into adolescence. However, most HIV treatment and care programmes are organized around adult or infant/young children needs, and the specialised needs of adolescents are often not covered. To address this gap, the Baylor International Paediatric AIDS Initiative has created Teen Clubs, with a mission "to empower HIV-positive adolescents to build positive relationships, improve their self esteem and acquire life skills through peer mentorship, adult role-modelling and structured activities, ultimately leading to improved clinical and mental health outcomes, as well as a healthy transition into adulthood".

Teen Club events include group games, drama/theatre activities, pool parties, safaris, sports and art sessions coupled with educational components on HIV, disclosure, adherence, life skills, college preparation, personal finance management and goal-setting. Participants report improved handling of their daily lives and improved interaction with their family and peers, enhanced academic performance, acceptance of their HIV status, as well as stronger treatment adherence. Teen Clubs now exist in Botswana, Lesotho, Malawi, Swaziland and Tanzania, and have been hailed by UNICEF as a best practice and by UNAIDS as promising practice.

Source: BIPAI. Teen Club International. Available at http://www.bipai.org/About-BIPAI/Teen-Club-International.aspx.

6.2.3 Gaps and opportunities in integration

Gaps

- Articulation of integration of HIV, TB and malaria into primary health care is covered in strategic frameworks/ plans, but is not specifically geared towards children's needs. Moreover, HIV integration into primary health care is still limited on the ground.
- Joint budgeting and planning for integration of HIV/TB is still lacking in the strategic frameworks/plans of a majority of Member States.
- No integration of HIV, TB and malaria M&E systems/platforms.
- The strategic frameworks/plans for TB and malaria do not adequately integrate basic care services for children (non-medical services).
- Basic services for children are not being consistently accessed by clients, due to limited provision or limited publicity.
- Needs of children infected or affected by TB and malaria are not specifically covered in national action plans for children and/or orphans and vulnerable children, and their status as vulnerable children is not specified.

Opportunities

- TB and malaria are well integrated into the primary health care, and strategic frameworks/plans feature strong emphasis on doing so for HIV as well.
- Integration of HIV/TB is a pillar of the responses to these diseases and is covered in all strategic frameworks/ plans, which provides an important opportunity to take implementation forward.
- South Africa is one of the countries that has developed a single, integrated strategic plan for HIV/TB and STIs, and provides a model for similar efforts in the region.
- The link between HIV and child vulnerability is addressed in children and/or orphans and vulnerable children national plans of all Member States, and this can be extended also to children affected by TB and malaria.
- Local best practices to provide basic children services through health facilities and community- and homebased care programmes exist and can be used as a models to expand coverage.

6.3 Harmonisation

Harmonisation of policies and programming frameworks on child and adolescent HIV, TB and malaria, as well as their integration, was assessed by comparing the homogeneity or heterogeneity across Member States for each of the components that were examined in the previous two sections, and the degree of domestication of international recommendations.

6.3.1 Harmonisation of policies and programming frameworks

HIV and AIDS. HIV and AIDS strategic frameworks/plans all featured stand-alone structures—except in South Africa, where HIV/TB and STIs were integrated into a single strategic framework/plan. Clinical guidelines for the treatment and management of child HIV were more heterogeneous, falling into one of three types: stand-alone child guidelines



(Mozambique, South Africa, Swaziland and Zambia), comprehensive guidelines with a child-specific chapter (Angola, Botswana, Mauritius, Tanzania and Zimbabwe), and guidelines in which each component was addressed at adults and children without a specific chapter dedicated to children (DRC, Lesotho, Malawi, Namibia).

The quality of the content did not depend on the type of document. For 7 Member States (Botswana, Mauritius, Namibia, South Africa, Swaziland, Zambia and Zimbabwe), independent stand-alone HTC guidelines (either for all ages or paediatric-specific) were available, while 7 countries shared stand-alone PMTCT guidelines (Botswana, Lesotho, Namibia, South Africa, Swaziland Zambia and Zimbabwe) and 1 country had post-exposure prophylaxis guidelines (Swaziland; see Annex 5). The following analysis pertains to Tables 6-11 in Section 6.1.1.

The components in the prevention sub-area (HTC, PMTCT, sexual transmission/SRH, PEP and male medical circumcision) were not harmonised across all strategic frameworks/plans (see Table 6) and the guidelines also varied between countries (see Tables 7-11).

For HTC, the most components that were most consistently addressed in the guidelines were provider-initiated testing and counselling, the principle of voluntary testing and the principles of counselling, consent and confidentiality. However, some of the components missing from the guidelines of some Member States (see Table 7). Age of consent varied widely from 12-18 years; it was 12 years in Lesotho and South Africa, 15 years in Angola and Seychelles, 16 years in Botswana, Swaziland, Zambia and Zimbabwe, 18 years in Mozambique and Tanzania, and unspecified in the other Member States. There were provisions enabling minors who are under age to give consent in 6 countries (Botswana, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe). In each case the provision applied to married children and to children who are pregnant or who have children. Two countries (Swaziland and Tanzania) extended this to all sexually active children, while one (Botswana) also included children who run their own businesses.

For PMTCT, coverage of prongs 1-4 was similar, but different programmatic options were chosen. Eight countries (Lesotho, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) chose Option A, four (Angola, Botswana, DRC, Mauritius) chose Option B and one (Malawi) chose Option B+.

The PEP sub-components that were covered in the guidelines were similar across countries, except for the omission of referral to medical, legal and psychosocial services (in DRC, Malawi, Mauritius and Zambia), and of training on PEP at child-referral points in some Member States (Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique and Namibia).

Male medical circumcision was covered in similar fashion in the strategic frameworks/plans, but was generally not covered in the guidelines (neonatal male circumcision was not covered in any Member States, and child male circumcision was only covered in Botswana, Swaziland and Tanzania).

Diagnosis (use of rapid, serological or virological tests) was addressed in highly similar manner in the various countries, and the international recommendations on when to use each test were covered in similar fashion in the guidelines of all Member States (see Table 9).

Components of the treatment, care and support sub-area⁵⁸, meanwhile, varied widely (see Table 10). The first-line ART regimens differed between across countries. Although 12/13 chose AZT (all except South Africa, who only uses ABC) and all chose 3TC, some also use ABC (Angola, Lesotho, South Africa, Tanzania and Zambia) or d4T (DRC, Mozambique, Namibia, Tanzania and Zambia).

For NNRTI, some Member States (Angola, Botswana, Lesotho, Mozambique, Tanzania and Zambia) recommended NVP for children under 3 years and EFV for children over 3 years while others did not. Some Member States (Botswana, Lesotho, Mozambique, Namibia, Swaziland, Tanzania and Zimbabwe) switched to an LPV-containing regimen for children exposed to NNRTI, while others (DRC, Malawi, Mauritius, Zambia) did not do so (see Table 9).

Fixed-dose combinations are becoming available in some countries, but not in others (for example, Angola and DRC). Such lack of hamonisation could complicate efforts to develop region-wide distribution systems for medicines, for instance.



Member States all stipulated provision of ART to HIV-positive children in WHO stages 3 and 4, irrespective of CD4 count; 10 of 13 Member States provide treatment for children under 5 if their CD4 count is ≤750 cells/mm³ or %CD4 ≤25, and to children above 5 with CD4 counts ≤350 cells/mm³, irrespective of WHO clinical stage. But stipulations differed on when to provide treatment to children under 2 years who are at higher risk of rapid progression. Half the Member States (Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania) have moved towards universal provision of ART in HIV-positive children younger than 2 years, irrespective of CD4 or clinical status, while the others apply this rule only to children under 1 year.

In similar fashion, provision of co-trimoxazole prophylaxis is standardised across Member States for children older than 2 years. However, some member States provide universal CPT to children younger than 2 years, while others do so only for children younger than 1 year. Clinical and CD4 monitoring are generally homogeneous across countries, but use of viral load and drug resistance testing is not (see Table 10).

Countries homogeneously had advocacy, communication and social mobilisation and M&E sections in their strategic plans/frameworks, although none of the former sections were child-specific. Similarly, there is variability across countries in the reporting of age- and sex- disaggregated data, and of child and adolescent indicators (see Table 6).

As for other issues, inclusion of health system strengthening and supply chain management sections in strategic plans/ frameworks was universal in all Member States. Child- and/or adolescent-friendly services were covered in similar fashion across the Member States (with the exceptions of DRC and Mauritius). Task-shifting policies, on the other hand, were mentioned in 10 of 13 Member States, but there was wide variation in the level of detail provided. For example, some policies clearly delineated the laws authorising task-shifting of particular activities (Malawi, Namibia and South Africa), while others (in Botswana, Tanzania, Zambia, Zimbabwe) vaguely mentioned the term and the types of task-shifting activities that were approved (such as nurses to initiate ART treatment, to provide follow-up for stable patients or to perform neonatal male medical circumcision; lay counsellors or community health care worker to provide HTC) (see Table 6).

Tuberculosis. TB strategic frameworks/plans from Member States were fairly homogeneous in their structure. However, three types of clinical guidelines for treatment and management of child TB were found. The majority were guidelines for adults and children that comprised a child-specific chapter (Angola, Botswana, Lesotho, Malawi, Namibia, South Africa, Swaziland, Zambia and Zimbabwe), while Mozambique had a stand-alone child guideline document, and Mauritius and Tanzania had guidelines that lacked a specific chapter dedicated to children (although child issues were covered alongside adults) (see Annex 5). The quality of the content did not depend on the type of guidelines. The following analysis pertains to Tables 12-15 in Section 5.1.2.

The coverage of the components of the prevention subearea that were assessed (BCG immunisation, screening of children that are household contacts of a source case, and provision of IPT), was homogeneous across the guidelines.

BCG immunisation, although not consistently covered in TB strategic frameworks/plans, is universally used in the region, and all Member States are providing it to children at birth. However, there are discrepancies in its application to HIV-exposed children, and this variability appears to be linked to the severity of the TB epidemics in Member States. All guidelines, in keeping with international recommendations, stipulate the screening of children in household contact with a newly diagnosed TB case, and provision of IPT to all children under 5 years and to children living with HIV of all ages who have been in contact with a source case (see Tables 12 and 13).

The diagnosis sub-area is highly harmonised across the guidelines of Member States. All countries cover the use of clinical history and examination, chest X-rays, tuberculin tests, smear-microscopy on sputum (for older children that can produce it) and bacteriological culture in sputum, induced sputum or gastric aspirate (in younger children who are usually smear negative). The only component showing variability was the new molecular diagnostic tool, Xpert MTB-RIF, which was included in the guidelines of three countries only (Botswana, Malawi and Swaziland), although this may have been due to the fact that the WHO recommendation on its use had been issued quite recently (see Table 14).

The components in the treatment, care and support sub-area⁵⁹ showed greater variation across Member States than those in the prevention and diagnosis sub-areas. The recommendations covered in most of the guidelines were the provision of DOTS to children of all ages, the principle of "no treatment-guided diagnosis" (i.e. not using a treatment trial to diagnose TB infection; once treatment is started it has to be completed), weight-adjusted doses and adherence counselling for parents or caregivers.



There was greater variation around other components, such as the inclusion of ethambutol in the intensive phase of treatment, the times for follow-up, the supervision by a health care worker when parents provide DOTS, the provision of ART and CPT to children, and nutritional support. Psychosocial support was absent from all Member State guidelines (see Table 15). Community-based TB care, on the other hand, was included in the strategic framework/plans of all Member States, but was not specifically geared to children (see Table 12).

Strategic plans/frameworks from all Member States included a chapter on advocacy, communication and social mobilisation, and M&E, although the former sections were not child-specific. For M&E, TB child indicators and reporting of age- and sex-dissagregated data were lacking in most Member States, with a few exceptions (see Table 12).

Health system strengthening and supply chain management sections featured in all the TB strategic plans/ frameworks, but provisions for child- and/or adolescent-friendly TB services were lacking in all Member States. The homogeneity or otherwise of task-shifting policies could not be assessed because the documents did not include enough information on those practices (see Table 12).

Malaria: SADC Member States are highly heterogeneous in their malaria risk. Consequently, seven Member States have malaria control plans (Angola, DRC, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe), while four (Botswana, Namibia, South Africa and Swaziland) have malaria elimination plans. It is important to bear these differences in mind when analysing harmonisation. Even though the components covered in both types of plans are very similar, some are deal with differently. Clinical guidelines for treatment and management of malaria are highly similar in structure, with all of them covering children and adults (i.e. without child-specific chapters), although specific requirements for children were included. The following analysis pertains to Tables 16-19 in Section 5.1.3.

In the prevention sub-area, the IRS component was featured in most Member States (except for Lesotho, Mauritius and Seychelles), since this strategy is used both in Member States in the control and elimination stages. Use of ITNs was covered in all Member States, as well, although the recommendations and child-specificity varied. Member States in the control phase prioritised children and pregnant women, while those in the elimination phase (and others, such as Malawi and Zimbabwe) aim for universal coverage (1 net per 2 people). South Africa is an exception, and its elimination plan is based mostly on IRS, although the provision of ITNs as a complementary strategy is to be evaluated.

Member States in the control phase cover SP-IPT for pregnant women (SP-IPTp), while those in the elimination phase (with low, endemic malaria) recommend chemoprophylaxis for pregnant women travelling to malaria-risk areas. However, Namibia includes SP-IPTp for areas in the country with moderate-to-high transmission (see Table 17).

The components that are most harmonised across countries are in the malaria diagnosis sub-area (and in the HIV and TB diagnosis sub-area). RDTs and microscopy, the diagnostic tools used for malaria, are not specific to children and apply to the entire population. They therefore are covered in all countries. Countries in the malaria elimination phase aim to provide parasitological confirmation of every case, either by microscopy or RDT. Countries in the control phase, while aiming to strengthen diagnostic capabilities, still allow for treatment upon clinical diagnosis when RDT and microscopy are not available (Tables 16 and 18). Because delays in malaria treatment can be fatal, all countries include provisions to start treatment without awaiting parasitological confirmations, if the latter are delayed. In addition, drug resistance monitoring is covered in all countries (Table 18).

In the treatment, care and support sub-area, almost all Member States endorse artemisinin combination treatment (ACT) for uncomplicated P. falciparum malaria as first-line drugs in adults and in children above 5 kilogrammes, in fixed-dose four-age combinations of Arthemeter-Lumefantrine. The DRC is the only exception: it uses Artesunate-Amodiaquine. For treatment of severe P. falciparum malaria, countries use quinine as a first line choice. The sole exception is again the DRC, which implements intravenous artesunate, in accordance with the latest WHO recommendations.

Referral of children with severe malaria to the highest level of care is homogeneously covered in the majority of countries as well, along with provision of a pre-referral treatment. However, the drugs used vary across countries (six use intramuscular quinine and three use rectal artesunate, and the choice is unrelated to the country's malaria elimination stage).



Nutritional and psychosocial support, and child and social protection were absent from almost all the malaria strategic plans (Table 19) and guidelines of Member States. Botswana was the exception, since its guidelines include nutritional support (Table 19). Community-based care strategies, without being specifically for children, were homogeneously covered in the majority of Member States (Table 19).

The malaria strategic plans/frameworks of all countries, whether in the control or elimination phase, included an ACSM and M&E chapter, although the ACSM sections were not children-specific. For M&E, malaria paediatric indicators (for children under 5 years) were homogeneous across Member States in the malaria control phase, but absent in countries in the malaria elimination phase. This is because, as the number of cases diminishes, the focus shifts from reporting cases in children under and above 5 years to reporting all cases collectively. Reporting of age- and sex-dissagregated data was included in some countries (such as Swaziland and Tanzania) but not in others (Table 16).

Inclusion of health system strengthening and supply chain management sections in malaria strategic plans/frameworks was universal, and provisions for child- and/or adolescent-friendly malaria services were lacking in all Member States. Coverage of task-shifting practices was mixed and was not linked to a country's malaria elimination phase. Some forms of task-shifting practice were included in the malaria strategic plans of four countries (Malawi, Mozambique, Tanzania and Zambia), but not in the others (Table 16).

The SADC Secretariat has agreed on various sets of Minimum Standards for HIV, TB and malaria. These guidelines, although geared mainly toward adults, can serve as a basis to guide harmonisation in the region. However, the documents were not yet referenced in Member States' strategic frameworks and plans, and interviews with key informants suggested that they were not well-publicised in Member States.

In summary, malaria policies and programming frameworks appeared to be more harmonised than TB ones, with HIV policies and frameworks the least harmonised. This may be due to clearer, simpler or more longstanding international recommendations, better alignment of country documents with international recommendations, or a combination of those factors. As for regional harmonisation, regional guidelines such as the SADC Minimum Standards and Frameworks were not well- known or used in Member States, which suggests that these documents are not reaching key stakeholders. Moreover, components from certain sub-areas seem to be more harmonised than others across countries and across diseases—namely diagnosis and advocacy, communication and social mobilisation, and inclusion of health system strengthening and supply chain management. The prevention, treatment, care and support sub-areas in general for HIV, TB and malaria seem to be the least harmonised across countries, and this is particularly true for HIV.

6.3.2 Harmonisation in the integration of policies and programming frameworks

Integration of HIV, TB and malaria services into primary health care is covered in strategic frameworks and plans of all Member States. However, the specific details of integration vary (Table 20).

With respect to integration between diseases, countries have incorporated the integration of HIV-TB in terms of collaboration across programmes, as well as the integration of services (referrals and/or services that are provided under the same roof, such as HTC and CPT in TB clinics, and screening for TB and provision of IPT in ART clinics), and the integration of M&E (through the use of common indicators, for example). However, the joint budgeting and planning component is absent in almost all Member States, the exception being South Africa, which has a single strategic framework/plan for HIV, TB and STIs (see Table 20).

The integration of HIV and basic services for children was homogenously covered in the HIV and AIDS strategic frameworks/plans of almost all countries (except for Mauritius; see Table 21). Integration of TB and basic services for children is more piecemeal and appears in various sections of the TB strategic framework/plans of Member States. Some Member States (Lesotho, Malawi, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe) cover nutritional support, some (Angola, Botswana, Malawi, Namibia, South Africa, Swaziland, Tanzania, Zambia) cover psychosocial support, and some (Botswana, Malawi, Namibia, South Africa, Swaziland, Tanzania, Zambia) cover certain components of child and social protection (Table 12). Basic services for children are completely absent from the malaria strategic frameworks/plans of all the Member States (Table 16).

The contents of national action plans for children and/or orphans and vulnerable children were fairly homogeneous across Member States. They all included health care, food security and nutrition, shelter/placement in foster families, birth registration, early childhood development, primary education, secondary education/vocational training, psychosocial support, social/legal protection and income-generating skills. There were a few exceptions: shelter was not covered in Angola, early childhood development was not covered in Zimbabwe, secondary education/vocational training was not covered in Swaziland and Zambia, and income-generation skills were not covered in Angola and Namibia). In all countries, the national action plans included issues concerning children who are infected with or affected by HIV. However, issues concerning children affected by TB or malaria were not specifically included.



In summary, issues related to integration require greater standardisation across Member States. HIV-TB integration is fairly common, but it is lacking in many aspects. As for the integration of basic child care services into disease-specific services, HIV policy and programming frameworks appear to have made the most progress, with strategic framework/plans of all Member States covering most basic child care services. This may be due to the fact that HIV, unlike TB and malaria, has long been recognised as a cause of vulnerability and orphanhood in children, while there is still a need to highlight the link between TB and malaria and child vulnerability. The integration between HIV programmes and basic child care services can be used as a model upon which to develop the integration of basic child services into TB and malaria programmes.

6.3.3 Domestication of policies and programming frameworks

In general, the degree of harmonisation of policies and programming frameworks across Member States seems to stand in inverse relation to the degree to which policies are domesticated. Malaria (of course depending on a country's elimination phase) and TB documents were fairly homogeneous and generally in line with international recommendations, while HIV documents tended to be more domestically specific. For instance, countries have decided on different PMTCT options and have chosen different ART first-line drug regimens for children, thereby adapting international guidance to their specific contexts, taking into account resource availability and epidemic burden.

Two interesting examples of domestication seen among the country documents were South Africa's National Strategic Plan on HIV, STIs and TB (2012-2016) and Malawi's National HIV and AIDS Strategic Plan (July 2011-June 2016). South Africa's plan has merged HIV and TB into a single document, allowing for a strong shift towards greater integration for these two diseases and STIs. Malawi's plan proposes a series of strategies and trade-offs to maximise the use of resources to achieve the greatest impact against HIV. These choices include moving towards PMTCT Option B+, starting all children under 2 years on ART, determining strict timelines for the use of viral load post-ART but not supporting CD4 monitoring post-ART, and providing CPT to all children living with HIV irrespective of age, clinical or immunological status.

Importantly, domestication can be done at the national or regional level, and SADC has prepared a series of Minimum Standards documents that can be used by countries as a basis for such domestication, guided by regional recommendations. However, interviews with key informants and service providers revealed limited familiarity with these SADC documents across Member States.

6.3.4 Gaps and opportunities in harmonisation

Gaps				
Common for the three diseases				
M&E No harmonisation of recommendations for sex- and age-disaggregation of data in M&I of HIV, TB and malaria strategic framework/plans of Member States.				
Task-shifting	Task-shifting policies are not harmonised across the region.			
	Lack of harmonisation on how to integrate of HIV, TB and malaria to primary health care.			
Integration	Lack of harmonisation on the integration of basic child services to TB and malaria services programmes across Member States.			
HIV				
Prevention	The age of consent for HTC and provisions for minors who can give consent below that age (for example, when married or pregnant) are not harmonised across Member States.			
	PMTCT programme options are not standardised across countries.			
Treatment, care and support	Choice of first-line drug regimen for children is not harmonised across Member States.			
	Provisions for universal ART (i.e. irrespective of immunological or clinical stage) and CPT in children are not harmonised across Member States.			
Tuberculosis				
Diagnosis	Use of Xpert MTB-RIF molecular diagnosis of TB for children is not included in all countries			



Treatment, o	care	There is a lack of harmonised coverage of nutritional and psychosocial support for children with malaria across the region.				
Malaria						
		Provisions for nutritional support are not harmonised across countries.				
Treatment, care and support		The requirement to provide ART and CPT to children diagnosed with TB disease is not harmonised across the region.				
	care	Details on who provides DOTS for children and whether this is supervised by a health care worker are not harmonised across the region.				
		Follow-up of children treated for TB was not harmonised across Member States.				
	Ethambutol is not universally used in the intensive phase of treatment in children.					

Opportunities

- Countries are moving towards greater integration of HIV, TB and malaria into primary health care, and between
 disease-specific services and basic child services, which presents an important opportunity to build momentum for
 integration in a harmonised manner across the region.
- Strong models of HIV-TB integration exist across the region and can be used as a basis to guide harmonisation.
- Basic child-care and HIV services are integrated in strategic frameworks/plans, providing a model on which to build a similar harmonised integration of these services for TB and malaria services.
- Existing regional SADC Minimum Standards on HTC, PMTCT, malaria, as well as the SADC Minimum Package of Services for orphans and vulnerable children can serve as a basis for regional harmonisation.



7. DISCUSSION

This rapid assessment shows that there is an enormous opportunity for integration and harmonisation of child and adolescent HIV, TB and malaria policies and programming frameworks in a continuum of care in the SADC region. Strong political will exists in SADC and its Member States, and the foundations for such integration and harmonisation are already in place.

With regard to the content of policies and programming frameworks, the existing strategic frameworks/plans and guidelines for HIV, TB and malaria generally address child- and adolescent-specific coverage adequately and in line with international recommendations in the areas of prevention, diagnosis, treatment, care and support, as well as for M&E. Advocacy, communication and social mobilisation, health systems strengthening and supply chain management are also included in all country documents, but these are not normally geared towards child and adolescent issues.

HIV-TB integration is now considered a pillar of all HIV and TB strategic frameworks/plans and is also systematically included in clinical guidelines, which should pave the way for similar integration with malaria. HIV and AIDS strategic frameworks/plans also have strong links to basic services for children, and make the case for gearing those services towards children made vulnerable by HIV. Those frameworks and plans provide a model for similar integration of basic child services into child and adolescent TB and malaria policies and programming frameworks. In addition, locally developed best practices, such as "teen clubs" and CHBC programmes, can be used as models to help provide such care. Member States have strong national action plans for children and/or orphans and vulnerable children, with good coverage of basic services for children, as set out in the SADC Minimum Standards for orphans and other vulnerable children and youth.

The high level of homogeneity of policies and programming frameworks for malaria (depending on countries' malaria elimination phases) and, to a lesser degree, for TB shows that harmonisation can be achieved across Member States. Moreover, the existence of regional SADC key guiding documents setting out Minimum Standards of care and psychosocial support for orphans and other vulnerable children and youth, as well as Minimum Standards for HIV, TB and malaria and a harmonised surveillance framework, provides a solid basis for building harmonisation.

Despite important progress in child health in the region, and the opportunities mentioned earlier, major challenges remain:

- Rates of MTCT of HIV are still high in many Member States;
- The provision of ART for children is lagging behind coverage for adults;
- TB disease in children remains under-diagnosed; and
- Treatment for malaria barely reaches a third of children under 5 even though the majority of malaria deaths occur in children.

In general, child and adolescent access to prevention, diagnosis and treatment services for HIV, TB and malaria is still limited in the SADC region, especially at community level. The assessment shows a need for greater attention on:

- Child-specific issues in prevention (for example, strengthening child and adolescent HTC and PEP, systematic screening for TB of children who in contact with a source case, and provision of ITNs to protect against malaria);
- Diagnostics (especially for child TB), and
- Treatment and care (scale-up of ART treatment, routine clinical follow-up suitable for children's and adolescents' needs, fine-tuning community and home-based care systems to cover children).

Gaps in child coverage of advocacy, communication and social mobilisation programming frameworks, clear definitions of task-shifting responsibilities concerning children and adolescents, provision of child- and adolescent-friendly services, and age- and sex-disaggregated M&E data, will also need to be addressed.

Greater effort is needed in relation to integrating HIV-malaria and TB-malaria, and integrating disease-specific services into basic child care services (including, among others, nutritional and psychosocial support, and child and social protection, and ensuring that those services are accessed by all children made vulnerable by HIV, TB and malaria). Finally, harmonisation of policies and programming frameworks across the region, particularly for HIV, remains a key challenge as SADC Member States move towards a child and adolescent continuum of care for HIV, TB and malaria.

This assessment highlights existing opportunities and shows how these can be harnessed with the concerted efforts of SADC Member States towards integration and harmonisation to build a continuum of care for children and adolescents.



The importance of adequately targeting services for children is widely recognised in HIV policies and programmes, but tends to be neglected for TB and malaria. Child-friendly services should be provided as a continuum across the three diseases, and the special needs of adolescents need to be addressed to ensure adherence to treatment and follow-up, as well as to link them with SRH services. Strengthening of community health care systems, could facilitate scale up and ensure wider coverage of children who need these services. Community involvement can take many forms, including task-shifting prevention and diagnostic tasks (or even first-line treatment for uncomplicated malaria) and referral, support and other activities. As shown by some of the best practices reported here, community and home-based care programmes, if integrated with HIV, TB and malaria health facility-based services, could also be used to provide basic child care services.

Integration between HIV and TB programmes is strongly emphasised at the policy level and implementation is being strengthened. These efforts should be replicated to ensure closer collaboration and integration of malaria programmes with HIV and TB programmes. Integration of services under the same roof (the "one-stop" approach), which is being implemented for some HIV and TB programmes, needs to ensure that appropriate TB infection control measures are in place to protect children living with HIV. If this "one-stop" approaches is expanded to malaria, it could have a positive impact for the communities, reducing travelling costs for people seeking care—which was an important concern and a barrier to seeking health care services documented throughout this assessment.

Limited human resources and restricted child and adolescent skills among available staff constitute further challenges. The SADC project for which this assessment was undertaken ("Scaling up of Paediatric HIV, TB and Malaria Continuum of Care in the Region"), which emphasises integration and harmonisation of services, could provide opportunities for regional training programmes for health care workers in key child and adolescent areas. It could also offer models for task shifting policies on the basis of lessons learned in Member States that have already implemented such policies. Task shifting of diagnosis and treatment of malaria to nurses and community health workers is well established, as is the provision of DOTS and contact tracing services by community health workers in TB programmes. These practices could also serve as models for implementing task-shifting of HIV diagnosis and treatment for children, and for TB diagnosis (if simpler diagnostic tools become available).

Integration of supply chain management systems for HIV, TB and malaria could help reduce costs and ensure availability of drugs and diagnostic kits for all three diseases at the same health facilities. In addition, best practices such as the use of mobile technology for malaria drug supply can be replicated across systems and scaled up. As harmonisation of diagnostics and drugs for the three diseases is strengthened across Member States, collaboration in production, procurement, quality assurance, distribution and logistics management systems might offer further opportunities to reduce costs and manage stock-outs of drugs and other essential supplies.

The assessment also showed that an emphasis on children was very limited around M&E, with strategic frameworks/plans for the three diseases rarely stating the need for disaggregation of data by age and sex.

The challenge of M&E for children begins with the definition of a child, and with international indicators for children. While WHO (as well as SADC) defines a child as an individual under 18 years, and defines an adolescent as a person between 10 and 19 years, international indicators for HIV use 0-14 and 15-24 year categories. International TB indicators are usually divided into 0-4, 5-14 and 15-24 year categories. Malaria indicators, on the other hand, are reported internationally against 2 age groups: under and above 5 years. A recent study suggests that the number of malaria cases and deaths among older children could be higher than originally thought⁶⁰, which might point to a need for more age categories in order to adequately monitor malaria in children.

The adequate separation of children under 18 years, without reporting them collectively with older individuals, the expansion of age categories so that different vulnerabilities across ages can be assessed, and the harmonisation of age categories across the three diseases all need to be addressed. The SADC effort towards "Scaling up of Paediatric HIV, TB and Malaria Continuum of Care in the Region", provides an important opportunity for doing so. However, standardisation of M&E indicators and age categories across the SADC region will have to be compatible with international categories, so as not to increase the reporting workload.

The lack of child TB indicators is another important challenge, not only in the SADC region but globally. Currently, the only international, paediatric-specific TB indicators are the percentage of BCG immunisation coverage, the number of



children orphaned by TB and the notification of smear-positive cases in children under 15 years. ⁶¹ The latter indicator is of limited value, since many TB cases in children, particularly younger children, are smear-negative. Improved reporting and recording of data on childhood TB is one of the short-term strategy priorities in the STOP TB Roadmap to address childhood TB. ⁶² Harmonisation of M&E systems and indicators across the SADC region could offer an opportunity for Member States to propose additional indicators that can inform the effort to tackle child TB at the global level.

This assessment has shown that, while important gaps in policy and programming frameworks in child and adolescent HIV, TB and malaria exist across SADC Member States, there are also strong foundations and important opportunities for scaling up a harmonised continuum of care for the three diseases and for integrating them with basic child services. Seizing those opportunities could have a marked impact on child health, survival and development in the region and thus help SADC Member States achieve MDGs 4 and 6 by 2015.



8. **RECOMMENDATIONS**

The recommendations generated by the findings of this assessment are presented in this section. The recommendations that have been used to inform the development of Minimum Standards are highlighted.

Common to the three diseases Community services and community- and home-based care Advocacy, communication and social mobilisation Revise advocacy, communication and social mobilisation sections in strategic framework/ plans and guidelines to include strategies to cover children. Minimum Standard. Revise M&E sections of strategic frameworks/plans to include dissagregation of child and adolescent data by sex and age, using age categories that maximise the ability of Member States to tailor interventions to specific age groups, while allowing for easy reporting to donors. Analyse mechanisms to integrate M&E systems/platforms for the three diseases. Allocate adequate financial and technical resources to train, attract and retain health care workers with skills in child and adolescent HIV,TB and malaria. Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E, based on existing models for HIV-TB integration. Mirimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria. based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through	Recommendations to Member States				
services and community- and home-based care Advocacy, communication and social mobilisation Revise advocacy, communication and social mobilisation sections in strategic framework/ plans and guidelines to include strategies to cover children. Revise advocacy, communication and social mobilisation sections in strategic framework/ plans and guidelines to include strategies to cover children. Minimum Standard. Revise M&E sections of strategic frameworks/plans to include dissagregation of child and adolescent data by sex and age, using age categories that maximise the ability of Member States to tailor interventions to specific age groups, while allowing for easy reporting to donors. Analyse mechanisms to integrate M&E systems/platforms for the three diseases. Allocate adequate financial and technical resources to train, attract and retain health care workers with skills in child and adolescent HIV,TB and malaria. Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective r	Common to the three diseases				
results advocacy, communication and social mobilisation of plans and guidelines to include strategies to cover children. Minimum Standard. Revise M&E sections of strategic frameworks/plans to include disagregation of child and adolescent data by sex and age, using age categories that maximise the ability of Member States to tailor interventions to specific age groups, while allowing for easy reporting to donors. Analyse mechanisms to integrate M&E systems/platforms for the three diseases. Allocate adequate financial and technical resources to train, attract and retain health care workers with skills in child and adolescent HIV,TB and malaria. Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	services and community- and	HIV, TB, malaria and basic child services in communities, through CHBC programmes for			
dissagregation of child and adolescent data by sex and age, using age categories that maximise the ability of Member States to tailor interventions to specific age groups, while allowing for easy reporting to donors. Analyse mechanisms to integrate M&E systems/platforms for the three diseases. Allocate adequate financial and technical resources to train, attract and retain health care workers with skills in child and adolescent HIV,TB and malaria. Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Child- and adolescent- friendly services for HIV, TB and malaria. Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	communication and				
Health system strengthening and supply chain management Allocate adequate financial and technical resources to train, attract and retain health care workers with skills in child and adolescent HIV,TB and malaria. Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Child- and adolescent- friendly services Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	M&E	dissagregation of child and adolescent data by sex and age, using age categories that maximise the ability of Member States to tailor interventions to specific age groups, while			
Health system strengthening and supply chain management workers with skills in child and adolescent HIV,TB and malaria. Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Child- and adolescent- friendly services Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.		Analyse mechanisms to integrate M&E systems/platforms for the three diseases.			
Expand capacity to provide HIV viral load and drug resistance testing, TB bacteriological culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for children through national and supranational laboratories and centres of excellence. Task-shifting Clearly outline task-shifting/task-sharing policies for child and adolescent HIV, TB and malaria prevention, treatment and care to protect and guide service providers. Child- and adolescent- friendly services Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	-				
Child- and adolescent- friendly services Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	and supply chain	culture and drug sensitivity testing and Xpert MTB-RIF molecular diagnosis of TB for			
adolescent- friendly services Minimum Standard. Strengthen availability of child- and adolescent-friendly services for HIV, TB and malaria. Minimum Standard. Ensure that strategic frameworks/plans for HIV, TB and malaria articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	Task-shifting				
articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for HIV-TB integration. Minimum Standard. Include nutritional and psychosocial support, child and social protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	adolescent- friendly				
Integration protection, and other basic child services in strategic frameworks/plans for TB and malaria, based on those for HIV and AIDS. Ensure basic services for children are correctly publicised and strengthened through effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.		articulate integration between programmes (joint budgeting and planning, collaboration between programmes, integration of services and M&E), based on existing models for			
effective referral linkages in communities so clients have consistent access. Scale up local best practices that provide integrated services for children affected by HIV, TB and malaria.	Integration	protection, and other basic child services in strategic frameworks/plans for TB and			
TB and malaria.					
HIV					
		HIV			



Prevention	Minimum Standard. Ensure that guidelines for HTC clearly indicate the age of consent, circumstances when minors can give consent at an earlier age (for example, married, pregnant or sexually active children), and procedures for instances where it is in the best interest of a child to perform an HIV test, but parental or guardian consent cannot be obtained.				
	Revise PMTCT policies and implementation experiences, as well as progress towards eliminating MTCT by 2015, and evaluate whether a move towards Option B or Option B+ can be cost-effective and adequately supported.				
	Minimum Standard. Strengthen PEP services by training of personnel at referral points relevant for children, and ensuring children requiring PEP are provided with legal, medical and psychological services.				
	Evaluate scaling up of neonatal and child male circumcision, according to national guidelines, by including in all strategic frameworks/plans and guidelines the training of service providers and by increasing demand via promotion of the procedure at all appropriate entry points.				
	Minimum Standard. Move towards provision of universal ART (i.e. irrespective of immunological or clinical stage) and CPT in all children living with HIV under 2 years.				
	Minimum Standard. Include protease inhibitor-based first-line treatment options for children exposed to maternal or neonatal non-nucleoside reverse transcriptor inhibitor in guidelines, according to international, evidence-based recommendations.				
Treatment, care and support	Minimum Standard. Revise strategic framework/plans and guidelines to include strict, routine follow-up of children living with HIV, including CD4 immuno-monitoring, viral load and regular TB and malaria screening.				
	Minimum Standard. Include in guidelines the use of drug resistance testing for children in second-line regimen failure and ensure adequate links to these services either at national or supra-national reference laboratories.12				
	Ensure paediatric HIV-TB co-infection components are addressed in strategic framewors/plans.				
	Tuberculosis				
	Minimum Standard. Ensure that strategic frameworks/plans address the screening of children household contacts from sources cases, and provision of IPT.				
Prevention	Minimum Standard. Ensure TB infection control guidelines are available and disseminated to health facilities.				
	Minimum Standard. Revise guidelines to cover HTC for all children suspected or diagnosed with TB, and evaluation of children living with HIV for TB at each visit.				
Diagnosis	Minimum Standard. Ensure that tools for the diagnosis of TB in children such as tuberculin tests, chest X-rays, induced sputum and gastric aspiration for sputum-smear and culture samples are covered in guidelines and strategic framework/plans.				
-	Revise strategic framework/plans and guidelines to include new molecular diagnostic tools, such as Xpert MTB/RIF technology.				



Treatment, care and support	Minimum Standard. Ensure clear guidance on how the DOTS strategy should be applied to children (by parent/guardian only, community or health facility DOTS).				
	Minimum Standard. Ensure that children diagnosed with TB receive four drugs (including ethambutol) in the initial phase of treatment.				
	Minimum Standard. Ensure that children living with HIV and diagnosed with TB have access to ART and CPT.				
	Minimum Standard. Delineate in strategic framework/plans and guidelines the strategies to ensure closer follow up of children with TB disease.				
	Malaria				
Prevention	In Member States with moderate to high malaria transmission areas, analyse the costeffectiveness and feasibility of implementing evidence-based chemo-prevention in children and infants at risk of malaria.				
Treatment, care and support	Minimum Standard. Change the first-line treatment of severe malaria in children from intravenous quinine to intravenous artesunate, in accordance with the latest international recommendations.				
	Minimum Standard. Amend guidelines to include strong referral systems, including pre- referral treatments to reduce the morbidity and mortality from severe malaria in children.				
	Include prioritisation of malaria services for vulnerable children, including through orphan and vulnerable children and community- and home-based care programmes.				
	Minimum Standard. Expand malaria community case management to fill the large unmet needs of children in communities with limited access to malaria treatment, preferably through integrated community case management of malaria, diahrroea and pneumonia.				

Recommendations for the SADC Secretariat level				
Harmonisation	Ensure accessibility to this Regional Assessment Report and regular update of this information in the situational assessment to inform progress in the region.			
	Develop Minimum Standards for child and adolescent HIV, TB and malaria to facilitate harmonisation of components across Member States.			
	Ensure wide circulation and advocacy to mainstream these into national policies and programmes.			
	Revise standards when relevant new international recommendations are issued.			
	Provide training and capacity building on these child and adolescent Minimum Standards.			
Integration	Working together with UN agencies and development partners (such as WHO), provide guidance to Member States on how to develop strong and harmonised integration of HIV, TB and Malaria into primary health care.			
	Promote harmonised integration of basic child services to HIV, TB and malaria services/ programmes, based on the HIV model and local best practices.			
M&E	Strengthen M&E of children issues by including child and adolescent indicators in the SADC Harmonised Surveillance Framework for HIV and AIDS, Tuberculosis and Malaria.			
Health system strengthening and supply chain management	Support Member States by contributing to strengthening health systems to provide comprehensive and integrated child and adolescent health services.			
	Promote harmonisation of procurement and supply chain management systems to enhance availability and accessibility of paediatric drugs and essential supplies.			



9. CONCLUSION

The main rationale for undertaking this regional assessment was to obtain data to inform a set of evidence-based Regional Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and Support. This regional assessment report compiles key findings and recommendations that allow for the development of a set of Minimum Standards that is firmly anchored in the various realities experienced across Member States.

The report highlights enormous opportunities for integration and harmonisation of child and adolescent HIV, TB and malaria policies and programming frameworks in a continuum of care in the SADC region. Strategic frameworks/plans and guidelines for HIV, TB and malaria exist and contain child-specific coverage in all the main areas that were analysed. Integration of malaria services into primary health care is already taking place, and HIV-TB integration is now considered a pillar of all HIV and TB strategic frameworks/plans. Moreover, a number of local best practices that provide integrated child services were encountered. Finally, malaria and, to a lesser extent, TB policies and programming frameworks are highly harmonised across Member States. Together with the existence of regional SADC key guiding documents, that provides a solid basis for developing broader harmonisation across SADC Member States.

Key challenges were also identified:

- National strategic frameworks/plans and guidelines need to reinforce child- and adolescent- specific needs in prevention diagnostics and treatment and care;
- Limited human resources and restricted child and adolescent skills among available staff, along with gaps in clear definitions of task-shifting responsibilities concerning children and adolescents are also important challenges;
- Adolescents are in dire need of youth-friendly services that meet their particular needs; and
- Important gaps were found in M&E for children and adolescents, due to inadequate disaggregation of data by age and sex, and a lack of harmonisation of age categories for reporting data on children across the three diseases.

In relation to integration, the assessment showed that HIV and TB in particular tend to be "vertical" programmes, and greater integration into primary health care systems is needed. While HIV programmes are linked to basic child services, this is not true for TB and malaria services, and basic child services are not being accessed by children made vulnerable by HIV, TB and malaria, which indicates limited implementation of integration strategies. Finally, there is need for stronger harmonisation across the region, particularly of HIV policies and programming frameworks.

Based on these opportunities and challenges, this report provides a series of recommendations, many of which are aimed at directly informing the Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and Support. The development and implementation of these evidence-based standards could have a marked impact on child health, survival and development in the region and could be key in helping SADC Member States achieve Millennium Development Goals 4 and 6 by 2015, and improve child survival and development beyond those target dates.



REFERENCES

BIPAI. Teen Club International. Available at www.bipai.org/About-BIPAI/Teen-Club-International.aspx.

Coker R, Balen J, Mounier-Jack S, Shigayeva A, Lazarus JV, Rudge JW, Naik N, Atun N. A conceptual and analytical approach to comparative analysis of country case studies: HIV and TB control programmes and health systems integration. Health policy and Planning. 2010;25:i21-i31.

Dondorp AM, Fanello CI, Hendriksen IC, et al. Artesunate vs. quinine in the treatment of severe falciparum malaria in African children (AQUAMAT): an open -label randomised trial. Lancet. 2010;376(9753):1647-57.

Du Cros P, Nyang'wa BT, Gale M, Venis S, Ford N. Counting children: comparing reporting for paediatric HIV and tuberculosis. Bulletin of the WHO Organization. 2011;89(12):855.

IUATLD. Desk-guide for Diagnosis and Management of TB in Children.

Kodner DL, Spreeuwenberg C. Integrated care: Meaning, logic, applications, and implications–a discussion paper. International Journal of Integrated Care. 2002;2:e12.

Moore DP, Schaaf HS, Nuttall J, Marais BJ. Childhood Tuberculosis guidelines of the Southern African Society for Paediatric Infectious Diseases. South African Journal of Epidemiology and Infection. 2009; 24(3).

Roll Back Malaria Partnership. Guidelines for core population-based indicators for malaria. Technical Papers Series, No.1. Geneva: Roll Back Malaria; 2004.

Roll back Malaria Partnership. World Malaria Day 2010: Africa Update. Progress and Impact Series No. 2. Geneva: Roll Back Malaria; 2010.

Roll Back Malaria Partnership. Eliminating malaria: learning from the past, looking ahead. Progress and Impact Series No. 8. Geneva: Roll Back Malaria; 2011.

SADC. Assessment methodology protocol. SADC Communicable Diseases Project. Component 5: Scaling-up Paediatric HIV, TB and Malaria Continuum of Care. Gaborone: SADC; 2012.

SADC. Capacity Building Plan 2012-2015. Monitoring and evaluation of orphans, vulnerable children and youth interventions in SADC. Gaborone: SADC; 2011.

SADC. Functions and minimum standards for national reference laboratories in the SADC region. Gaborone: SADC; 2012.

SADC. Functions and minimum standards for supranational reference laboratories and regional centres of excellence in the SADC region. Gaborone: SADC; 2011.

SADC. Gender mainstreaming guidelines for communicable diseases. Gaborone: SADC; 2011.

SADC. HIV and AIDS best practices series. The Inkwanca home-community based care model in South Africa. Gaborone: SADC; 2007.

SADC. HIV and AIDS Strategic Framework 2010-2015. Gaborone: SADC; 2010.

SADC. Harmonised Surveillance Framework for HIV and AIDS, Tuberculosis and Malaria in the SADC Region. Gaborone: SADC; 2009.

SADC. Harmonised Minimum Standards for the Prevention, Treatment and Management of Tuberculosis in the SADC Region. Gaborone: SADC; 2010.

SADC. Malaria Elimination Framework. Gaborone: SADC; 2010.



SADC. Malaria Strategic Framework 2007-2015. Gaborone: SADC; 2007.

SADC. Minimum Package of Services for Orphans, Vulnerable Children and Youth. Gaborone: SADC; 2011.

SADC. Monitoring and Evaluation Framework for Orphans, Vulnerable Children and Youth 2012-2015. Gaborone: SADC; 2011.

SADC. Pharmaceutical Business Plan 2007-2013. Gaborone: SADC; 2007.

SADC. Regional Conceptual Framework for Psychosocial Support for Orphans and Vulnerable Children and Youth. Gaborone: SADC; 2011.

SADC. Regional Minimum Standards for Harmonised Approaches to the Prevention of Mother-to- Child Transmission of HIV. Gaborone: SADC; 2009.

SADC. Regional Minimum Standards for the Harmonised Control of HIV and AIDS, Tuberculosis and Malaria in Militaries in the SADC Region. Gaborone: SADC; 2010.

SADC. Regional Minimum Standards for Harmonised Guidance on HIV Testing and Counselling in the SADC Region. Gaborone: SADC; 2010.

SADC. Regional Minimum Standards for the Prevention Treatment and Management of Malaria. Gaborone: SADC; 2010.

SADC. Regional Strategy and Action Plan for Universal Access to Prevention 2008–2010. Gaborone: SADC; 2008.

SADC. State of Tuberculosis in the SADC Region. Gaborone: SADC; 2008.

SADC. Strategic Framework and Programme of Action (2008-2015) for Comprehensive Care and Support for Orphans, and Vulnerable Children and Youth in SADC. Gaborone: SADC; 2008.

SADC. Strategic Plan for the Control of Tuberculosis in the SADC Region 2007-2015. Gaborone: SADC; 2007.

SAfAIDS. Inception Report for Component 5 Project: Technical Assistance towards Strengthening Prevention, Care and Treatment of Paediatric HIV, TB and Malaria in the SADC Region. Gaborone: SADC; 2011.

Stop TB Partnership. Combating TB in children factsheet. Geneva: WHO; 2012.

The Tuberculosis Coalition for Technical Assistance. International Standards for Tuberculosis Care. The Tuberculosis Coalition for Technical Assistance; 2011.

UNAIDS. Report on the Global AIDS Epidemic 2010. Geneva: UNAIDS; 2010.

UNAIDS. Summary Booklet of Best Practices in Africa. Geneva: UNAIDS; 2000.

United Nations General Assembly. Convention on the Rights of the Child. New York: United Nations General Assembly; 20 November 1989.

UNICEF. Children on the Brink. New York: UNICEF; 2004.

UNICEF. State of the World's Children. 2012. New York: UNICEF: 2012.

UNICEF. Committing to Child Survival: A Promise Renewed. Progress Report. New York: UNICEF; 2012.

Stop TB Partnership, WHO. Advocacy, communication and social mobilization for TB control: A guide to developing knowledge, attitudes and practice surveys. Geneva: WHO; 2008.

WHO. Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Recommendations for a Public Health Approach, 2010 Revision. Geneva: WHO; 2010.



WHO. Antiretroviral Therapy for Infants and Children, Report of the WHO Technical Reference Group, Paediatric HIV/ART Care Guideline Group Meeting. Geneva: WHO; 2008.

WHO. Antiretroviral Therapy for HIV Infection in Adults and Adolescents: Towards Universal Access, Recommendations for a Public Health Approach. Geneva: WHO; 2010.

WHO. Antiretroviral Therapy for HIV Infection in Infants and Children: Towards Universal Access, Recommendations for a Public Health Approach. Geneva: WHO; 2010.

WHO. Automated Real-time Nucleic Acid Amplification Technology for Rapid and Simultaneous Detection of TB and Rif Resistance. Geneva: WHO; 2011.

WHO. Child and Adolescent Mental Health Policies and Plans. Geneva: WHO; 2005.

WHO. Community Involvement in Tuberculosis Care and Prevention: Towards Partnership for Health. Geneva: WHO; 2008.

WHO, UNAIDS, UNICEF. Global HIV/AIDS Response. Progress Report. Geneva: WHO; 2011.

WHO. Global Tuberculosis Control. Geneva: WHO; 2011.

WHO. Guidance for National Tuberculosis Programmes on the Management of Tuberculosis in Children. Geneva: WHO; 2006.

WHO. Guidelines for Treatment of Malaria. Geneva: WHO; 2011.

WHO. Revision 1 on Guidelines for the Treatment of Malaria Guidelines 2nd Edition: Treatment of Severe P. Falciparum Malaria in Children. Geneva: WHO; 2011.

WHO. Improving Child Health. IMCI: Integrated Management of Childhood Ilnesses. The Integrated Approach. Geneva: WHO; 1997.

WHO. Intermittent Preventive Treatment for Infants Using Sulfadoxine-pyrimethamine (SP-IPTi) for Malaria Control in Africa. Implementation Field Guide. Geneva: WHO; 2011.

WHO. HIV and Infant Feeding: Revised Principles and Recommendations, Rapid Advice. Geneva: WHO; 2009.

WHO. Priority Interventions: HIV/AIDS Prevention, Treatment and Care in the Health Sector. Geneva: WHO; 2010.

WHO. Task-shifting. Rational Redistribution of Tasks among Health Workforce Teams. Geneva: WHO; 2008.

WHO. Technical Updates of the Guidelines on IMCI. Geneva: WHO; 2005.

WHO. World Malaria Report 2011. Geneva: WHO; 2011.

WHO, UNICEF. Countdown to 2015. Taking Stock of Maternal, Newborn and Child Survival, Decade Report (2000-2010). Geneva: WHO; 2011.

WHO, UNICEF. IMCI Complementary Course on HIV/AIDS. Geneva: WHO; 2006.

WHO, UNICEF. Scale-up of HIV-related Prevention, Diagnosis, Care and Treatment for Infants and Children. A Programming Framework. Geneva: WHO; 2006.

WHO, UNICEF, UNAIDS. A Guide on Indicators for Monitoring and Reporting on the Health Sector Response to HIV/AIDS. Geneva: WHO; 2009.



APPENDCES

Annex 1: titles and positionS of key informant interviewees

	Key Informant Interviewees
Country	Position of Respondents
Angola	CDC Country Director
	Deputy General Director, National AIDS institute
	Head of Unity for Development of Standards and HIV/TB Co-infection
	Head of Department of Administration and Services
	Head of Department of Epidemiological Surveillance
	Head of Malaria Programme (Ministry of Health)
	Director of the Paediatric Hospital
	General Director of the National Institute of Public Health
	Head of HIV Programme
	Head of TB Programme
	Head of Malaria Programme
	National Director for Medicines and Medical Equipments
	Provincial HIV focal Point
	UNICEF HIV AIDS Unit in charge
	UNICEF Child Survival & Development Chief Malaria Focal Point



Botswana

- AG Director DHAPC
- Chief Information Education and Communication Officer
- Chief, Young Child Survival Development
- Country Director
- I Tech, Dr Bazgeina WERG, SEMO
- Director of Programmes, Dr Frans Mwangenl
- Director of Public Health, Mr Moekwensenanye
- Director Clinical Services
- Global Fund Manager
- M&E Specialist, Mr Tim Chadbon
- Malaria Programme Manager
- MCH Focal Person
- Nursing Manager, OVC Coordinator
- Paedriatrician and Coordinator, Dr Musa & Dr Muwala
- PMTCT Project Manager
- Principal Health officer
- Social Mobilisation Advisor, Mr Irene Mana
- TB/HIV Advisor CDC Botswana, Dr Robert Makobe
- Training Coordinator



Lesotho	Clinical Officer, Paediatric HIV
	Director Disease Control
	Health Officer and PMTCT Officer
	HIV/AIDS M&E Officer
	Nursing Officer, HIV/AIDS
	Paediatrician
	Pharmacist
	PMTCT Programme Manager
	Laboratory Analyst
	Clinical Mentor
	Programme Manager
	Programme Manager, PMTCT/TB/HIV
	Senior Nursing Officer, HIV/AIDS
	Social Worker
	Technical Advisor
Malawi	Acting Country Director, CHAI
	Community Health Unit, MOH
	Country Director, UNC
	Country Representative, UNAIDS
	Director of Child Development
	Director of Nursing Services
	Director, Baylor
	HIV Prevention Programme Manager, UNFPA
	Medical Focal Point, Epidemiologist, Field coordinator, MSF
	PMTCT & Paediatric HIV Care & Child Health Specialist
	Principal M&E Officer
	Principal Secretary, Nutrition and HIV and AIDS Office of President and Cabinet
	Research Officer, NAC
	Senior Programme Manager for Maternal & Child Health, Save the Children



Mauritius	Director Of PILS
	Director of Women and Child Development
	Head of Chest Disease Clinic
	Head of the HIV Programme Int MOH
	National AIDS Coordinator
Namibia	Chief Manager TB Programme
	Chief Medical Officer
	Chief Pharmacist and Distribution Pharmacist
	Chief Policy Planning Officer (Ministry of Health)
	Director of Primary Health Care Services
	General Manager
	Technical Operations NIP
	M&E Officer HIV, Mr Alfons Badia
	 Maternal and Child Health Officer & Disease Prevention Control Officer, Dr Ghirmay Andemicheal & Dr Desta A Tiruneh
	National Coordinator Prevention of Malaria
	Division of Public and Environmental Health
	National Programme Coordinator, PMTCT
	Pharmacist
	Planning officer
	Programme Analyst
	National Programme Officer
	Senior Advisor (Paediatrician), Dr Brandt
	Senior Medical Officer
	HIV Case Management
	Pharmacy Coordinator for ART Logistics
	TB Programme Officer, Mrs A Thomas
	Technical Director, Dr K Chan & Dr A Ntumba
	Training Unit Manager, Positive Vibes
	Vector Control Officer

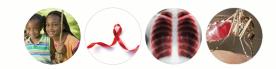


- Principal Counsellor Ministry of Education
- Nurse Manager Victoria Hospital
- Principal Social Worker, Ministry Of Social Development
- Principal Pharmacist Responsible, CDCU
- Director Of Pharmaceutical Services
- Chief Director, Child Health
- Child Health and School Programme
- Head Of AWD Health Promotion Officer

• Children Home Foundation

- Communicable Disease Nurse Manager, CDCU
- Control Officer, TB
- Communication Coordinator
- Director Epidemiology
- Head Of LUNGOS, Forum Of Civil Society Organization
- Nurse Manager at Youth Health Centre
- Primary Secretary Ministry of Social and Development
- Public Health Commissioner
- WHO Representative

Seychelles



South Africa	Director, Monitoring and Evaluation
	Deputy Director, Monitor and Evaluation
	Acting Chief Director
	Assistant Director, PMTCT
	Asst Manager, Nursing (PHC) Legotio-Rustenburg sub-district
	Chief Director, M&E Children
	Director HIV/AIDS Intersectoral and International Coordination Chief Directorate
	Deputy Director, TB clinical Management
	Director, Epidemiology and Surveillance (Department of Health)
	Director, DOTS Strategy Coordination
	Director, Paediatric TB (Department of Health)
	Director & Deputy Director, HIV/AIDS Prevention Unit
	Paediatric Met at Alex Clinic - Right to Care
	Social Work Manager, Care and Support
Swaziland	Case Management Officer (Ministry of Health)
	Country Director, EGPAF
	Director, Nutrition National Nutrition Council (MOH)
	Head of Clinical Services, Baylor
	National Paediatric ART Officer, SNAP
	Programme Officer, HIV/AIDS, UNICEF
	Programme Manager, IMCI
	Programme Manager, SNAP (MOH)
	School Health Coordinator (Ministry of Education)
	Senior Planning Officer (MOH)
	Technical Director, ICAP - URC



Tanzania	Assistant Director M&E, MoHSW
	Associate Technical Director, EGPAF
	Deputy Director TB/HIV-PATH
	Deputy Programme Manager, Malaria, NMCP-MOHSW
	Head, Care and Treatment Unit
	Health System Specialist - UNFPA
	PMTCT/Paediatric Technical Advisor, ICAP
	Programme Officer, NTLP
	Programme Officer, MDH
	Programme Officer, CHAI
	Quality Assurance Officer, Medical Stores Department
	Senior Regional Technical Advisor, FHI
	Team Leader, HIV/AIDS, UNDP
Zambia	ARV Programme Coordinator
	Deputy Director, Health and Research Malaria
	Deputy Director, Planning and Budgeting
	Executive Director
	Health Programme Manager
	HIV/AIDS Paediatric Care Specialist
	Logistics Manager
	M&E Officer
	National Programme Officer for Reproductive Health
	OVC Technical Officer, Senior TA, CRS Zambia
	Programme Manager, HIV/Malaria
	Programme Officer
	Programme Officer, HIV/AIDS (PMTCT) Specialist
	Programme officers, Home-Based Care & HTC, HIV/STI
	Reproductive Health Commodity Coordinator
	PMTCT M&E and Deputy Director, Epidemic Diseases Control
	TB Programme Manager



Zimbabwe

- Coordinator, National PMTCT & HIV Care & Treatment
- Country Representative UNAIDS
- Deputy Director, AIDS & TB Programmes
- Deputy Director, National Programme of Action for Children
- Director HIV and TB Programmes, Ministry of Health and Child Welfare
- Director Policy Planning and M&E, Ministry of Health and Child Welfare
- Director Finance and Administration, Ministry of Health and Child Welfare
- Director, Pharmacy Services
- Director Malaria Control programme, Ministry of Health and Child Welfare
- Director M&E, AFRICAID
- Director, NAC
- Manager, HIV Services, PSI
- Principal Director Policy Planning
- Programme Manager, ART
- Programme Managers, Paediatric HIV and AIDS, and Malaria Programme, UNICEF



Annex 2: service provider interviewees

		Service Provider Interviewees
Country	Type of Facility	Position of Respondents
	Tertiary	In Charge HIV clinic, Head
Angola	Secondary	Clinical Director, Director General, In charge Dr of OPD and Emergency
	Primary	Administrator
	Tertiary	Assistant Nursing Officer, Principal Registered Nurse
Botswana	Secondary	Principal Registered Nurse
	Primary	Nursing Officer In Charge, Principal Registered Nurse
	Tertiary	Acting Director, Medical Officer, ART Nurse, TB
Lesotho	Secondary	
	Primary	Nursing Assistant
	Tertiary	Coordinator – TB, HIV, Malaria
Malawi	Secondary	TB Malaria HIV Coordinators, TB, Malaria, HIV Officers
	Primary	Medical Assistant
N. 4	Secondary	Community Physician, Nurse in Charge, Pharmacy in charge, Regional Health Superintendent
Mauritius	Primary	Chief Medical Officer
Namibia	Tertiary	Medical Officer
	Secondary	TB Coordinator, OPD Manager, MIS officer
	Primary	MO in Charge, Registered Nurse
Seychelles	Tertiary	Paediatric ward
	Secondary	Nurse in Charge, Nurse Manager
	Primary	Nurse in Charge
	Tertiary	Deputy Director Nursing, Acting Director Quality Assurance, ANC, Manager
South Africa	Secondary	Medical Officer, Clinical Coordinator
	Primary	Facility Manager, Project Coordinator, Primary Health Care, Pharmacist, Dr ARV Clinic
	Tertiary	Female Medical Ward, Head Paediatric Dept, Nurse/Sister Paediatric Station, TB, ART Children ward nurses
Swaziland	Secondary	Senior Nurse Manager
	Primary	Nurse in Charge
	Tertiary	TB, HIV Officer
Tanzania	Secondary	Clinical Officer, DTLC Temek
	Primary	DTLC, Site Manager
	Tertiary	Nurse Counsellor Child
Zambia	Secondary	ART Nurse, TB Corner Nurse, OP, CMO, Matron, Senior Medical Officer
∠ambia	Primary	In Charge TB, ARV Clinics, MCH Coordinator
	Tertiary	Head, Matron, Pharmacist
Zimbabwe	Secondary	RGN, FCH, Water, Electricity
	Primary	Anaesthetists, RGN



Annex 3: health facilities visited

Country	Name of the facility
	Provincial Hospital of Bengo
	Paediatric Hospital David Bernadino
Angola	Municipal Health Centre Cacuaco
	Centro de Saude Ndala Muleba
	Hospital Municipal do Dande
	Serowe Clinic
Botswana	Sekoma Memorial Hospital
Botswaria	Scottish Livingstone
	Sekeowa Memorial Hospital
	Queen Mamahato Memorial Hospital
	Maluti Adventist Hospital
Lesotho	Mafiteng Hospital
	Tsakholo Health Centre
	Immaculate Health Centre
Malawi	Queen Elizabeth Central Hospital
	Mulanje District Hospital
	Namitambo Health Centre
	Namasalima Health Centre
	Chiradzulu District Hospital
	NDCCI
Mauritius	Chest Clinic
	Bamboos area H C
	Gobabis Clinic
Namibia	Katutura Intermediate Hospital
	Otjiwarongo Hospital
	Sechelles Hospital
	Anse Royale
Seychelles	Les Mamelles Health Centre
	Anse Bolleau
	English River Health Centre



	Bophelong Hospital
	Montshioa Stadt Clinic
South Africa	Tlhabane Health Centre
South Airica	Rahima Moosa Hospital
	Dr George Mkhari Hospital
	Lilian Ngoyi Community Care Centre
	Mbabane Hospital
	Raleigh Fitkin Memorial Hospital
Swaziland	Motjane Community Hospital
	Good Shepherd Hospital
	Balyor Clinic
	Temeke Municipal Hospital
	Bangamoto District Hospital
Tanzania	Mnazi Mmoja
	Bunguruni Health Centre
	Tumbu Hospital
	Ngungu
Zambia	Kabwe Provincial Health Centre
Zambia	Nakambala Urban Clinic
	University Teaching Hospital
	Zvimba Rural Hospital
	Harare Children Hospital
Zimbabwe	Chinoyi Hospital
ZITIDADWE	St Michael Mission Hospital
	Beatrice Infectious Hospital
	Harare Hospital



Annex 4: Schedule of field country Assessments

	October 2011		November 2011	2011		Dec	December 2011	4	February 2012
Country	24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8	9 10 11 12 13 14 15 16	<i>T</i> 18 19 20 21 22 23 24	4 25 26 27 28 29 30	1 2 3 4 5 6	7 8 9 10 11 12 13	14 15 16 24	4 25 26 27 28 29
Angola									
Botswana									
Lesotho									
Malawi									
Mauritius									
Namibia									
Seychelles									
South Africa									
Swaziland									
United Republic of Tanzania									
Zambia									
Zmbabwe									



Annex 5: Documents received and analysed

Carrata.	Name of Dogwood
Country	Name of Document
Angola	Plano Estratégico Nacional de Respostas às ITS, VIH e SIDA, 2011 – 2014
Botswana	The Second Botswana National Strategic Framework for HIV and AIDS, 2010-2016
	Health Sector HIV/AIDS Strategic Plan, 2010-2016
DRC	Plan Strategique National de Lutte Contre le SIDA, 2010-2014
	Plan Strategique de Lutte Contre le VIH et le SIDA du Secteur de Sante, 2008-2012
Lesotho	Lesotho National HIV and AIDS Policy, 2006
	Lesotho National HIV Testing and Counselling Policy, 2009
	National HIV & AIDS Strategic Plan, 2011/12-2015/16. Draft version 4
Malawi	Malawi National Policy on HIV and AIDS, 2011
	Malawi National HIV and AIDS Strategic Plan, July 2011-June 2016
Mauritius	National HIV and AIDS Strategic Framework, 2007-2011
	National HIV and AIDS M&E Framework, 2007-2011
Mozambique	A Moçambicanização da Declaração Política sobre o HIV e SIDA
	Plano Estrategico Nacional de Resposta ao HIV e SIDA, 2010-2014
	Plano Estrategico Nacional de Resposta ao HIV e SIDA, 2010-2014. Livro II - Objectivos e Estrategias Monitorizacao e Avaliacao
Namibia	National Policy on HIV AIDS, 2007
	National Strategic Framework for HIV and AIDS Response in Namibia, 2010/11-2015/16
	Policy on Male Circumcision for HIV Prevention, 2010
	Results Framework for HIV and AIDS Response in Namibia, 2010-2015
	Plan for National Multi-sectoral Monitoring and Evaluation of HIV and AIDS, 2010/11-2015/16
Seychelles	National HIV and AIDS Policy, 2011
	National Strategic Framework, 2012-2016 for HIV and AIDS and STIs
South Africa	National Strategic Plan on HIV, STIs and TB, 2012-2016
	What Does the National Strategic Plan on HIV and AIDS Mean for Children? A Guide for Individuals and Organizations Working with and for Children
	Monitoring & Evaluation Framework for the HIV & AIDS and STIs National Strategic Plan, 2007 – 2011
	National HTC Policy Guidelines, 2010



Swaziland	National Multi-sectoral Strategic Framework for HIV and AIDS, 2009-2014
	The Health Sector Response to HIV and AIDS Plan, 2009-2014
	National Multi-sectoral HIV and AIDS M&E Framework, 2009-2014
Tanzania	National Multi-sectoral Strategic Framework, 2008-2012
	Health Sector HIV-AIDS Strategic Plan, 2008-2012
	Tanzania National Multi-sectoral HIV Prevention Strategy, 2009-2012
Zambia	National HIV/AIDS/STI/TB Policy, 2005
	National AIDS Strategic Framework, 2011-2015
	National AIDS Strategic Framework, 2011-2015. Volume 2. National Operational Plan of the Multisectoral AIDS Response in Zambia, 2011-2013
	National Monitoring, Research and Evaluation Plan, 2011-2015.
Zimbabwe	National HIV and AIDS Strategic Plan (ZNASP II), 2011-2015
	Monitoring and Evaluation Plan for Zimbabwe HIV and AIDS National Strategic Plan (2011 - 2015)
	PMTCT and Paediatric HIV Prevention, Treatment and Care. National Plan 2006-2010
	National HIV/AIDS Clinical Guidelines
Country	Name of Document
Angola	Protocolo para Seguimento das Sessoes de Aconselhamento e Testagem Voluntaria, 2007
	Normas sobre Tratamento Anti-Retroviral 3er ed., 2011
Botswana	National Guidelines for PMTCT of HIV, 2011
	National HIV/AIDS Treatment Guidelines, 2012
	National HIV Testing and Counselling Guidelines, Botswana, 2009
	National HIV Testing and Counselling Guidelines for Children and Adolescents, 2010
DRC	Guide National de Traitement du VIH par les antirétroviraux, 2005
	Guide de Prise en Charge de la co-infection VIH-TB, 2008
Lesotho	National Guidelines for HIV & AIDS Care and Treatment, 2010
	National Guidelines for PMTCT, 2010
	Lesotho Policy and Guidelines for the Implementation of the PMTCT programme
Malawi	Clinical Management of HIV in Children and Adults, 2011.
Mauritius	Guidelines for HIV Testing, 2011
	Protocole Nationale de prise en charge de l'infection a VIH
Mozambique	Manual De Tratamento Da Criança Com Infecção Pelo VIH-Sida, 2011
	Novo algoritmo de diagnóstico EID July 23, 2010



Namibia	National Guidelines for Antiretroviral Therapy, 2010
	Guidelines for PMTCT of HIV. 2nd ed., 2008
	Guidelines for Outreach Counselling and Testing, 2007
Seychelles	Protocoles et Modules de Prise en Charge dans les CDAG et les Centres de PTME des Pays de la Comission de l'Ocean Indien, 2008
South Africa	Guidelines for the Management of HIV in Children, 2010
	Clinical Guidelines for PMTCT. 2nd ed., 2010
	National HIV Counselling and Testing Policy Guidelines, 2010
	Policy and Guidelines for the Implementation of PMTCT, 2008
	A Practical Guide for TB and HIV Service Integration at Primary Health Care Facilities
	Guidelines for Tuberculosis Preventive Therapy among HIV-Infected Individuals in South Africa, 2010
	Guidelines on Psychosocial Support for Children living with HIV and AIDS, and other chronic conditions, 2010
Swaziland	PEP Guidelines, 2010
	National HIV Testing and Counselling Guidelines, 2010
	Guidelines for Prevention of Mother to Child Transmission. 3rd ed., 2010
	Paediatric HIV Management, 2010
	Nutrition and HIV Guidelines for Service Providers
	Psychological Care and Support Guidelines, 2008
Tanzania	Tanzania National Guidelines for the Management of HIV-AIDS, 2011
	Guidelines for HTC in Clinical Settings, 2008
	Tanzania National Policy Guidelines for Collaborative HIV-TB Activities
Zambia	National Protocol Guidelines 2010. Integrated Prevention of Mother-to-Child Transmission
	National Guidelines for HIV Counselling and Testing of Children, 2011
	Zambian Guidelines for ART in Infants and Children. Towards Universal Access, 2007
	National Guidelines on Management and Care for People Living with HIV/AIDS, 2008
	National Minimum Standards for Community and Home-based Care Organisations, 2007
Zimbabwe	National Guidelines on HIV Testing and Counselling, 2005
	Guidelines for Antiretroviral Therapy in Zimbabwe, 2010
	National PMTCT Protocols/Treatment Guidelines, 2010
	Guidelines for HCT in Children, 2008
	National TB-HIV Guidelines, 2009
	National Community and Home Based Care Guidelines, 2009



	National TB Policy, Strategic Framework and/or Plan				
Country	Name of Document				
Angola	Plano Estratégico Nacional da Tuberculose, 2008-2012				
Botswana	Botswana National TB Strategic Plan, 2008-2012				
	Botswana National TB M&E Plan Indicators				
	National TB/HIV Collaborative Policy Guidelines, 2011				
DRC					
Lesotho	Lesotho National Tuberculosis Programme Policy and Manual, 2007				
Malawi	Malawi National Tuberculosis Strategic Plan				
Mauritius	TB Control Strategic Plan for Mauritius				
Mozambique	Plano Estrategico Nacional de Controlo da Tuberculose em Mocambique para o período, 2008-2012				
Namibia	National Tuberculosis and Leprosy Programme. Second Medium-Term Strategic Plan for Tuberculosis and Leprosy, 2010-2015				
	National Tuberculosis Control Programme. Policy Document, 2000				
Seychelles					
South Africa	National Strategic Plan on HIV, STIs and TB, 2012-2016.				
	Tuberculosis Strategic Plan for South Africa, 2007-2011				
	MDR-TB. A Policy Framework on Decentralised and Deinstitutionalised Management for SA, 2011				
	Draft National Infection Prevention and Control Policy for TB, MDR and XDR-TB, 2007				
Swaziland	National Tuberculosis Control Strategic Plan, 2010-2014. Draft				
Tanzania	Tanzania National TB and Leprosy Strategic Plan, 2009-2015				
Zambia	Zambia National HIV AIDS-STI-TB Policy, 2005				
	Zambia National-Health-Strategic Plan, 2011-2015				
Zimbabwe	National TB Control Programme. Five year strategic plan, 2010-2014				
	TB Advocacy, Communication and Social Mobilisation Policy Guidelines, 2011				
	National TB Clinical Guidelines				
Country	Name of Document				
Angola	Manual de Controlo da Tuberculose, 4 th ed., 2008				
Botswana	National Tuberculosis Programme. Guidelines for the Management of TB. 7 th ed., 2011				
	National Guidelines for the Management of Drug Resistant TB. 2nd ed., 2009				
	Community TB Care Policy Guidelines, 2011				
DRC					
Lesotho	Lesotho National Tuberculosis Programme Policy and Manual, 2007				
Malawi	Malawi National TB Control Programme Manual, 2012				



Mauritius	Tuberculosis Manual, 2009			
Mozambique	Abordagem da Tuberculose infantil em Moçambique Abril, 2012			
Namibia	Namibia TB National Guidelines, 3rd ed., 2011			
	Tuberculosis Infection Control Guidelines.			
Seychelles				
South Africa	National Tuberculosis Management Guidelines, 2009			
	National TB Infection Control Guidelines, 2007			
	A Practical Guide for TB and HIV Service Integration at Primary Health Care Facilities			
	Policy Guidelines for the Management of Drug Resistant Tuberculosis, 2011			
	Guidelines for Tuberculosis Preventive Therapy among HIV-infected Individuals, 2010			
Swaziland	National Tuberculosis Programme Manual, 2012. Draft			
	National Guidelines for Implementing the Three I's of Tuberculosis Control: Intensified case finding, Isoniazid Preventive Therapy for People Living with HIV, and Infection Control			
Tanzania	Tanzania Manual of the National TB and Leprosy Programme, 5th ed., 2006			
	Tanzania National Policy Guidelines for Collaborative HIV-TB Activities			
Zambia	Zambia TB Manual, 2008			
	National Guidelines for the Programmatic Management of Drug Resistant TB. Draft			
Zimbabwe	National TB Guidelines, 4th ed., 2010			
	TB Advocacy, Communication and Social Mobilisation Policy Guidelines, 2011			
	National TB-HIV Guidelines, 2009			
	National Malaria Policy, Strategic Framework or Plan			
Country	Name of Document			
Angola	Plano Estratégico Nacional para o Controlo da Malaria em Angola, 2008-2012			
Botswana	National Malaria Programme: Malaria Policy, 2011			
	Botswana Malaria Strategic Plan, 2010-2015			
DRC	Faire Reculer le Paludisme. Plan Strategique, 2007-2011			
	Malaria Operational Plan, 2012 (USAID)			
Lesotho				
Malawi	Malaria Strategic Plan, 2011-2015			
	Malaria Monitoring and Evaluation Plan, 2011-2015			
	Malawi Malaria Operational Plan, 2012 (USAID)			
Mauritius				



Mozambique	Politica National da Malária, 2011			
	Plano Estrategico da Malária, 2012-2016			
	Plano de Monitoria e Avaliação Malária, 2012-2016			
	Plan de Monitoria e Avaliaçao Nacional da Prevençao e Controlo da Malária, 2010-2014			
Namibia	Malaria Strategic Plan, 2010-2016			
	National Malaria Monitoring and Evaluation Plan, 2010-2016			
	Namibia Malaria Communications and Advocacy Strategy			
Seychelles				
South Africa	Malaria Elimination Strategy, 2011-2018			
Swaziland	Swaziland National Malaria Elimination Policy, 2010			
	National Malaria Elimination Strategic Plan for 2008-2015			
	Malaria Elimination M&E Plan, 2009-2013. Draft			
Tanzania	Tanzania Malaria Medium-Term Strategic Plan, 2008-2013			
Zambia	A Roadmap for Impact on Malaria in Zambia, 2006-2010. Rapid Scale-Up of Malaria Control			
	Interventions for Impact in Zambia. A 5-year Strategic Plan			
	National Malaria Control Action Plan, 2012			
Zimbabwe	National Malaria Control Strategy, 2008-2013			
	Monitoring and Evaluation Plan for the Zimbabwe Malaria Control Strategic Plan, 2008-2013			
	National Malaria Clinical Guidelines			
Country	Name of Document			
Angola	Manual Manejo de Casos de Malaria, 2009			
Botswana	Botswana Guidelines for the Diagnosis and Treatment of Malaria, 2007			
DRC	DRC Malaria Operational Plan, 2012 (USAID)			
Lesotho				
Malawi	Malawi Malaria Operational Plan, 2012 (USAID)			
Mauritius	Communicable Diseases Control Unit. Malaria Guidelines, 2008			
Mozambique	Normas da Tratamento da Malaria em Moçambique, 2011			
Namibia	National Standard Treatment Guidelines, 2011			
Seychelles				
South Africa	Guidelines for the Treatment of Malaria in South Africa, 2010			
	Guidelines for the Prevention of Malaria, 2011			
Swaziland	Swaziland Malaria Diagnosis and Treatment Guidelines, 2009			
Tanzania	Tanzania National Guidelines for Diagnosis and Treatment of Malaria, 2006			
Zambia	Guidelines for the Diagnosis and Treatment of Malaria in Zambia, 2010			
	National Guidelines on the Distribution and Utilisation of ITN for Malaria Prevention and Control. 2008			
Zimbabwe	National Guidelines for Management of Malaria in Zimbabwe, 2009			



	National Children and/or OVC&Y Policy, Strategic Framework or Plan of Action			
Country	Name of Document			
Angola	Angola 11 Compromissos com a Criança, 2011			
	Conselho Nacional da Crianca Plan Bienal, 2011-2013			
Botswana	National Plan of Action for OVC, 2010-2016			
	Accelerated Child Survival and Development (ACSD) Strategy, 2009-2015			
DRC				
Lesotho	Lesotho National Strategic Plan for OVC, 2012-2017			
	Lesotho National Strategic Plan for OVC National Operational Plan, 2012-2017			
Malawi	Extended National Plan of action for OVC in Malawi, 2010-2011			
	Malawi National Policy on Early Child Development, 2003			
	National Policy on Orphans and other Vulnerable Children, 2003			
Mauritius				
Mozambique	Plano de Acção para as Crianças Órfãs e Vulneráveis (PACOVs), 2006-2010			
	Plano Nacional De Acção Para A Criança (PNAC), 2005-2010			
	National Plan of Action for OVC, 2006-2010 (2005)			
	Developing the New National Plan of Action for Children in Mozambique			
Namibia	Namibia's National Agenda for Children, 2012-2016			
	Education Sector Policy for OVC, 2011			
	National Standards for Adolescent-Friendly Health Services			
Seychelles				
South Africa	National Action Plan for OVCY, 2009-2012			
	Infant and Young Child Feeding Policy, 2007			
Swaziland	National Children's Policy, 2009			
Tanzania	National Costed Plan of Action for Most Vulnerable Children, 2007-2010			
Zambia	National Child Policy, 2006			
	National School Health and Nutrition Policy, 2006			
Zimbabwe	National Child Survival Strategy for Zimbabwe, 2010-2015			
	National Action Plan for Orphans and Vulnerable Children (NAP for OVC) II, 2011-2015			



Annex 6: Sample of debriefing sessions: Angola

Slide 1&2

SADC/UNICEF PROJECT

Technical Assistance towards Strengthening Prevention, Care and Treatment of Pediatric HIV, TB and Malaria in the SADC region

> Debriefing Meeting Ministry of Health- Botswana 28 October 2011

Team

- Dr. Jibril Haruna (Team leader)
- Dr. Esther Kip
- · Dr. Moono E. Munsanje
- · Dr. Tchaka Ndhlovu
- Mr. George Vilili
- Dr. Pandu Hailonga-van Dijk

Background of the project

- SADC Members States carry a disproportionate **burden of Tuberculosis**, **HIV and Malaria**Majority of States have adult infection levels in excess **of 15%**, **some countries have 20%**
- Region is home to 25% of the Sub-Saharan population that accounts for $\bf 50\%$ of $\bf TB$ $\bf cases$

- accounts for 50% of TB cases

 Five members state among the 22 global high-burden countries that account for approximately 80% of all new TB cases

 Four member states i.e. Botswana, Namibia, South Africa and Swaziland have reported cases of Extensively Drug Resistant TB (XDR-TB)

 Malaria in SADC region accounts for more than 30% of outpatients visits, 40% of hospitalizations and one in five childhood deaths.

Broad Objectives

 To gain a better understanding of the existing policies and implementation strategies, and the extend to which these are integrated & harmonized in the SADC Region, towards informing development of framework on the continuum of care (COC) in pediatric and HIV, TB and Malaria

Slide 3&4

Specific Objectives

- To describe and analyse the policy environment in the area of pediatric HIV, TB and Malaria prevention, care and treatment. To describe and analyze existing programmes for HIV, TB and Malaria in terms of programming, organizational content of the properties of the properties of the properties of the properties, community participation and service demand, and the management of resources of existing programmes for Policies of the properties of the properties
- To identify best practices in prevention, care and treatment of pediatric HIV, TB and Malaria
- To conduct a gap-analysis of regional policy and programming capacity, and identify related opportunities towards building on a continuum of care for pediatric HIV, TB and Malaria

Methodology

Data collection Methods and tools

- Desk review
- Key informants
- Health service providers interview
- Client exit interviews
- Focus group Discussions
- Documentation of Best Practices

Slide 5&6



Slide 7&8

Slide 9&10

PARTICIPANTS

- -MOHSS (Directors (DPH, DCS, DHAPC & DPDME); Programme Managers (HIV, TB and Malaria), M& E officers; Hospital Superintendents;
- -UN Agencies: WHO; UNAIDS; UNICEF
- -Development Partners: CDC-Botswana; ITECH; BAYLOR; Botswana Harvard Partnership; ACHAP

DISTRICTS VISITED

- Kweneng East
- Serowe

Preliminary findings

EXISTENCE OF POLICIES AND GUIDELINES

- Strengths
 Policies/Guidelines/training packages exist & align to
- Policies/Guidelines/training packages exist & align to global standards global standards Development of an adolescent minimum package High quality Pediatric KITSO training Comprehensive and Participatory review processes Botswana being the model e.g. Universal HAART for PMTCT, ARVs

<u>Challenges</u>

Policies are comprehensive, but they are not pediatric specific

Preliminary findings cont...

CAPACITY OF THE HEALTH SYSTEM Strengths

- Commitment to human resource development
- Commitment to numan resource developm
 Good performance management system
 Good infrastructure and equipment
 Strong financial Government commitment - Presence of Donor communities

Challenges

- Inadequate specialized human resources
 Deployment of HCWs

Preliminary findings cont...

SUPPLY CHAIN MANAGEMENT SYSTEMS

Strengths

- Reliable supply chain management systems
- Existence of emergency funds to purchase urgent supplies, by hospitals
- Good quality assurance system

Challenges

Staff at the district level may not have the capacity to do accurate forecasting and quantification.

Preliminary findings cont...

IMPLEMENTATION

Strengths

- Existence of monitoring and evaluation system
- Adherence to clinical guidelines
- Implementation of task shifting
- Collaboration between private and public sector
- Availability of early infant diagnosis
- Community TB care strengthened

Slide 11&12



Preliminary findings cont...

Challenges

- Limited implementation of quality control mechanism and systems of clinical care in the private sector
- Limited adolescent/youth friendly services
- ${\sf -Inadequate}$ psychosocial support for OVC
- Limited services that specifically address adolescent health issues, especially those who are HIV+

Preliminary findings cont...

INTEGRATION

Strengths:

- Integration at the service delivery point
- Progress towards integrating TB and HIV services

Challenges

- Limited integrated M & E system
 Limited integration at planning, budgeting and training

Slide 13&14

Preliminary findings cont...

HARMONIZATION

- Limited knowledge on SADC policies and guidelines

BEST PRACTICES

- Pediatric KITSO training
- Pediatric testing for early infant diagnosis of HIV infection
- PMTCT scale up

Next Steps

- Data analysis
- Compilation of all MS reports
- Development of Regional Assessment Report(RAR)
- Sharing of RAR and Draft of Draft Minimum Standard with MS at a Regional Consultative Meeting for validation

Slide 15&16



Annex 7: consultants and project team members

SAfAIDS staff and consultants participating in the project

Rouzeh Eghtessadi, MPH. Unit Head. Special projects. Ketlogetswe Montshiwa. Programme Manager. Godfrey Tinarwo. Senior Technical Advisor Policy and Communications. Maria Candela Iglesias Chiesa, PhD. Health Consultant. Team members for regional assessment and country report writing

Name	Gender	Area of expertise & country experience	Country experience	Country represented
Team 1: Mauritius, Seycl	nelles, DRC, A	Angola, Mozambique		
Dr. Kitenge Kalenga English & French	М	MD, Dip. In HIV Management; Medical Superintendent (DRC, Botswana), experience in paediatric care, TB. Malaria. Team 2 interviewed him during Botswana assessment: highly organized and visionary leader	DRC, Zambia, Botswana	Botswana/DRC
Ms Susana Mendes Portuguese, English, French	F	BA Community Development & Mental Health. Research experience, data analysis with SPSS, academia & consultancy experience including working with UNICEF	Angola, Portugal	Angola
Dr. Richard Nkurunziza Portuguese, English, French	М	MD, HIV Management, TB Management, MCH, SRH, consultancy experience, has worked with UNICEF previously	Mozambique, Uganda	Mozambique
Dr. Joel Samogudo Portuguese	М	MD, MPH, Clinician on epidemiology of infectious diseases, TB, HIV experience, experience in a 54-country HIV study, and a 6-SADC country study	Mozambique, SADC region	Mozambique
Dr. Kito Mukasa French & English	М	MD, Medical Director (Lubumbashi: Head of Medicine, TB isolation ward); Head of TB Ward – Zambia; Coordinator of ARV clinic and TB focal person with follow up on MDR TB – Botswana, Malaria management	DRC, Botswana, Zambia	Botswana/DRC
Mr Rui Mapatse Portuguese, English	F	BA international Relations; Civil society experience – Joint Oxfam Advocacy Program, consultancy experience e.g, building capacity for local NGOs on HIV and AIDS. Development	Mozambique, South Africa, Angola	Mozambique
Ms Yvana Theresine English & French	F	Nursing, MA Educational Leadership & Innovation; Health Educator (MOH), Community Health Nursing (lecturing and practice), MCH, HIV	Seychelles	Seychelles
Team 2: Botswana, Nam	nibia, Lesotho	, Malawi, Zambia		
Dr. Pandu Hailonga- van Dijk	F	Ph.D; Development Studies. Youth, gender, SRH, policy development, UNDP, UNFPA, Government experience	Namibia	Namibia







George Vilili M M&E specialist, HIV, TB research, policy analysis, M&E, tools and indicator development Malawi, Uganda, Zambia Malawi Dr. Esther Kip F Ph.D., MPH: HIV, TB programming, HIV policy management, health systems strengthening Botswana, Lesotho, Malawi Malawi Dr Haruna Jibril Paediatrician: Clinical paediatric health, paediatric HIV treatment, policy formulation, clinical research Nigeria, Botswana Botswana Dr. Tchaka Ndlovu Ph.D in Health Economics: Has experience as principal investigator, has worked for UNICEF, National coordinator on the Global Fund TB Malaria Evaluation Study, ARV surveys, TB follow up surveys, household surveys. Malawi, Tanzania, Zambia Dr Moona Munsanje M MD: TB specialist, experience in working with CDC and other development partners in the SADC countries Zambia, Botswana and other SADC countries A Zambian based Botswana Team 3: Tanzania, South Africa, Swaziland, Zimbabwe PhD: Population and Health specialist, HIV program and policy formulation and research, PMTCT research Zimbabwe, Malawi, Botswana etc Malawian Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, MCH: experience with UN agencies, EU, Zimbabwe, Botswana Zimbabwe
policy management, health systems strengthening Dr Haruna Jibril Paediatrician: Clinical paediatric health, paediatric HIV treatment, policy formulation, clinical research Dr. Tchaka Ndlovu Ph.D in Health Economics: Has experience as principal investigator, has worked for UNICEF, National coordinator on the Global Fund TB Malaria Evaluation Study, ARV surveys, TB follow up surveys, household surveys. Dr Moona Munsanje M MD: TB specialist, experience in working with CDC and other development partners in the SADC countries with CDC and other development partners in the SADC countries Team 3: Tanzania, South Africa, Swaziland, Zimbabwe Dr Chiweni Chimbwete M PhD: Population and Health specialist, HIV program and policy formulation and research, PMTCT research Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, Zimbabwe, Botswana Zimbabwe
paediatric HIV treatment, policy formulation, clinical research Dr. Tchaka Ndlovu Ph.D in Health Economics: Has experience as principal investigator, has worked for UNICEF, National coordinator on the Global Fund TB Malaria Evaluation Study, ARV surveys, TB follow up surveys, household surveys. Dr Moona Munsanje M MD: TB specialist, experience in working with CDC and other development partners in the SADC region Team 3: Tanzania, South Africa, Swaziland, Zimbabwe Dr Chiweni Chimbwete M PhD: Population and Health specialist, HIV program and policy formulation and research, PMTCT research Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, Zimbabwe, Botswana Zimbabwe, Botswana Zimbabwe, Botswana
as principal investigator, has worked for UNICEF, National coordinator on the Global Fund TB Malaria Evaluation Study, ARV surveys, TB follow up surveys, household surveys. Dr Moona Munsanje M MD: TB specialist, experience in working with CDC and other development partners in the SADC region Team 3: Tanzania, South Africa, Swaziland, Zimbabwe Dr Chiweni Chimbwete M PhD: Population and Health specialist, HIV program and policy formulation and research, PMTCT research Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, Zimbabwe, Botswana Zambia, Botswana and A Zambian based other SADC countries A Zambia, Botswana and other SADC countries Tanzania, South Africa, Swaziland, Zimbabwe Botswana etc Zimbabwe, Botswana Zimbabwe
with CDC and other development partners in the SADC countries Team 3: Tanzania, South Africa, Swaziland, Zimbabwe Dr Chiweni Chimbwete M PhD: Population and Health specialist, HIV program and policy formulation and research, PMTCT research Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, Zimbabwe, Botswana Zimbabwe
Dr Chiweni Chimbwete M PhD: Population and Health specialist, HIV program and policy formulation and research, PMTCT research Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, Zimbabwe, Botswana Zimbabwe
HIV program and policy formulation and research, PMTCT research Dr Joconiah Chirenda M MD, MPH: Experience in HIV, TB, malaria, Zimbabwe, Botswana Zimbabwe
private sector, government
Dr Naomii Wekwete F PhD, extensive HIV research, academic South Africa and other SADC countries
Mr Sabelo Mbokazi M MSc, Dip.in HIV Management, policy development, training of trainers, preparation of policy briefs, M&E, worked in The SADC parliamentary Forum HIV Unit SADC region South Africa
Dr. Bertha Simwaka F Ph.D, MSc: Assessment of HIV Zimbabwe, Zambia, programmes, research in TB, Malaria, HIV, surveillance systems, programme implementation Tanzania, Malawi
Dr Francis Mhimbira M MD. experience in MDR TB Tanzania Tanzania



ANNEX 8: TECHNICAL WORKING GROUP EXPERTS

Name	Position	Organisation	Country
Augusto Rosa Neto	Chief International Cooperation	Ministry of Health	Angola
Dr Haruna Jibril	Paediatrician, Child Health Division,	Ministry of Health	Botswana
Kafitha Wilhemina	Senior Health Program Administrator for Opportunistic Infections and Palliative Care Program (SHPA/OIs&PC)	Ministry of Health	Namibia
Dr António AA Assane	Director Nacional Adjunto de Assistência Médica	Ministry of Health	Mozambique
Dr Aleny M Couto	Public Health Specialist	Ministry of Health	Mozambique
Dr Joel Samo Gudo	Consultant	Escopil International	Mozambique
Dr Brian Pazvakavambwa	AIDS Program Team Leader Inter-country Support Team for Eastern and Southern Africa (IST/ESA/AIDS)	WHO AFRO	Zimbabwe
Dr Buhle Ncube	TB Specialist	WHO AFRO	Zimbabwe
Professor Gabriel Anabwani,	Director Children's Clinical Center of Excellence	Baylor	Botswana
Mrs Margaret Mehlomakulu	Expert in child and adolescent health	Independent consultant	Zimbabwe
Prof Linda Richter	Executive Director Child Youth & Family Development programme.	Human Sciences Research Council (HSRC)	South Africa
Sue Laver	Senior Advisor	CCORE	Zimbabwe
Timothy Brainbridge	Regional Director	Save the Children	South Africa
Noreen Huni	Director	REPSSI	South Africa
Hanna Brown	HIV/AIDS Specialist	World Bank SA	South Africa
Dorothy Mbori-Ngacha	Senior PMTCT/PAIDS Specialist	UNICEF ESARO	South Africa
Mr Noel Marie Zagre	Regional Nutrition Adviser	UNICEF ESARO	Kenya
Dr Rory Nefdt	Regional Health Specialist, Malaria Control & iCCM	UNICEF ESARO	Kenya
Khassoum Diallo	YCSD M&E Specialist	UNICEF ESARO	Kenya
Itayi Muvandi	M&E Specialist	SADC Secretariat	Botswana
Banyana Madi	Policy Analysis Specialist	SADC Secretariat	Botswana
Manasa Dzirikure	OVCY Specialist	SADC Secretariat	Botswana
Innocent Modisaotsile	CD Project Coordinator	SADC Secretariat	Botswana
Guillermo Marquez	HIV Specialist	SADC Secretariat	Botswana

(Footnotes)

¹ SADC. Functions and Minimum Standards for National Reference Laboratories in the SADC Region. Gaborone: SADC; 2010.

² SADC. Functions and Minimum Standards for Supranational Reference Laboratories and Regional Centres of Excellence in the SADC Region. Gaborone: SADC; 2010.











Directorate of Social & Human Development & Special Programs SADC Secretariat

Private Bag 0095
Gaborone, Botswana
Tel: (267) 395 1863
Fax: (267) 397 2848
Email: registry@sadc.int
Website: www.sadc.int

978-99968-402-8-9 ISBN:

