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MEASURING REGIONAL POLICY CHANGE AND PRO-POOR HEALTH POLICY SUCCESS

A PRARI Toolkit of Indicators for the Southern African Development Community (SADC)

Ana B. Amaya, Isaac Choge, Philippe De Lombaerde, Stephen Kingah, Samuel Longwe, Enock Anthony Mhehe, Themba Moeti, Lillian Mookodi, Mubita Luwabelwa, Ponesai Nyika and Molefe Phirinyane¹

December 2015



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KEY DEFINITIONS

- a) **Compliance:** Full or partial adherence to the policies and rules that are developed jointly by Member States and implemented with SADC's Secretariat playing a facilitating and coordinating role.
- b) **Coordination:** Deliberate and guided actions/ processes often by SADC's Secretariat, Chair and Troika to ensure that specific goals in given issue areas are collectively realized.
- c) **Differentiation:** Contextual differences between SADC Member States that may affect the uptake/ implementation of regional policies and rules at the national level.
- d) **Domestication:** Incorporation or transposition of SADC (health) standards into the national (health) systems. Domestication is highly revealing of the degree of openness of Member States to SADC's region-wide standards.
- e) **Governance:** The wide range of steering and rule-making related functions conducted by governments and decision-makers as they seek to achieve health policy objectives
- f) **Harmonization:** Process of facilitating the alignment and attainment of the goals of SADC's minimum standards that are included in SADC's guiding documents. In health such guiding documents include amongst others the Health Protocol of 1999 and the Maseru Declaration of 2003.
- g) **Health:** A complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity.
- h) **Input indicators:** Indicators that measure human, financial, infrastructure, physical, supplies, and all other resources related to the implementation of a policy or programme. Data on an input indicator can tell us if supplies are reaching their destination on time. These are usually reported in the form of a number. Some examples are: Current expenditure on health; total current expenditure on health as a percentage of Gross Domestic Product (GDP) and number of public hospitals.
- i) **Process indicators:** Evaluate whether the policy or programme is being implemented as planned and how well the policy or programme activities are being conducted. Some examples are: number of educational materials developed; number of training sessions conducted; number of meetings conducted; and number of health promotion materials developed.
- j) **Output indicators:** Relate to the results of efforts (inputs and processes/activities) at the programme or policy level. They inform us of direct deliverables from the policy or programme activities. Some examples are: number of health care workers trained on managing symptoms of ill-health; number of bed nets distributed.
- k) **Outcome indicators:** They measure a policy's or programme's level of success in improving service accessibility, utilisation or quality. These are usually reported as a percentage or rate, such as the percentage of population with knowledge on proper sanitation practices. Other examples include: percentage of the population with knowledge of HIV transmission and proportion of adults undergoing treatment for Tuberculosis.

- l) **Impact indicators:** They measure long-term, cumulative effects of policies or programmes over time (years) on the population's health and well-being or on the larger social system. Some examples are: reduction in child mortality; reduction in child morbidity; and reduction in mother to child transmission of HIV.
- m) **Indicator levels:** They refer either to the levels of measurement of the indicators (e.g. global, regional, national, sub-national) or to the level of production and reporting of the indicators (e.g. global (UN), regional (Secretariat), national (member states)).
- n) **Monitoring:** Follow-up and evaluation process of the implementation and impact of policies.
- o) **Policy priorities:** Key goals in the area of health as elaborated by political leaders.
- p) **Policy success:** Positive policy change and policy effectiveness.
- q) **The Poor:** The poor are the most vulnerable and most severely impacted by HIV/AIDS, tuberculosis and malaria in terms of vulnerability to risk factors as well as morbidity and mortality and have the least resources to cope with the socio-economic impacts of these diseases even where social safety nets such as free access to treatment *et cetera*, exist.
- r) **Poverty:** Widespread levels of deprivation that negatively affect one's ability to ensure decent access to health care and other essential needs of life. SADC's Implementation Plan for the Health Protocol of 2007 defines poverty as "a multidimensional phenomenon that manifests itself in low income, malnutrition, poor health, low survival rates, low literacy, inadequate clothing, housing and living conditions ... The region subscribes to the concept of human poverty as a complement to income poverty, emphasizing that equity, social inclusion, women's empowerment, and respect for human rights matter for poverty reduction."
- s) **Pro-poor policies:** Policies that seek to address mainly economic issues affecting acceptable living standards of peoples in poor communities and vulnerable groups (such as rural female populations, indigenous communities, urban slum dwellers). In health terms, it is understood that those in this sector of society are disproportionately and adversely afflicted by HIV/AIDS, tuberculosis and malaria, and non-communicable diseases.
- t) **Public health:** Defined by SADC in the Health Protocol as efforts of society to protect, promote and restore the people's health through health-related activities in order to reduce the amount of diseases, premature deaths, and reduce discomfort and disability in the population.
- u) **Regional health policy:** Public health standards collectively adopted by SADC Member States and implemented by them with an understanding that the Secretariat facilitates and coordinates the process.
- v) **Regional Integration:** Regional integration is invoked in SADC when three or more countries are involved in a process or project.
- w) **SADC mechanisms:** Standards, policies, rules, norms and institutions included in SADC's treaty, protocols, charters, Summit declarations/ communiqués and ministerial decisions on specific issues including health.

- x) **SADC Secretariat:** SADC's organ that coordinates and facilitates actions of Member States for purposes of harmonisation and domestication.

ABBREVIATIONS

ARIPO	African Regional Intellectual Property Organisation
ART	Anti-retroviral treatment
AU	African Union
CBOs	Community based organizations
CDs	Communicable diseases
CHWs	Community health workers
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
FBOs	Faith based organizations
GDP	Gross Domestic Product
HP	Health Protocol
HSAs	Health surveillance assistants
HSF	SADC HIV/AIDS Tuberculosis and Malaria Harmonized Surveillance Framework
IP	Intellectual property
IPTp	Intermittent preventive treatment of malaria in pregnancy
ITN	Insecticide treated net
MD	Maseru Declaration
MDGs	Millennium Development Goals
MDR-TB	Multi-drug resistant TB
MS	SADC Member States
MTCT	Mother to child transmission
NCDs	Non-communicable diseases
PAR	Participatory Action Research
PLWHA	People living with HIV/AIDS
PMTCT	Prevention of mother to child transmission
RECs	Regional economic communities
RISDP	Regional Indicative Strategic Development Plan
RO	WHO African Regional Office
SADC	Southern African Development Community
SADC PF	SADC Parliamentary Forum
SDGs	Sustainable Development Goals
SPP	SADC strategy on pooled procurement

TB	Tuberculosis
TRIPS	Agreement on Trade Related Aspects of Intellectual Property
UHC	Universal health coverage
UNAIDS	United Nations Agency against HIV/AIDS
UNECA	United Nations Economic Commission for Africa
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
VGs	Vulnerable groups (rural women, urban slum dwellers and members of indigenous communities)
WB	World Bank
WHO	World Health Organization
WIPO	World Intellectual Property Organisation
WTO	World Trade Organisation
XDR-TB	Extensively drug resistant TB

FOREWORD

This PRARI toolkit is the culmination of the work conducted in the chapter on indicator development of the Poverty Reduction and Regional Integration (PRARI) project led by Professor Nicola Yeates at The Open University (UK)². The two-year project studies what regional institutional practices and methods of regional policy formation are conducive to the emergence of embedded pro-poor health strategies, and what national, regional and international actors can do to promote these policies. This work was carried out with support from the Economic and Social Research Council (ESRC)/ Department for International Development (DfID) United Kingdom, Grant Reference ES/L005336/1. It does not necessarily reflect the opinions of the ESRC/DfID.

The toolkit is one of the main areas of work within PRARI. We hope that it will be actively used by the various stakeholders of SADC especially officials of SADC Secretariat (who also contributed to its development) in the monitoring of regional health policy in SADC. A particular focus is placed on three diseases that have a conspicuous incidence on the poor and most vulnerable groups. The product is an indicator system. It is not meant to be static. It is not meant to be final. Its novelty is the participatory method and approach used in developing the indicators by the potential end users.

The toolkit has been a collective effort with the input of many partners and participants. It is useful to single out a number of persons whose contributions have been invaluable to the realization of the document. We are grateful to Ityai Muvandi, Joseph Mthetwa and Innocent Moditsaotsile all from the SADC Secretariat, for their participation, comments and support. We also thank Lien Jaques in a very special way. Her sharp sense of graphics greatly helped us with the figures and tables. Special gratitude also goes to Ana Gabriela Alvarez Cruz, Maria Borda, and Alexandra Vida for their research assistance.

*Ana Amaya, Philippe De Lombaerde and Stephen Kingah
Bruges, December 2015*

² Further information about PRARI is available from The Open University-hosted project website: <http://www.open.ac.uk/socialsciences/prari/index.php>. Other institutional partners in the project are the South African Institute for International Affairs (SAIIA), FLACSO (Argentina), Southampton University (UK), and the United Nations University Institute on Comparative Regional Integration Studies (UNU-CRIS).

CHAPTER 1: INTRODUCTION AND RATIONALE FOR PRARI TOOLKIT DEVELOPMENT

While important progress has been made in the past five years, Southern Africa continues to experience the most severe HIV epidemic in the world, with nine countries (Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe) reporting over 10% adult HIV prevalence compared with the global mean of 0.8% (UNAIDS, 2013). In addition to HIV/AIDS, tuberculosis (TB) and malaria also cause a large part of the disease burden in the Southern African Development Community (SADC) region. These high rates not only result in increased morbidity and mortality but have a negative impact on the livelihood and economic productivity of those affected most of which are in the prime of their working lives. Moreover, these diseases affect the most marginalized and vulnerable groups and entail high costs related to their treatment and care. Added to costs to employers in terms of health care insurance, absenteeism, reductions in productivity and increased turnover, these diseases also affect the economies of the countries as a whole. Although it is difficult to calculate the true impact and cost of these diseases, it has been estimated that HIV reduced economic growth by 1% in high burden countries (AVERT, 2015). Malaria has been found to reduce economic growth by 1.3% in most affected countries, whereas TB costs around 7% of GDP in the worst affected countries (Health Poverty Action, 2014). The three diseases central to this toolkit should not blind one's attention to non-communicable diseases (NCDs). NCDs are a significant and growing health problem in the region, important also in the context of HIV and AIDS, TB and malaria with longer patient survival and co-morbidities.

Increasingly, there is awareness that processes and instruments of governance for development have to be used to improve social welfare. And amongst the elements of welfare that are often alluded to are access to decent and affordable health care amongst others. It is not by coincidence therefore that crucial processes such as the development of the sustainable development goals (SDGs) place importance on the promotion of healthy lives as one of the goals (SDG3). This epitomizes a realization that access to decent and affordable health care is a key plank in strides to reduce poverty or in fostering development.

Also significant is the discussion on the optimal level of delivery of the desired standards of such health care access. While attention has often been placed at the national and global levels there is room for the expansion of interventions at the regional/ supranational level. Engagement in health at this level is testament to the fact that there are many cross-border health challenges that can be better and optimally addressed through concerted efforts of cooperation between countries. Many regional organizations themselves have recognized this through the adoption of provisions in key regional treaties, protocols, charters and declarations that amply ordain clear mandates for them in this regard. SADC, the principal regional organization in Southern Africa is not an exception in this respect.

With the transformation of the Southern African Development Coordination Conference (SADCC) into SADC in 1992, SADC member states fully embraced broader development goals and sharpened their emphasis on social policies including in the area of health (Article 5: Treaty of SADC). This focus on development in Article 5(1) is packaged in terms that mirror a concern for the socially and economically vulnerable segments of society. The provisions of the treaty reveal a desire to mobilize efforts to support populations that are socially vulnerable. Member States (MSs) have identified cooperation in the area of health as one of the ways of responding positively to the concerns of the socially disadvantaged. In 1999, SADC MSs experienced a landmark in the realm of health policies when they endorsed the Health Protocol that came into force in 2004. Over the years MSs have sought to adopt policy strategies and common positions on critical aspects such as joint pharmaceutical procurement, maternal and child care and HIV/AIDS. All these policies have variably catered for the concerns of the socially disadvantaged in the broader sense of pro-poor development.

Monitoring these actions, particularly in key priority areas such as HIV/AIDS, TB and malaria is important for the SADC region given the direct relationship between these diseases with poverty and reduced economic growth. Appropriate monitoring has the potential to help identify policy gaps, support decision-making and refine existing health policies. Building such a tool has precisely been one of the aims of the Poverty Reduction and Regional Integration (PRARI) project.

The task that the team had in the indicator development chapter of PRARI was to facilitate the collaborative or joint development of a set of indicators that can be used by (mainly) regional health policy makers in assisting them to monitor regional health policy change and implementation that affects the most vulnerable. This toolkit is thus a guide to the implementation of an indicator system to measure regional policy change and pro-poor regional health policy successes targeted at HIV/AIDS, TB and malaria in the SADC context. Whilst it is acknowledged that many other diseases are also a priority for host countries, we have chosen to concentrate this toolkit on HIV/AIDS, tuberculosis and malaria because they disproportionately affect the poor.

The pro-poor aspects of the policy change measured through this toolkit are an important component in terms of added value for SADC. Clearly provision of treatment for the three diseases covered either at free or at subsidised rates is an important “pro poor aspect” of policy in many countries for dealing with the diseases which have a disproportionate impact on the poorer members of society. By pro-poor, as indicated in the section on definitions, the team means economic policies that speak to or reflect the interests of vulnerable groups (especially women)³ including those in rural communities, indigenous groups and urban slum dwellers. The toolkit aims amongst others to capture limitations which the health sector in many countries may have in addressing structural issues that make the poor more vulnerable or at risk. A critical dimension of the toolkit is gauging the extent to which regional policies aimed at addressing these diseases reflect concerns of the poor. The toolkit reflects the manner in which regional policies are translated into domestic policy.

1.1 How to use this toolkit of indicators

The proposed methodology in this toolkit is characterized by its integrating nature and its flexibility. This holistic approach reflects the complementary nature of the indicators that have been added to the core SADC indicators for HIV/AIDS, TB and malaria as included in the Harmonized Surveillance Framework (HSF) of 2010. As such it is a flexible system that captures national and regional level indicators, and that highlights pro-poor indicators. So this is not a parallel initiative to SADC’s HSF. Specific

³ Women and the girl child are often at higher risk for socio-cultural reasons with income disparity and different opportunities for women and men making female headed households more vulnerable.

indicators capturing the SDGs are also included. The SDG indicators on health (3) as well as the majority of SADC's HSF indicators are mirrored mainly under outcome and impact indicators. While complementing these, PRARI indicators add value in terms of input, process and output indicators. Of the 76 indicators in the system, 15 are directly based on SADC's HSF, 3 are adapted from the HSF, and 6 are based on SDG3.

The methodology proposed here should be regarded as one that is adaptable and malleable. It is to be populated on a needs basis by the end users. All the logical components have been taken into account with an understanding that additional priorities may be generated and may arise over time. So the current product is a modular toolkit that reflects the reality and need for sustained interventions on a multi-level basis.

The modular nature of the toolkit is a reflection of the importance of indicator development as both an epitome of an indicator system/ comprehensive data base on the one hand, and an activity of indicator reporting as such, on the other. Our focus has been to sharpen and ease the first dimension deferring the second to end users.

Once more it is important to underpin that this is a dynamic document. While reflecting the current priorities in SADC it also indicates that these priorities may change and shift. The approach used thus integrates this reality with an understanding that downstream policy end-users will be able to adapt the proposed framework to new priorities as they emerge.

In terms of timeline it is proposed that reporting be aligned to the current practice in SADC. Member States currently report annually for purposes of the HSF. Mindful that this system complements and is not parallel to the HSF it is proposed that MS also report on annual basis for the additional indicators that seek to fill in gaps identified by the end users from SADC Secretariat and from MS who jointly developed the toolkit of indicators.

This relates to the issue of costs. Given the fact that this process has been closely anchored to the SADC HSF for the three diseases no extra costs are foreseen for purposes of reporting on the additional complementary indicators. MSs and

international development partners and especially SADC Secretariat will be able to use this comprehensive tool to annually track performance in the results chain or policy process cycle in a manner that reflects shifting priorities.

Again, we underscore the fact that the toolkit takes into account the work already done in SADC. It builds on and strengthens this, with the intention of addressing possible gaps in the existing SADC framework. SADC has developed indicators that focus mainly on the outcome and impact levels. However to be able to identify the policy process aspects and monitor the success of this process and its implementation certain indicators earlier in the chain need to be measured as well: the input, process and output indicators.

The report and toolkit consists of five chapters. Following the Introductory chapter, Chapter 2 discusses how the toolkit was produced and the actors involved. Chapter 3 introduces the conceptual framework and covers a number of additional methodological issues. Chapter 4 presents the indicators, and chapter 5 deals with implementation issues. This is followed by the list of references and two annexes.

1.2 What can be learned from previous experiences with indicator system development in African sub-regions?

In Africa, a number of (dispersed and not necessarily sustained) efforts have been undertaken to design and develop indicator systems with multi-dimensional and composite indicators that reflect the depth and speed of integration processes and allows one to compare integration experiences in ways that try to go beyond the juxtaposition of case description and/or the formulation of stylized facts and opinions. These attempts include efforts made by the regional bodies themselves and those made by other entities and actors.⁴ A common currency in all the monitoring efforts is first the articulation of benchmarks or indices used to determine whether the process is on track.

In 2000, SADC was involved in a project with the United Nations Development Program (UNDP) and the Southern African Political Economic Series (SAPES) in which

⁴ For an assessment of experiences with indicator-based monitoring systems in world regions outside (Southern) Africa, see e.g. De Lombaerde et al. (2008, 2010).

a SADC Integration Index was developed. The index measured the level of intra-SADC activities in goods, capital and labour markets. This effort was not sustained. Since then, the SADC Secretariat has published annual reports on macro-economic and development convergence indicators (Hansohm and Adongo 2008: 195). In addition, there is also a monitoring system that was built into the SADC Regional Indicative Strategic Development Plan (RISDP) of 2003. The objective of the mechanism was to ensure that goals planned are achieved. It was also meant to serve as an early warning system for potential cases of failure, and as a means to provide stakeholders information on progress in attaining the targets outlined in the RISDP.

In SADC the main institutions involved in the monitoring process are the Council and the Integrated Committee of Ministers. The secretariat is tasked with coordination and monitoring at the regional level through an integrated monitoring and evaluation system. SADC National Committees ensure the coordination of the monitoring process at the national level and provide feedback to the secretariat in Gaborone. Other actors in SADC pushing for indicators for monitoring within SADC have been civil society organizations and think tanks. They have been involved in a Stakeholders Forum that often meets prior to annual/special Council and Summit meetings. But these civil society actors also take independent initiatives geared at better monitoring of regional integration in the region. For instance the Southern African Regional Poverty Network developed a series of indices on human poverty, life expectancy, literacy, water, health services, amongst others. In addition, the Namibian Economic Policy Research Unit (NEPRU) and the Trade Law Centre for Southern Africa (TRALAC) have since 2001 with the support of the Konrad Adenauer Foundation published Year Books on Monitoring Regional Integration in Southern Africa. The year books have focused on macro-economic trends, trade, democracy, security and social concerns.

When looking at other regional integration schemes in Africa for instance, CEMAC (Central African Economic and Monetary Community) adopted a special directive in 2004 that aims at monitoring how the rules and policies of the grouping are implemented (CEMAC, Directive n°01, 2004). Within the East African Community (EAC) one peculiarity is that the secretariat has been working with the private sector, East African Business Council, to develop monitoring tools for the region. More

recently, the World Bank and the EAC Secretariat have published an East African Common Market Scorecard for the first time.

In the Economic Community of West African States (ECOWAS), the Commission used indicators aligned to specific departments and the nine commissioners are expected to provide biannual reports on the progress made in implementing the objectives of the organization. In addition ECOWAS has put in place the multilateral surveillance mechanisms to monitor macro-economic convergence (M. Assani, personal communication, 19 November 2009; T. K. Zourehatou, personal communication, 10 November 2009).

In addition to the efforts by the regional organizations themselves, the UN Economic Commission for Africa (UNECA) (2001, 2002, 2004) developed an indicator system to assess progress in African regional integration since the signing of the Abuja Treaty in 1994 in its ARIA1 Report (*Assessing Regional Integration in Africa*). The main objectives of the indices were listed as follows:

“i) [t]o assess each country’s performance and relate it to the goals and objectives of each regional economic community and that of Africa as a whole, as well as to assess the performance of each economic community to that of Africa; ii) to compare the contributions of each member country in a regional economic community towards the realization of such goals and objectives, in addition to the contributions that each regional economic community has made towards the realization of goals and objectives of the continent at large; iii) to monitor the performance of each country, regional economic community, and the continent as a whole for regional integration efforts over time; iv) to enhance the quality of the analysis by providing indices for scores and rankings at country, regional economic community and continent levels” (UNECA 2004: 224).⁵

⁵ The structure of the UNECA composite indicator was based on eight sectors (or clusters of activities) that are common to the treaties of the regional economic communities: trade, money and finance, transport, communications, energy, agriculture, manufacturing and human development and labour markets. Progress in these clusters was measured by a variable number of indicators, totalling 19 indicators in the whole system. The data came from published official sources but also from questionnaires that were specifically designed for the purpose. Basic data were normalised transforming them in annual indices taking 1994 as the base year (1994=100). The Composite Integration Index, which assessed the “relative performance of a regional economic community” was based on the eight sectoral indices for all member countries. Country weights were GDP figures; sector weights were based on expert judgement. UNECA also calculated weighted averages of the regional economic community indices, using the corresponding GDP weights of each regional economic community.

In the UNECA proposal two benchmarks were used for the purpose of evaluating and comparing the integration efforts: (i) the self-defined pre-determined targets for target-driven indicators (if they exist for particular integration groupings), and (ii) an average of the n best performers. Although further improvements and refinements of the indicator system were announced (UNECA, 2002: 228 and 249), the effort was unfortunately not sustained in ARIA2 of 2004. According to recent information, UNECA is currently taking up the work on indicators again and plans once more to include the indicator-based assessments in ARIA in the future. Concerning those RIAs that were studied by UNECA, SADC and ECOWAS came out as performing “above average” whereas COMESA and EAC showed a performance level close to the African average. It should thereby be borne in mind that the period considered was rather short. The fact that UNECA’s initial indicators and assessment led to the conclusion that organizations like SADC and ECOWAS were better performers, attracted strictures from the Common Market for Eastern and Southern Africa (COMESA) which found the UNECA approach to be lacking in objectivity (De Lombaerde and Van Langenhove, 2006). Currently, UNECA and the African Union (2014) are working on a new system of indicators to be applied to the sub-regional integration schemes in Africa.

The European Union (EU), as an extra-regional actor, has also been active in supporting the development of indicator systems in Africa. Apart from the EU-ACP Reviews (Pietrangeli 2010) and the monitoring components of the economic partnership agreement (EPA) negotiations, the recently funded ACP Monitoring Regional Integration (ACP-MRI) project is worth mentioning. This was a two-year ACP Secretariat project funded by the EU. Launched in 2008, it aimed at designing an information system for the measurement and monitoring of regional integration in the ACP sub-regions.⁶ The project was conceived as a two-stage project in which, in a first stage, a system of core indicators would be developed, common to all the ACP regional integration organizations. In a second stage, the system would be expanded with other indicators specific to each regional organization on the basis of their own agendas. The project cycle involved multiple multi-level consultations but, due to a lack of ownership at the level of the regional organizations, the project was not

⁶ These sub-regions were the twelve regional integration organizations recognised by the ACP Group and benefiting from EDF funds. They included regional organizations in Sahel-Saharan Africa (CEN-SAD), Southern Africa (SADC), Central Africa (CEMAC, CEEAC), Western Africa (CEDEAO, UEMOA), Eastern and Southern Africa (COMESA, COI, EAC, IGAD), the Caribbean (CARICOM), and the Pacific (Pacific Islands Forum). See: <http://mri.acp.int/>.

continued after the first phase and the elaborated indicator system was not adopted by the regional organizations.

As can be observed, monitoring often involves a myriad of stakeholders that can be partitioned into those active in decision-making, consultations, and those conducting the actual monitoring and other institutional actors. Councils and secretariats in the RIAs of Southern, Central and West Africa are engaged in the monitoring efforts. For East Africa, the East African Community secretariat is active in monitoring regional integration in the region (Hansohm and Adongo, 2008: 205).

CHAPTER 2: THE TOOLKIT DEVELOPMENT PROCESS

Taking into account that experiences with other indicator-based monitoring systems in regional contexts have revealed, among other things, that stakeholder participation and local ownership are crucial success factors in developing and implementing such systems (De Lombaerde, Pietrangeli and Weeratunge 2008; De Lombaerde et al. 2010), the approach followed in this project right from the start was a participatory action research (PAR) approach (Amaya and Yeates 2015). This means, among other things, that the (potential) users of the end product have been integrally involved from the outset in the conceptualization, development, rollout and eventual deployment of the toolkit of indicators.

The PAR approach was applied to collaboratively develop regional indicators of pro-poor health policy success. It differs from conventional research in several ways (Amaya and Yeates 2015). Firstly, the methodological context of the application of the approach is unique by considering local actors', or beneficiaries' knowledge. The actors affected by the problem are the primary source of information and are involved in every step of the process, from problem identification and analysis in order to collectively work towards solutions. Secondly, it involves iterative cycles of action and reflection, where results and data are questioned and analyzed at every step. This makes change processes more robust by ensuring that learning and sharing takes place (Mahoo 2012). Thirdly, it differs from conventional research in the location of power in the stages of the research process (Cornwall and Jewkes 1995). Local actors are empowered to construct their own knowledge to respond to their needs (Reason,

1994) and researchers act as facilitators of this process (see Amaya and Yeates 2015; also see the PRARI website for further information - <http://www.open.ac.uk/socialsciences/prari/about/participatory-action.php>).

The PAR approach was employed by forming an 'indicator development' team in the SADC region and organizing regional workshops to discuss key issues. The team was composed of around 12 key stakeholders from the region belonging to ministries, NGOs, academia, think tanks and regional bodies.⁷ Although it was not possible to include all of the countries in the region due to logistical and financial reasons, in choosing these actors we sought to identify key representatives from the MS, as well as maintaining a good gender and organizational balance. Challenges to this process included ensuring ongoing team commitment to the process as well as the logistical difficulties of working with actors in different countries and time constraints associated with the short lifespan of the project.

The indicators developed in the toolbox are needs based. This means that from the very beginning impetus to develop the toolkit was generated by and from the regional health policy unit of SADC. Using the priorities of the regional organization itself, a team of regional health experts on monitoring and evaluation as well as other regional specialists on social determinants of health were brought together in toolkit development workshops. The first meeting (Gaborone, Botswana, in December 2014), was used to elaborate on the nature of policy monitoring in the context of regional integration, health and poverty reduction. What is more, the meeting provided an opportunity for participants to explore issues of data flows and to consider indicators that already exist and are being used in the region. This first meeting also provided an opportunity for the team members to know each other better: an important component in building an epistemic community and now a community of practice. Following the first meeting, the majority of the participants cooperated in jointly authoring a PRARI Policy Brief (Amaya, Bagapi, Choge et al. 2015). This Policy Brief was used in explaining the importance of a regional toolkit of health indicators, noting some of the key elements/priority areas to be monitored.

⁷ From national health ministries those who participated included: Khuteletso Bagapi, Onkemetse Mathala (Botswana), Zandile Mandlopha (Swaziland), Enock Anthony Mhehe (Tanzania), Mubita Luwabelwa (Zambia), Ponesai Nyika (Zimbabwe), Samuel Longwe (Malawi). One participant from an NGO was Irene Kwape. Participants from academia and think tanks included Themba Moeti, Isaac Choge, Molefe Phirinyane and Lillian Mookodi. Participants from SADC were Ityai Muvandi, Joseph Mthetwa and Innocent Moditsaotsile. One participant coming from the regional ECSA Health Community was Zubeda Ngware.

The second meeting (Gaborone, Botswana, in June 2015) was used to articulate the pro-poor regional health priorities for the region in a more profound and exhaustive way. It was also used to means-test initial ideas on the nature and scope of the indicators being developed. The final meeting (Johannesburg, South Africa, in September 2015) provided an opportunity for the facilitators to present the initial results or draft toolkit of indicators resulting from the previous meetings. The objective of the final meeting was equally to discuss the indicators elaborated and to receive feedback from a wider community of researchers, policy makers and members of civil society.

The facilitating role in the development of a toolkit of indicators that capture regional policy change and pro-poor regional health policy success in the Southern African region was played by UNU-CRIS, with the support of PRARI partners. The process was conducted in collaboration with key stakeholders from the SADC region, including representatives from the SADC Troika MS, through continuous communication via ICTs and a series of face-to-face interactions through workshops and consultations.

2.1 What is the status quo for health policy indicator development in SADC?

The toolkit which is presented here builds on existing efforts at the level of SADC. The institution has developed a policy template that helps it to monitor the implementation of its regional integration disciplines. This is known as the Regional Indicative Strategic Development Plan (RISDP) (SADC 2003). It was adopted in 2003 for a period of 15 years. Periodically SADC services and national authorities conduct an assessment of the progress that is being made in meeting the goals set in the plan. For example in the 2011 assessment it was revealed that in the area of social and human development (that also includes health) only 38 per cent of the planned output had been realized (SADC 2011: 13; Amaya, Kingah and De Lombaerde, 2015). The monitoring of the RISDP is effected with support from SADC National Committees. They monitor the implementation of the plan at the national level and provide status reports to the secretariat on a periodic basis (SADC 2003: 151). Also SADC publishes a Year Book, which contains health-relevant data (SADC 2011).

SADC's Health Protocol stipulates that indicators of communicable and non-communicable diseases will be developed that will help MS in meeting goals set by the organization. In view of this SADC has developed a *Format for Monitoring Progress for Implementation of the SADC Protocol on Health in Member States*. Specifically, in 2007, the organization rolled out the *Implementation Plan for the Protocol on Health (2007-2013)*. The 2007 Implementation Plan focuses on four core areas: disease control (including HIV/AIDS, TB and malaria), family health, health promotion (and education) and health systems (including human resources). This document includes rolling targets for HIV/AIDS, TB and malaria. All these efforts complement the work on a surveillance template developed by the SADC secretariat in partnership with the Centre for the Evaluation of Public Health Interventions of the University of London School of Hygiene and Tropical Medicine (SADC 2010: 6; Amaya, Kingah and De Lombaerde, 2015). In 2008, MS agreed on creating a set of HIV and AIDS indicators that had to be tracked and reported on by them (SADC 2010: 7-8). This was done in the HSF in 2010 for three diseases.

A key problem with the existing HIV/AIDS indicators used by SADC has been the absence of metrics that capture key elements such as *paediatric care and emerging issues including male circumcision* (SADC 2010: 11). In the course of the workshops organised to develop this toolkit it also emerged that SADC needed "a systematic way at the Secretariat level in Gaborone to know if what they do at that level" works for Member States. In the Assessment Report for the implementation of the strategy for HIV/AIDS, Tuberculosis and Malaria it is stated in terms of the extant gaps that: "Member States' monitoring and evaluation frameworks have clearly defined indicators that measure progress in the implementation of global commitments (for example, UNGASS and the MDGs). *But few Member States have indicators tracking region-specific indicators* (emphasis added)" (SADC Assessment Report: HIV/AIDS, TB and Malaria, 2010: 19). Also it is stated in the Assessment Report that: "Tracking most-at-risk populations is difficult for most Member States. ... There are weaknesses in the communication systems between SADC Secretariat and Member States, which leads to gaps in the collection and reporting of the regional surveillance information." These citations amply point to the directions where there is room for complementarity in the area of indicators tracking health policy for the three diseases.

To summarize, the areas where gaps exist and where MS expressed a desire for greater SADC Secretariat involvement include development of indicators on HIV/AIDS, TB and malaria that track:

- a) *Pediatric care*
- b) *Emerging issues like male circumcision*
- c) *Relevance of Secretariat actions for Member States in dealing with HIV/AIDS, tuberculosis and malaria*
- d) *Region specific issues for use by Member States*
- e) *Most at risk populations including vulnerable groups*

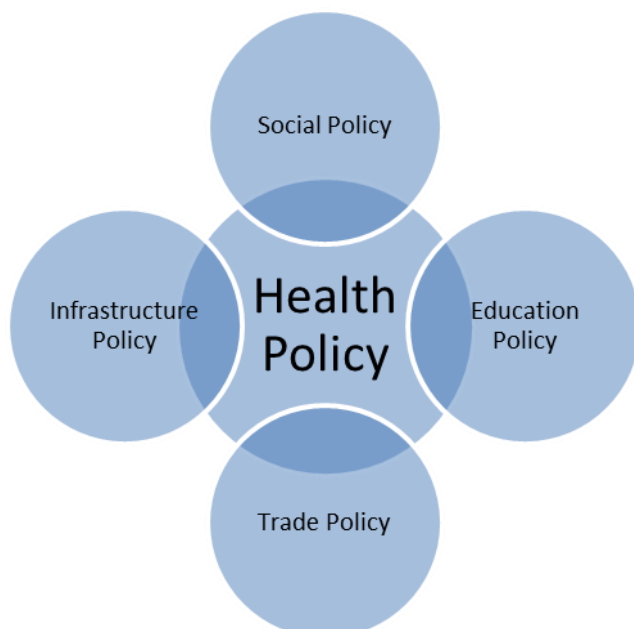
CHAPTER 3: CONCEPTUAL FRAMEWORK AND FURTHER METHODOLOGICAL ASPECTS

3.1 What are health policies and health policy indicators?

Health policies have been defined as the “courses of action (and inaction) that affect the set of institutions, organizations, services and funding arrangements of the health and health care system” (Buse et al. 2012:6). According to the World Health Organization (WHO), they can also be defined as the decisions, plans and actions that are conducted to achieve specific health care goals (WHO 2015).

The precise delimitation of health policies is not necessarily straightforward and complicates the construction of an indicator-based monitoring system. Inspired by the literature on the social determinants of health (Marmot 2005; Puska 2007; WHO 2008), there is a tendency to broaden the scope of health policies. Although we will initially opt for a relatively strict interpretation of health policies, we are fully aware of the multiple overlaps between health policies and other policy areas (Figure 1). It will be up to the users of the Toolkit to decide whether and when a broadening of the indicator-set in those directions is desirable (or not).

Figure 1: Overlap of policy areas



Health policy indicators are numerical/quantitative or qualitative measures that are used to determine whether the objectives of set health goals are being met or otherwise. When target values exist for such indicators, they can be used as benchmarks. Such indicators are common at the national and sub-national levels of governance (Aller et al., 2015:1). At these levels national statistical offices are crucial in providing the material and information needed. Monitoring and evaluation units within the ministries of health as well as in other ministries including finance and national statistical offices develop such indicators that are useful in tracking policy change and success in the realm of health.

At the global level, the World Health Organization (WHO) has set goals and targets, the realization of which are gauged against clear indicators that are widely used by policy makers both at the international and at the national levels. Other international agencies such as the United Nations Development Program (UNDP), the UN's agency dealing with HIV/AIDS (UNAIDS), the United Nations International Children's Emergency Fund (UNICEF), multilateral development banks, amongst others also have set indicators tracking health success or failure.

At the regional level indicator development may appear insipient but it is fast gaining ground. This is either facilitated by the regional offices of the WHO, or by regional organizations such as the African Union (AU) or the Southern African Development

Community (SADC). Indicators can either be disease(s)-specific, issue(s)-sensitive or they can be system wide.

3.2 What is understood by monitoring regional policies?

Monitoring in this context relates to the follow-up and evaluation process of the implementation and impact of policies. Specifically it can also mean “a series of relevant processes of information gathering, processing and dissemination with the aim to influence, scrutinize and/or evaluate regional integration policies or to secure their implementation” (De Lombaerde 2008: 284). It allows judgment (objective or otherwise) as to the sustainability of an effort. As De Lombaerde and colleagues assert, “monitoring has the capacity to make integration processes more transparent, involving higher degrees of participation and legitimacy, and therefore, making the processes more sustainable” (De Lombaerde, Pietrangeli and Weeratunge 2008: 41). In his study of monitoring integration in the Caribbean Girvan posits that the potential value of monitoring is the diminution of the time frame of the learning cycle and the amelioration of the accuracy of problem identification and intervention (Girvan 2008: 51).

Purposeful monitoring must be preceded by fundamental questions regarding the object that is subject to monitoring, the purpose of monitoring, the *modus operandi* of the same and the actors involved in the enterprise of monitoring (Bilal 2009). Monitoring must also be driven by a reason. Some of the potential rationales for monitoring include enhancement of development, assessment of progress, and the production of evidence respecting the capacity of an institution to implement its policies (Bilal 2009). Monitoring that is contingent on clear indicators allows institutions to challenge conventional wisdom and received truths and assumptions about the success of the regional process (De Lombaerde 2008: 284). The *modus operandi* or modalities for monitoring regional integration may vary depending on what is being monitored. The means or methods used will greatly influence the outcome of the process. The method will be contingent on data availability, the capacity to monitor as well as the target of the process.

3.3 What are regional health policy indicators?

Regional health policy indicators are those that are put in place by regional organizations to help policy makers in those entities monitor the degree of success or failure of the implementation of the health policies and disciplines that have been agreed at the regional or supranational level. There are some examples of regional health policy indicators (RHPIs) that are being used in various parts of the world. In SADC the Health Protocol (HP) of 1999 (that entered into force in 2004) (SADC, 1999: Articles 7a and 7d) has specific provisions that allow for the development of system-wide health indicators to monitor regional health policy implementation. In SADC's RISDP of 2003 elements such as health are included (SADC, RISDP, 2003). Benchmarks aligned to the health aspects are periodically monitored within the framework of the RISDP at the national and regional levels (SADC, 2011). The indicators mentioned in the HP and used in the context of the RISDP are system-wide ones. SADC also has disease specific indicators that have been used to monitor implementation of set goals in terms of addressing HIV/AIDS (following the Maseru Declaration, MD) (SADC, MD, 2003) tuberculosis and malaria (in the case of tuberculosis see: Lonroth et al., 2014). These have been included in SADC's HSF. Also relevant for SADC are indicators that have been developed and constantly updated by the Eastern, Central and Southern African (ECSA) Health Community.

The main regional indicators used in this project are more quantitative than qualitative. This is so notwithstanding the fact that qualitative indicators have also gained traction and relevance (MacDonald, Veen and Tones, 1996). The decision to side more with quantitative ones can be partly explained by the ease of reporting.

3.4 Why are regional health policy indicators important (useful)?

Estimating the state of a population's health can be very contested (Byass, 2010; Editors, *PLoS Medicine*, 2010). That is why specific tools such as indicators can be useful in providing an approximate map of reality. Regional health policy indicators are useful in measuring regional health policy change, success, standstill or failure assisting policy makers internally to make course corrections as needed in the implementation process.

In addition, they are indicative of or signal health priorities for regional organizations both for internal and external stakeholders. Signaling for internal stakeholders can be

useful for non-health policy makers working in regional entities in policy areas falling under social determinants of health. Social determinants of health include elements such as: meaningful employment, income security, educational opportunities and engaged, active communities (Lantz and Pritchard, 2010). For external stakeholders including international development partners (IDPs), multilateral development banks (MDBs), philanthropists, foundations and companies, such signaling helps them identify areas where there is room for complementarities.

These are all linked to the fact that indicators help to corroborate performance or lack thereof. Yang and Holzer summarize six important drivers of performance data use. These include: system maturity; stakeholder involvement; leadership support; support capacity; innovation culture; and goal clarity (Yang and Holzer, 2015: 361). Leaning against a historical institutionalism perspective of the evolution of management by objectives and results (MBOR) in Denmark, Norway and Sweden, they write that: “Instead of treating MBOR of performance regime as an ideal technique with clear boundaries ... it is an institutional choice that has various institutional configurations and is affected by path dependence and institutional context” (ibid: 362).

All these elements also pertain to the importance of evidence in decision-making. Anderson and colleagues note that the use of scientific knowledge for policy making has grown (Anderson et al., 2005: 226). While the demand for evidence in public health is at an all-time high, public health is still short of the material base for comprehensive evidence-based decision-making (Anderson et al., 2005: 228). They note that evidence-based decision-making has many benefits (ibid). Regional health indicators are an important component of evidence-based decision-making. In the same vein, Boerma and colleagues argue that health indicators are key for guiding development and resource allocation: but data is often lacking (Boerma et al., 2010:1). For them, there is need to strengthen the way estimates for health indicators are generated (Boerma et al., 2010:2). Indicators help in synthesizing a myriad of data into usable and actionable steps.

Concurring, Brownson et al. (2010) contend that to improve health, qualitative and quantitative evidence is needed, adding that effective health policies and resource allocation can improve public health outcomes. They opine that policy makers are at

the receiving end of data that is often chaotic. Hence it is key to have clear tools to assess disease burden, set priorities and measure progress (ibid). A public health adage, they note, goes as follows: “what is measured gets done” (ibid).

Finally the process of indicator development that involves the regional health policy makers as downstream users of the toolkit of indicators is an important learning process for all those involved. Corburn and Cohen opine that: “lessons from other fields and emerging experiments around the world suggest that indicator processes can integrate science, policy, and community to promote greater ... health equity” (Corburn and Cohen, 2012:5). Experience from the PRARI indicator development chapter is corroborative of this pattern of mutual learning between policy makers, researchers and the NGO participants who have all been active in the elaboration of the indicators.

SADC functions through the close interaction between the Secretariat, based in Botswana, and its 15 Member States. In order to attain our goal to measure regional health policy change and pro-poor health policy success, it is crucial to evaluate actions taken at the Secretariat level to tackle HIV/AIDS, TB and malaria, as well as the result of the Secretariat-MS level interaction, which are materialized in the form of national health policies. This means that in addition to observing the impact of health policies, through this exercise we are able to gain an understanding of how SADC can support its MS to address these diseases, as well as how the role of the Secretariat can be strengthened. We also want to assist SADC and MS to track how successful they are translating regional policies into action at the MS level by proposing a set of indicators to measure the success of this process.

HIV/AIDS, TB and malaria are in part caused and exacerbated by poverty. The proposed framework allows us to measure progress in policies to address these diseases and in this manner reduce poverty. Through the analysis of the data we can reach conclusions on how to support MS and the Secretariat target their policies towards the most vulnerable populations and to reduce disease burden. Alternatively we may also assist MS to assess how well SADC and Member States’ policies are targeted to the most vulnerable populations.

3.5 In which logical categories can indicators be organized?

Within these two large domains (MS and Secretariat levels), following the results chain logic, sub-sets of indicators were classified as input, process, output, outcome and impact indicators (table 1). This categorization is widely used in the health indicator development literature (see e.g. Boerma, AbouZahr, Evans and Evans, 2014: 3 *et seq.*).

Table 1: Definition of input, process, output, outcome and impact indicators

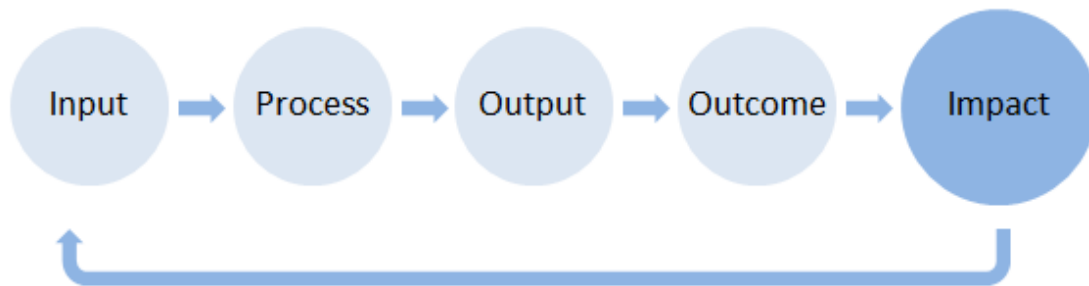
Category	Input	Process	Output	Outcome	Impact
Definition	Measure all resources related to the implementation of a policy or programme.	Evaluate whether the policy is being implemented as planned and how well the activities are being conducted.	Report on the results of efforts (inputs and processes/activities) at the programme or policy level.	Measure a policy's or programme's level of success in improving service accessibility, utilisation or quality.	Measure long-term, cumulative effects of policies over time on the population's health and well-being or on the larger social system.

This categorization suggests a causal sequence between the various sub-sets of indicators. Two preliminary remarks should be made, however. The first is that even if there is a causal logic implied between the sub-sets, this does not mean that any correlation encountered in the movement of indicators of two subsequent categories should be interpreted as a demonstration of causality. The logical causality plays at the level of sub-sets but cannot be traced back at the level of individual indicators. Many factors determine the behavior of individual indicators in each category. Necessarily, many of these factors are not captured by the indicator system. Demonstrations of cause-effects at the indicator-level, require additional statistical analysis which goes beyond the scope of an indicator-system.

The 'impact' category (containing indicators that directly reflect the health situation of the citizens of a particular country or region) is obviously both a logical end-point as well as a starting-point when thinking about regional (and national) health policies (figure 2).

Figure 2: Logical organization of indicator system⁸

⁸ In the indicator development meetings there was agreement that since SADC had focussed on outcome and impact levels, we would complete their indicator set by proposing indicators at the other levels that would assist measure/monitor policy success.



The indicators in each logical category can further be sub-classified in various ways. One option is to distinguish between ‘regional’ (i.e. Secretariat level) indicators and ‘national’ (i.e. Member State level) indicators (figure 3). This option highlights the multi-level governance nature of modern health policies and allows focusing on the interactions between policy levels. While there are different indicators for each of these levels, these are frequently related. For example, inputs developed at the Secretariat level that are targeted at a specific country, naturally become inputs at the country level as well.

Another option is to organize the indicators by (regional) policy priority areas (figure 4), which allows one to monitor more directly policy actions in specific priority policy areas. Following this option, it is recommended to add a general indicator category because not all relevant policy variables are specific to a policy priority (or, disease-specific) and not all relevant impacts can be attributed to specific policy action lines. Obviously, opting for one or the other option can be combined with a secondary sub-classification following the alternative option. In addition, when indicators are correctly coded in a database (i.e. reflecting their belonging to a logical category, their level of measurement, their link to a policy priority, etc.), they can then easily be combined, re-combined and presented according to the needs of the users. In this document, we will opt for organization by priority policy areas (i.e. HIV/AIDS, Tuberculosis, Malaria) because this corresponds to the concerns of the stakeholders as expressed in the PAR process that led to the development of this PRARI Toolkit (figure 5) (see also Chapter 2). However, the system is sufficiently flexible to easily reorganize the indicators.

Figure 3: Classification of indicators by logical categories and measurement levels

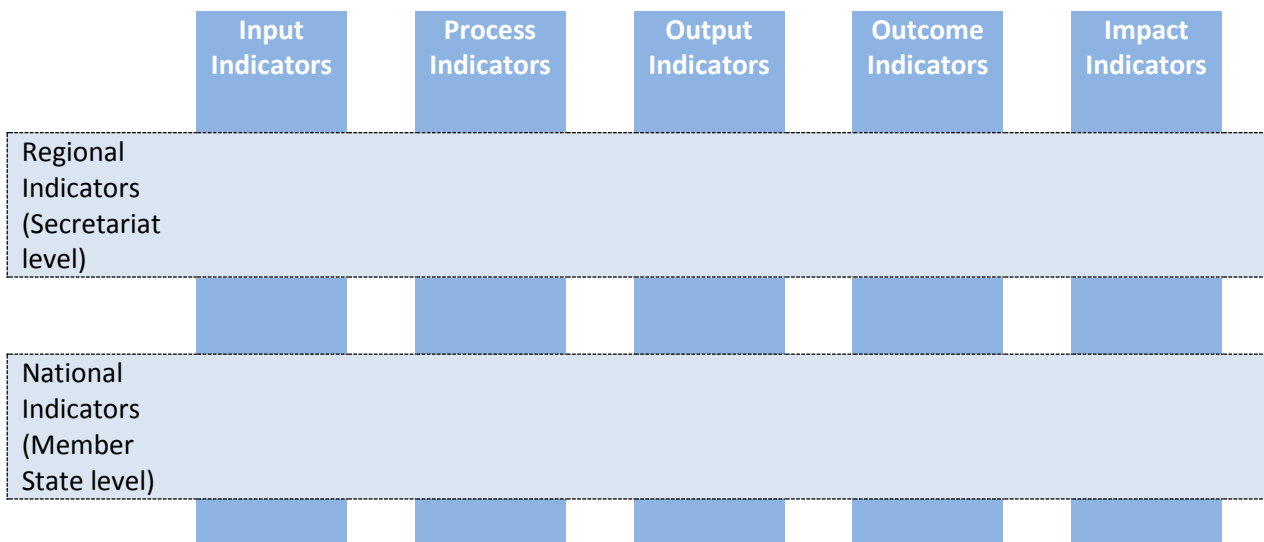


Figure 4: Classification of indicators by logical categories and priority policy areas

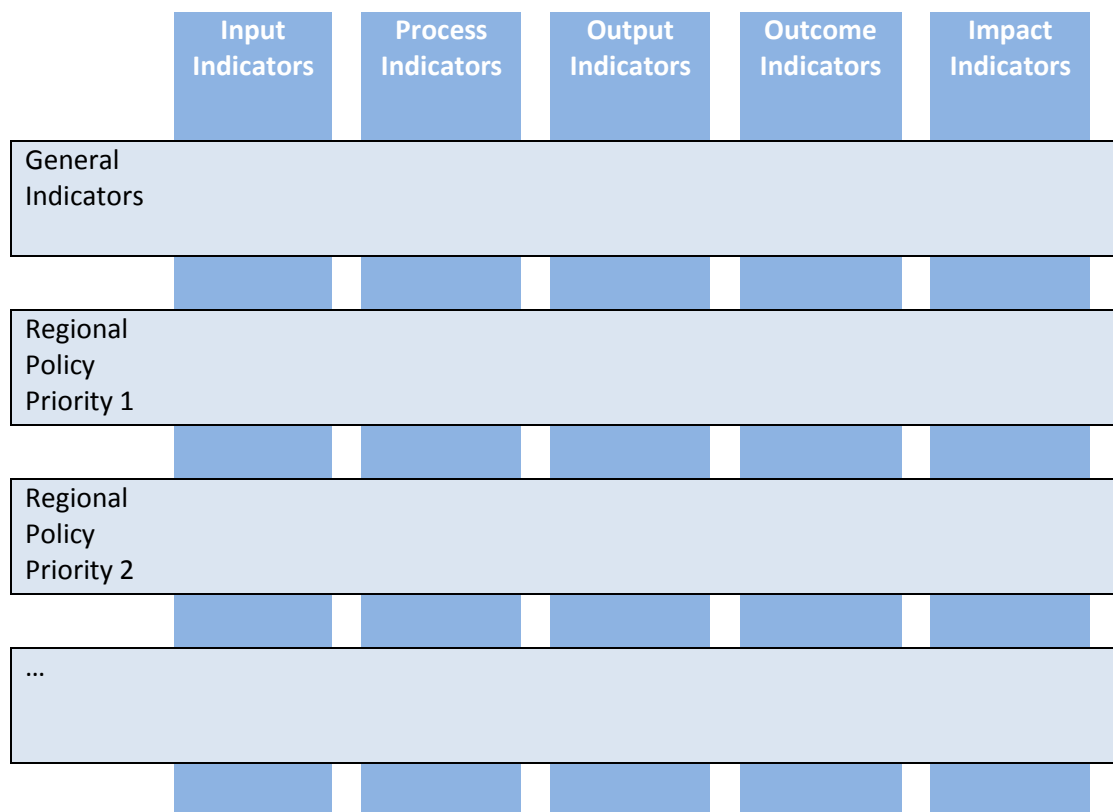
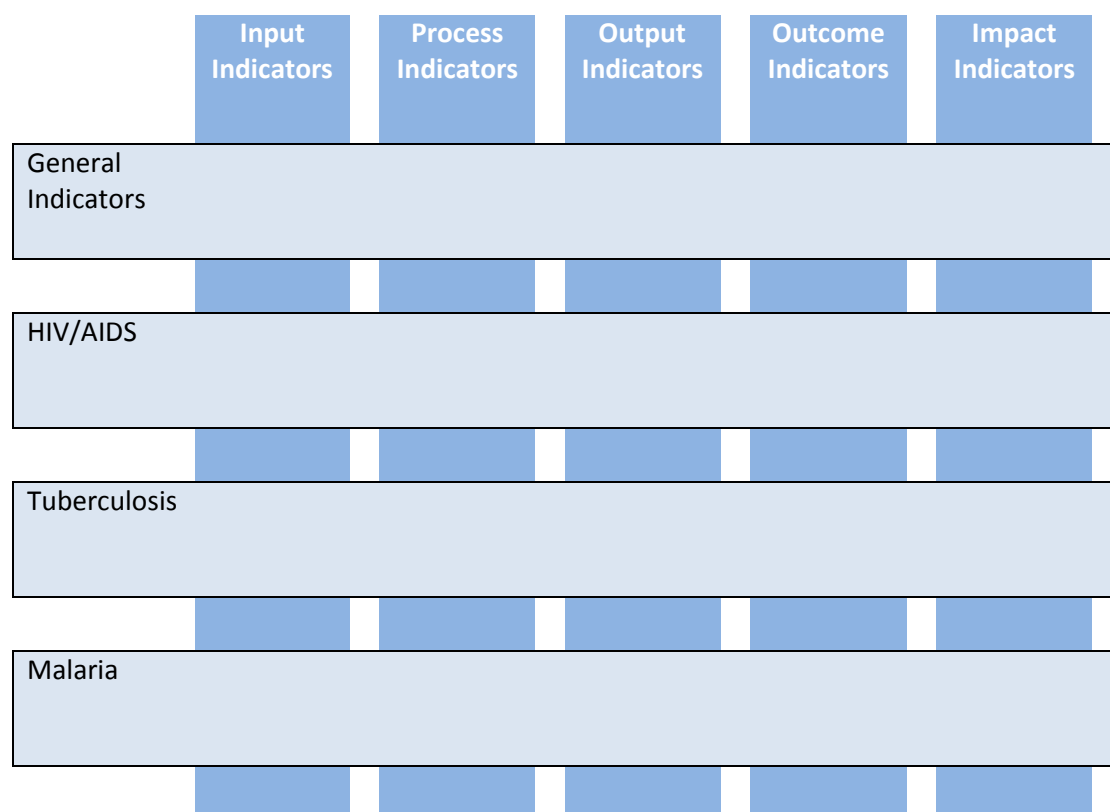


Figure 5: Classification of indicators by logical categories and priority policy areas in SADC



In terms of the metrics proper, the goal has been to keep the system accessible, clear, coherent and sufficiently integrated. On each score reporting will be done for the denominator (which is the broader cohort) and for the numerator (the target metric/priority assessed).

3.6 How to build-in the health-poverty-regional integration nexus

The main added value of PRARI indicators is that they are sensitive to two dimensions: poverty reduction (pro-poor elements) and regional integration. Many indicators at the global and national levels capture vital aspects of health systems and specific diseases. To complement these existing global and national efforts PRARI indicators capture those aspects of regional health policy change that are distal and proximate proxies of regional integration and poverty reduction.

Regional integration is approached here in a flexible manner. It incorporates all the cross-border dimensions of trans-boundary flows that have links with health policy. It

also entails initiatives to which at least three MS have subscribed. The crucial element is that of cooperation within the context of a region.

Pro-poor is a more contentious category. The mundane approach has been to use the dollar poverty lines trendy amongst IDPs. The underlying target in PRARI has been to work on health policies that mainly affect the most vulnerable populations in the various societies of the respective regions. Vulnerable populations constitute a malleable category. However, one may make reference to members of indigenous communities, urban slum dwellers, and rural women as constitutive of the main parts of vulnerable populations.

The pro-poor dimension of the indicators seeks to reflect the importance of *people* in indicator development for regional health policy making and implementation. While some still pay greater attention solely on national health *systems* in the broad sense, Frenk argues that health is increasingly regarded as a broader part of development. In as much as a lot of money goes to health, more money alone is not a condition for progress and the *people* component in public health needs to be taken more seriously (Frenk, 2010:1; cf: Haines, 2015: 2328).

This is closely related to the issue of universal health coverage (UHC). Many countries lack explicit frameworks for UHC monitoring (Boerma et al., 2014: 2; cf: Kutzin, 2013). What is most needed include a comprehensive health information system, as lack of data on population needs is a huge problem (Boerma et al., 2014: 4). Effective coverage in this context means: measurement of need, utilization and quality of services (ibid), especially for the most vulnerable groups in the respective regions.

Most of the regional tools that have been developed do not address issues like the use of “poor data” when developing the policies, none of the tools assists in studying/analysing the burden of diseases among the poor. There is room for SADC to emphasize regional collection and use of poverty-related health data. It is recognized that some diseases such as HIV/AIDS, tuberculosis and malaria are more prevalent amongst the poor, yet this data is not typically available at the country level.

Whereas the pro-poor focus of the proposed indicator system is thus already implicit in the choice for a system that focuses on the three priority diseases (HIV/AIDS, tuberculosis, malaria), the pro-poor dimension can be further developed by incorporating additional data for existing indicators but discriminated by:

- Gender;
- Urban-rural;
- Sub-national regions (departments, provinces); and/or
- Socio-economic categories (including income categories).

The value-added of incorporating these sub-indicators, will have to be weighed against the cost of multiplying substantially the number of indicators in the system.

3.7 How to integrate the Harmonised Surveillance Framework in the Toolkit

The Harmonised Surveillance Framework (HSF) for HIV and AIDS, Tuberculosis and Malaria in the SADC Region (SADC 2010) is the tool that is currently used in SADC to track adherence by Member States to the minimum standards agreed regionally in confronting the three diseases. The existence of the HSF, as well as of other specific indicator sets within the SADC Secretariat should be fully taken into account when developing the Toolkit. As mentioned before, the Toolkit is designed in a flexible way which allows it to integrate subsets of existing or to-be-developed indicators within a broader conceptual framework and which can be hosted by a central database. Depending on the needs, subsets can then be extracted for specific reporting purposes, or combined with other indicators for other reporting purposes.

In the case of the HSF, the proposed Toolkit can easily accommodate the indicators contained therein (SADC 2010) (Annex 1). They should therefore be coded and classified in the proposed logical categories, and according to their levels of measurement. This is shown in Figure 6. Once coded, they can be wholly or partially integrated in the Toolkit.

Figure 6: Integration of HSF in Toolkit

Input Indicators	Process Indicators	Output Indicators	Outcome Indicators	Impact Indicators	
24		4	3	38	1
25		6	5	46	10
		7			
		8			15
		11	9	47	26
		12	14	48	29
		13	16		34
		17	19		35
		18	21		36
		20	22		37
		23	27		43
		32	28		44
		39	30		45
			31		
			33		
			2		

Source: Authors' figure based on SADC's HSF (2010)

3.8 How to integrate the health-related SDGs?

On 31 December 2015, the Millennium Development Goals (MDGs) will officially be drawn to a close and the Sustainable Development Goals (SDGs) are going to take the lead. While the MDGs focused primarily on poverty and health, the SDGs put a newfound emphasis on environment, human rights and gender equality amongst others. An important emphasis of the SDGs is also ensuring that interventions address the most vulnerable (the concept of leaving no one behind). Another criticism of the MDGs with the emphasis on reporting at national level (as another example) was that they did not enable a focus of identification of vulnerable groups at sub-national levels.

The Millennium Development Goals

There were six principal MDGs that directly related to health. All targets are focused on the period 1990 - 2015. The first goal bearing on health was MDG 1 *Eradicate Extreme Hunger and Poverty*, whose target was to halve the proportion of people who suffer from hunger. The fourth MDG aimed at *Reducing Child Mortality* by two-thirds the under-five mortality rate. The fifth goal was to *Improve Maternal Health* by reducing by three-quarters the maternal mortality ratio. The sixth sought to address “*Combat HIV/AIDS, Malaria and other diseases*” by halving the incidences of HIV/AIDS and Malaria and other diseases and by beginning to reverse their spread. The seventh objective was to *Ensure Environmental Sustainability*. The target relating to health meant to cut in half the proportion of people without sustainable access to safe drinking water and basic sanitation. Finally, the eighth goal related to health in the MDGs was to *Develop a Global Partnership for Development*. The target bearing on health concerned the cooperation with pharmaceutical companies in order to provide access to affordable essential drugs in developing countries.

Health occupied an important position in the MDGs, conveying the conception that health is indispensable to development. Six out of eight goals concerned directly or indirectly health matters, and eight out of 21 targets were health-related. Moreover, these targets were framed in decreasing percentages. The main criticisms were the omission of issues stated in the Millennium Declaration and the absence of political consultation throughout the process (Alleyne, Beaglehole and Bonita 2015).

The Sustainable Development Goals (SDGs)

The Post-2015 Agenda aims to mitigate the criticism directed against the MDGs; and this is precisely the basis of the difference between MDGs and SDGs. The formation process of SDGs is politically inclusive and consultative. In turn, this may lead to a more diffuse set of goals. There are 17 goals and 189 targets, which is double the MDG goals and quintuple the MDGs targets. Political consensus has been achieved, but the targets are seen as diffuse and vague. There is also a relatively reduced set of health priorities. There is one specifically health-focused goal (SDG3), subsuming nine targets, and nine additional targets from other Goals that bear on health.

The third SDG, “*Ensure healthy lives and promote well-being for all at all ages*”, highlights the SDGs’ rallying call: “No one must be left behind”. The nine targets of this Goal cover a range of familiar and new subjects, and aim for the 2030 deadline. These are presented in figure 7.

There is a will to accelerate the progress regarding the reduction of newborn, child and maternal preventable mortality as well as considerations for adolescents. A similarly ambitious goal is to fight and end malaria, HIV/AIDS, tuberculosis, hepatitis, Ebola and other communicable diseases and epidemics. Newer targets include a concern for improved mental health, well-being, and non-communicable diseases, such as behavioural, developmental and neurological disorders. The prevention of tobacco, harmful use of alcohol, and substance abuse, a consideration for family planning and education, road traffic accidents, as well as environmental factors and their relation to health are all supplementary targets to take into account. Finally, the most discussed target of the SDG 3 is the call for universal health coverage under the adage of “no one must be left behind” and a focus on vulnerable groups.

There are nine additional SDGs whose target(s) hold significance for health. The second SDG aims to *End hunger, achieve food security and improved nutrition and promote sustainable agriculture* by ensuring the poor and vulnerable access to safe, nutritious and sufficient food, by ending all forms of malnutrition, in particular for vulnerable populations. Strategic Development Goal (SDG) 5, focusing on gender equality, has a provision to ensure universal access to sexual and reproductive health and reproductive rights. The sixth SDG seeks to *ensure availability and sustainable management of water and sanitation for all*. The targets associated with it aim at universal and equitable access to safe and affordable drinking water and access to adequate and equitable sanitation and hygiene, with a particular attention for women and girls. SDG 7, whose emphasis is on energy, could also increase the services hospitals and community health centers can provide. SDG 9 focuses on resilient infrastructure, which could result in a considerable advancement for hospitals and health centers. The eleventh SDG focuses on safe and healthy human settlements and housing. SDG 12, target 13, aims at soundly managing chemicals and wastes in order to protect human health and the environment. Finally, the Peace and Stability SDG (16) can positively impact the mental and physical health of communities (OWG 2015).

Although this toolkit relates to HIV/AIDS, tuberculosis and malaria, its focus on pro-poor health policies means that other health SDGs are also relevant. Measuring attainment of the SDGs together with other regional policies will give countries and the SADC Secretariat the basis on which to track the coherence of these policies with these globally-set targets, identify countries that require support achieving these goals early on as well as coordinate measurement efforts that are already taking place.

The list of sub-targets of the health-specific SDG is presented in figure 7. Figure 8 shows the health-related SDGs can be classified in our logical categories. The full list of health-related SDGs is presented in Annex 2.

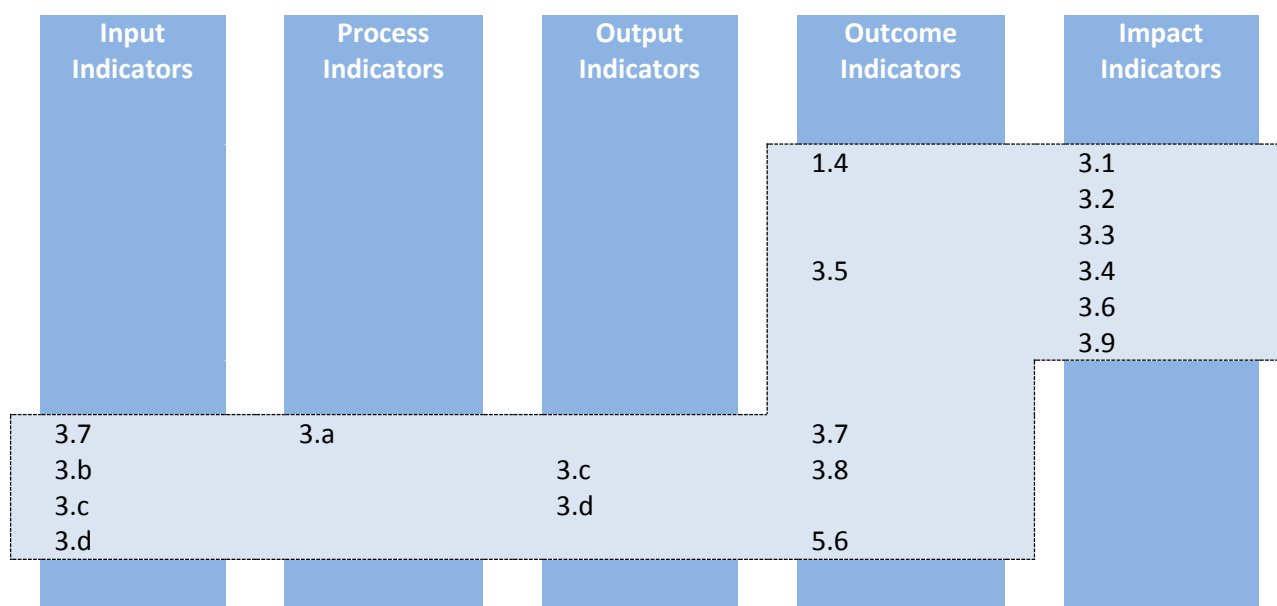
Figure 7: Health-specific SDG

Health-Specific Sustainable Development Goal	
Goal	Targets
<p>3. Ensure healthy lives and promote well-being for all at all ages</p>	<ol style="list-style-type: none"> 1) Reducing maternal mortality ratio (less than 70 per 100,000 live births) 2) Ending preventable deaths of newborns and under-five children 3) Ending the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases 4) Reducing pre-mature mortality from non-communicable diseases by one-third and promoting mental health and wellbeing 5) Strengthening prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol 6) Halving global deaths and injuries from road traffic accidents (by 2020) 7) Ensuring universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes 8) Achieving universal health coverall (UHC)⁹ 9) Substantially reducing the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

Source: Open Working Group (2015). Open Working Group proposal for Sustainable Development Goals. Available at: <https://sustainabledevelopment.un.org/focussdgs.html>

⁹ Including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all.

Figure 8: Integration of health-related SDGs in Toolkit



Source: Draft outcome document (12/08/2015)

3.9 How to select individual indicators?

The range and possible number of health indicators are enormous (Larson and Mercer: 1199). Given this reality, and due to limited resources it is advised and better to select few areas that can be monitored well (ibid). Larson and Mercer note that characteristics of a good health indicators system include: one that is defined (internationally applicable), valid (measures what is intended, replicable between settings and interpretable), feasible (especially data gathering), and useful (ibid). They propose that especially in resource constrained settings, indicator developers should focus on a small number of health indicators measuring high priority areas; that they use more efficient sampling frames; and that they apply standard international definitions (Larson and Mercer: 1200).

The indicators in the toolbox were selected based on regional and Member State priorities (including non-governmental actors); their inclusion in international declarations to which Member States have agreed to; whether the indicator is being used by countries in monitoring national plans and programmes; whether it builds on existing work; and whether it fulfils original aims of this exercise.

Other considerations used when selecting an indicator were (Parrish, 2010):

- Indicator is valid and reliable
- Indicator can be understood by people who need to act
- Indicator galvanizes action
- Action can improve the indicator
- Measuring the indicator over time reflects effect of action – ceteris paribus
- Measuring the indicator is feasible
- Data for the indicator is available for the various geographic levels and population subgroups
- Indicator is sensitive to changes in other societal domains (socioeconomic, environmental or public policies)

3.10 What are the sources of the specific indicators?

The indicators for the national level are sourced mainly from the priorities set by the governments and also by key health international organizations as well as other IDPs. At the region-wide level the indicators used are retrieved from guiding documents of SADC. These legal health regulations and policy texts are critical in determining the health status of populations (Brownson et al., 2009: 1576). Crucial in terms of the indicators sourced for SADC has been the PAR workshops or indicator development meetings mentioned previously. Through these meetings the facilitators had the opportunity to listen directly to and cooperate with those who will be the end users.

One should bear in mind that a distinction should be made between the level of measurement and the locus of production (and publication) of the indicators. Theoretically, various combinations of measurement levels and production loci are possible (figure 9).

Figure 9: Measurement level versus data production locus

Data Source Level of Measurement	National	Regional	Global
National			
Regional			
Global			

3.11 What timelines will the specific indicators gauge?

Mindful of the importance placed on the main legal and policy texts on health of the regional organization, there has been a clear bias to use the main dates of entry into force of the major health legal and policy texts for SADC. So the reference date (base year) for SADC is 2004 when the HP came into force. It is hoped that the reporting will be done yearly. But this may take long to internalize given that institutionalizing indicator systems for health can be protracted (Oliver, 2010). The reporting burden that could be envisaged will be obviated especially at the region-wide level in the case of the regional indicators *per se* because the great majority of the requisite pieces of information are already available to SADC’s secretariat on most of the region-wide relevant indicators. The indicator development team was conscious and sensitive to key dates and processes ongoing in SADC. The first pertains to the efforts to have an integrated surveillance framework for the three diseases. The second is the renewal of the RISDP endorsed by SADC leaders in April 2015 for a five year period.

3.12 Limitations

First, the sheer number of indicators included could be symptomatic of the scope of the priorities and problems faced by the regions. The multiplicity of indicators compounds the reporting challenges, which national officials may have. Reporting benefits, some argue are not always evident (Hibbard, 2008: 160). Developing indicators that are applicable to many countries in a diverse region can be a complex

task and it is also about making choices (Boerma, AbouZahr, Evans and Evans, 2014). In any event what we have sought to highlight is the salience of the region-relevant indicators. We believe the fact that requisite information is readily available to regional health policy makers for purposes of reporting the specific region-wide indicators selected, would help mitigate this apparent challenge.

CHAPTER 4: THE INDICATORS

The proposed toolkit is composed of 78 indicators as shown in figure 10. The suggested baseline measurement for this toolkit is the year 2004 when the SADC Protocol on Health was adopted. Using this baseline data as a level of comparison can contribute to confirming trends and/or evaluating success of regional policies. Suggested implementation periods are every year to monitor progress and fine-tune interventions.

In the current proposal, the HSF and SDGs are only partly covered, for reasons of parsimony in the indicator selection. However, as shown earlier (sections 3.8 and 3.9), they can be fully incorporated without major problems. Indicators with the sign (*) show those that are *based* on SADC's HSF. Indicators with the sign (**) show those that are *adapted* from SADC's HSF. The indicators with the sign (***) are taken from the SDG on health (SDG3). Those without any signs are added. In Annex 3 a complete list of the indicators is elaborated with the numerators and denominators as well as the sources and time span for measurement purposes

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Figure 10: Proposal of toolkit of indicators for monitoring SADC health policies

Input Indicators	Process Indicators	Output Indicators	Outcome Indicators	Impact Indicators
General Indicators (SADC)				
<p>Number of SADC schemes for training paramedics and health surveillance assistants (HSA)</p> <p>Existence of SADC supported regional standards for mobile clinics</p> <p>Existence of regional health standards on indigenous peoples</p> <p>Number of SADC measures on affected rural women</p> <p>Number of SADC measures on afflicted urban slum dwellers</p> <p>Existence of SADC special health programs targeting those living below the poverty line</p> <p>Existence of SADC standards on traditional medicines</p> <p>Instances of regional pooled procurement</p>	<p>Full domestication of SADC policies on HIV/AIDS, TB and Malaria in all 15 MS</p> <p>Instances of SADC sanctioned non-compliance</p> <p>Number of MS adopting SADC health guidelines on paediatric care for the poor</p> <p>Promotion of circumcision that is safe among the poor</p> <p>Expansion of HSAs approach to more than 50% of SADC States</p>	<p>Number of cross-border mobile populations (such as truckers and sex workers) provided with preventive messaging</p>		

General Indicators (MS)

<p>Proportion of poorest households that received external economic support in the last 3 months</p> <p>Out-of-pocket payment for health as percentage of current expenditure on health</p>		<p>Instances of trainings for community health workers (per 1000 workers)</p>		<p>Elderly Population (65+ years) accessing community health programs</p> <p>Indigenous Population accessing community health programs</p> <p>Urban slum dwellers accessing community health programs</p> <p>Members of vulnerable groups accessing clean drinking water and sanitary services</p> <p>Number of skilled health workers assigned to vulnerable groups (rural women, urban slum dwellers and indigenous groups)</p> <p>SDG3.c: Increase substantially health financing and the recruitment, development and training and retention of the health workforce</p> <p>Indicator: Ratio of health professionals to population (MDs, nurse midwives, nurses, community health workers, caregivers)</p>		<p>Proportion of Population living within 8km of a health facility</p> <p>Access to skilled health workers on HIV/AIDS, TB and Malaria</p> <p>SDG3.7: Universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs ***</p> <p>Indicator: Percentage of young people receiving comprehensive sexuality education</p> <p>SDG3.b: Research and development of vaccines and medicines and Provision of access to affordable essential medicines and vaccines, in accordance with the Doha Declaration which affirms the right of developing countries to use to the full the provisions in the TRIPS agreement regarding flexibilities to protect public</p>		<p>SDG3.1: Reduce the global maternal mortality ratio</p> <p>Indicator: Maternal mortality ratio ***</p> <p>SDG3.3: Ending the epidemics of AIDS, tuberculosis, malaria***</p> <p>Indicator: Mortality rates due to HIV/AIDS, TB and malaria</p> <p>Reduced incidence of HIV/AIDS, TB & Malaria amongst vulnerable groups in the SADC region</p> <p>SDG3.8: UHC including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all***</p> <p>Indicator: Healthy life expectancy at birth</p>
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					<p>health and, in particular, provide access to medicines for all***</p> <p>Indicator: Percentage of population with access to affordable essential drugs and commodities on a sustainable basis</p> <p>Immunization coverage rates for children <1 year of parents from vulnerable groups</p> <p>Antenatal care coverage (+4 visits) for women in vulnerable groups</p> <p>SDG3.2: Ending preventable deaths of newborns and under-5 year old children***</p> <p>Indicator: Percent of children receiving full immunization (as recommended by national vaccination schedules)</p>		
HIV and AIDS							
Spending for HIV/AIDS targeting vulnerable groups (VGs)		Number of trainings for skilled health workers working with HIV+ patients from vulnerable groups		Percentage of facilities providing HIV testing services to members of vulnerable groups		Percentage of those aged 15-24 who are HIV infected* Proportion of HIV+ pregnant women receiving ART to reduce MTCT*	HIV prevalence among individuals who belong to vulnerable groups

		<p>Number of trainings for health surveillance assistants (HSAs) and community health workers (CHWs) working with HIV+ patients from vulnerable groups</p> <p>Number of community outreach campaigns on behaviour change related to HIV targeting members of vulnerable groups</p>		<p>Percentage of HIV/AIDS referral facilities for care and treatment of patients from vulnerable groups</p> <p>Percentage of the poor being tested and counselled on HIV</p> <p>Percentage of schools providing preventive HIV education*</p> <p>Percentage of facilities providing HIV testing services*</p>		<p>Number of distributed female and male condoms*</p> <p>Percentage facilities providing ART*</p> <p>Orphaned and vulnerable children between 0-17 years receiving free basic external support*</p> <p>Attitude toward PLWHA*</p> <p>Percentage of circumcised males*</p> <p>Undernourished HIV+ positive persons who are poor and are receiving therapeutic and supplementary food</p>		<p>HIV incidence among individuals who belong to vulnerable groups</p> <p>Co-infection rates amongst the poor</p> <p>Percentage of HIV+ persons who are TB+*</p>
Tuberculosis								
<p>Spending for TB targeting vulnerable groups (VGs)</p>		<p>Number of trainings for skilled health workers working with TB patients from vulnerable groups</p> <p>Number of trainings for HSAs and CHWs working with TB patients from vulnerable groups</p>		<p>MDR-TB vulnerable patients identified by bacteriology confirmation**</p> <p>XDR-TB vulnerable patients identified by bacteriology confirmation**</p> <p>Isoniazid and rifampicin uptake for vulnerable groups</p> <p>Diagnosis facilities for TB</p>		<p>Treatment success rate*</p> <p>Percentage of TB+ persons who are HIV+*</p> <p>Second line TB treatment accessed by the poor</p>		<p>TB incidence for those in vulnerable groups</p> <p>TB prevalence for individuals belonging to vulnerable groups</p>

Malaria

Spending for malaria targeting vulnerable groups	Number of trainings for skilled health workers working with malaria patients from vulnerable groups Number of trainings for HSAs and CHWs working with malaria patients from vulnerable groups	Malaria diagnosis facilities that reach vulnerable groups	Percentage of pregnant women protected by intermittent preventive treatment (IPTp)* Percentage of poor pregnant women protected by intermittent preventive treatment (IPTp)* Those in vulnerable groups receiving first line anti-malaria treatment Household residents sleeping under insecticide-treated nets (ITNs)* Poor household residents sleeping under insecticide-treated nets**	Malaria mortality rates for those in vulnerable groups Malaria cases per 1000 population*
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CHAPTER 5: IMPLEMENTATION ARRANGEMENTS

From a review of experiences with indicator-based monitoring in various regions worldwide, it is clear that the governance aspects – as much as the technical aspects – are crucial for relevant and sustainable indicator systems (De Lombaerde et al. 2008, 2010). Who will champion the indicators? This relates to the issue of sustainability and political buy-in given that political leanings are determinative of health status (Navarro et al., 2006: 1033). This is also linked to the short life span of the PRARI project. The engagement of health policy makers within SADC have provided positive signals that there is room and potential for the toolkit to be championed from and by the regional organizations that will benefit from the indicators. Talks are underway to also explore ways in which political buy-in from political masters could be ensured at the region-wide level. In a world just recovering from the Ebola epidemic (wakeup call), there is increased political realization that the regional dimension of health is increasingly also an issue of high political importance (Kickbusch and Reddy, 2015: 1). This realization, it is hoped could provide a booster for greater political awareness and support.

The indicators will mainly be of relevance to regional health policy makers. It will also be vital for purse-holders both within the regional entities and outside in terms of IDPs and multilateral development banks. Another cohort of potential users includes non-governmental organizations (NGOs) working at both the national and regional levels, researchers dealing with regional health and the media. The latter groups of stakeholders are critical in terms of ensuring accountability in the realization of the goals that regional health policy makers set for themselves. The indicators will be used as a results framework to ensure that the promises made in the legal and policy texts are met and fulfilled in a deliberate fashion.

For toolkit implementation, mechanisms (and resources) should be in place to collect data from the Member States, store the data and analyse it to reach appropriate conclusions on the status of the regional health policies. Furthermore, the impact indicators are closely in line with the SDG targets, meaning that SADC and the

countries will be able to use this exercise to track progress towards SDG 3, subgoal 3: End the epidemics of AIDS, TB, malaria and Neglected Tropical Diseases (NTD).

This toolkit of indicators is not meant to be a stagnant product but is sufficiently flexible so that it can be moulded and adjusted over time according to emerging needs. Moreover, the conceptual framework could be applied to other health areas, including measuring policies to address health resource shortages.

Implementation aspects need to speak also to how this process might move forward after this project (December 2015) – ownership by SADC and Member States, integration into SADC monitoring processes and frameworks *et cetera* – short, medium and long term approaches to sustainability of the institution of an effective monitoring framework. This conduces once more to the challenges that the SADC Secretariat itself has stated related to its own monitoring framework and its use in terms of gaps.

The herculean challenge is the “and so what?” challenge. This conduces more to what Kindig and colleagues refer to as social epidemiology (education, behavior, decisions, income) (Kindig et al. 2008: 1925). They note that the politics of health are hard to change: not even by the efforts of researchers; many of whose work say nothing about the cost decision on politicians (ibid: 1924). This is related more to the fact that it is not often clear what reported information ought to be used for mindful that public health structures vary acutely both within and between countries (Higgerson et al., 2015). Yet the rejoinder to such a view is that in those cases where countries have signed up to regional binding norms and commitments in the area of health, they do so knowing the specificities of their systems and so ought to refrain from using these specificities to breach the obligations to which they freely signed in the spirit of *pacta sunt servanda*.

REFERENCES

- Aller, M-B., I. Vargas, J. Coderch, S. Calero, F. Cots, M. Abizanda, J. Farré, J. Ramon Llopart, L. Colomé and M.L. Vasquez (2015), Development and testing of indicators to measure coordination of clinical information and management across levels of care, 15(323) *BMC Health Services Research*, 1-16.
- Alleyne, G., Beaglehole, R. and Bonita, R. (2015). Quantifying targets for the SDG health goal. 385 *The Lancet*, 208-9.
- Amaya, A.B., K. Bagapi, I. Choge, P. De Lombaerde, S.S. Kingah, I. Kwape, M. Luwabelwa, O. Mathala, E. Mhehe, T. Moeti, L. Mookodi, I. Muvandi, I. Ngware and M. Phirinyane (2015). “Monitoring pro-poor health policy success in the SADC region”, *PRARI Policy Brief*, (7).
- Amaya, A.B., S. Kingah and P. De Lombaerde (XXX), Multi-level pro-poor health governance, statistical information flows, and the role of regional organizations in South America and Southern Africa, *PRARI Working Paper*, (15-1).
- Amaya, A. and N. Yeates (2015) “Participatory Action Research: New Uses, New Contexts, New Challenges”, *PRARI Working Paper*, (15-6).
- Anderson, L.M., R. Brownson, M.T. Fullilove, S.M. Teutsch, L.F. Novick, J. Fielding and G.H. Land (2005), Evidence-Based public health policy and practice: promises and limits, 28(5S) *American Journal of Preventive Medicine*, 226-230.
- AVERT (2015) Impact of HIV and AIDS in sub-Saharan Africa. Available at: <http://www.avert.org/impact-hiv-and-aids-sub-saharan-africa.htm>
- Boerma, T., C. Abou-Zahr, D. Evans and T. Evans (2014), Monitoring intervention coverage in the context of universal health coverage, 11(9) *PLoS Medicine* (September), 1-13.
- Boerma, T., C. Mathers and C. Abou-Zahr (2010), WHO and global health monitoring: The way forward, 7(11) *PLoS Medicine* (November), 1-3.

- Boerma, T., Patrick Eozenou, David Evans, Tim Evans, Marie-Paule Kieny and Adam Wagstaff (2014), Monitoring progress towards universal health coverage at country and global levels, 11(9) *PLoS Medicine* (September), 1-8.
- Brownson, R.C., J. Chiqui and K.A. Stamatakis (2009), Understanding evidence-based public health policy, 99(9) *American Journal of Public Health* (September), 1576-1583.
- Brownson, R.C., R. Seiler and A.A. Eyler (2010), Measuring the impact of public health policy, 7(4) *Preventing Chronic Disease Public Health Research, Practice, and Policy*, 1-6.
- Buse, K., N. Mays and G. Walt (2012) *Making Health Policy*, Berkshire: Open University Press.
- Byass, P. (2010), The imperfect world of global estimates, 7(11) *PLoS Medicine* (November), 1-3.
- Corburn, J. and A.K. Cohen (2012), Why we need urban health equity indicators: integrating science, policy and community, 9(8) *PLoS Medicine* (August), 1-6.
- De Lombaerde, P. O. Guinea, G. Pietrangeli and C. Weeratunge (2010) "Systems of Indicators for Monitoring Regional Integration Processes: Where Do We Stand Anno 2010?", *Köz-Gazdaság – Economic Theory and Policy*, 5(3): 145-171
- De Lombaerde, P., G. Pietrangeli and C. Weeratunge (2008), "Systems of Indicators for Monitoring Regional Integration Processes: Where do we Stand?" 8(2) *The Integrated Assessment Journal: Bridging Science and Policy*, pp. 39-67.
- Editors, *PLoS Medicine* (2010), Can we count on global health estimates? 7(11) *PLoS Medicine* (November 2010), 1-2.
- Frenk, J. (2010), The global health system: Strengthening national health systems as the next step for global progress, 7(1) *PLoS Medicine* (January), 1-3.
- Haines, A. (2015), Development assistance for health: potential contribution to the post-2015 agenda, 313(23) *Journal of the American Medical Association* (16 June), 2328-2330.

- Health Poverty Action (2014) Key Facts: Poverty and health. Available at: <http://www.healthpovertyaction.org/info-and-resources/the-cycle-of-poverty-and-poor-health/key-facts/>
- Hibbard, J.H. (2008), Editorial: What can we say about the impact of public reporting? Inconsistent execution yields variable results, 148(2) *Annals of Internal Medicine*, 160-161.
- Higgerson, J., C. Birt, E. Ameijdon and A. Verma (2015), Defining the urban area for cross national comparison of health indicators: the EURO-URHIS 2 boundary study, *The European Journal of Public Health* (23 July), 1-7.
- Kickbusch, I. and K.S. Reddy (2015), "Global health governance: the next political revolution," *XXX Public Health*, 1-5.
- Kindig, D., P. Day, D.M. Fox, M. Gibson, J. Knickman, J. Lomas, and G. Stoddart (2008), What new knowledge would help policymakers better balance investments for optimal health outcomes? 38(6/2) *Health Services Research*, 1923-1937.
- Kutzin, J. (2013), Health financing for universal coverage and health system performance: concept and implications for policy, 91 *Bulletin of the World Health Organization*, 602-611.
- Lantz, P.M. and A. Pritchard (2010), Socioeconomic indicators that matter for population health, 7(4) *Preventing Chronic Disease Public Health Research, Practice, and Policy*, 1-7.
- Larson, C. and A. Mercer (2004), Global health indicators: an overview, 171(10) *Canadian Medical Association Journal* (9 November), 1199-1200.
- Lonroth, K., P. Glaziou, D. Weil, K. Floyd, M. Uplekar and M. Raviglione (2014), Beyond UHC: Monitoring health and social protection coverage in the context of tuberculosis care and prevention, 11(9) *PLoS Medicine* (September), 1-10.
- Macdonald, G., C. Veen and K. Tones (1996), Evidence for success in health promotion: suggestions for improvement, 11(3) *Health Education Research*, 367-376.
- Marmot, M. (2005) "Social determinants of health inequalities", *The Lancet*, 365: 19-25.

- MLE. (2014). Measuring success toolkit: indicators. Available at: <https://www.urbanreproductivehealth.org/toolkits/measuring-success/indicators>
- Navarro, V., C. Muntaner, C. Borrell, J. Benach, A. Quiroga, M. Rodriguez-Sanz, N. Vergés and M.I. Pasarin (2006), Politics and health outcomes, 368 *The Lancet* (16 September), 1033-1037.
- Oliver, T.R. (2010), Population health rankings as policy indicators and performance measures, 7(5) *Preventing Chronic Disease Public Health Research, Practice, and Policy* (September), 1-7.
- Open Working Group (2015), *Suggested SDG Indicators Arranged by Open Working Group Targets* (Revised working draft, 20 March 2015).
- Parrish, R.G. (2010), Measuring population health outcomes, 7 (A71) *Prevention of Chronic Diseases*.
- Puska, P. (2007) "Health in all policies", *European Journal of Public Health*, 17: 328.
- SADC (1999), Protocol on Health, Maputo, 18 August.
- SADC (2003), Maseru Declaration on the Fight Against HIV/AIDS in the SADC Region, Maseru, Kingdom of Lesotho, 4 July.
- SADC RISDP (2003), Regional Indicative Strategic Development Plan (2003). Gaborone: SADC.
- SADC (Assessment Report 2010), Assessment Report on the Status of HIV and AIDS, Tuberculosis and Malaria Surveillance Systems in the SADC Region.
- SADC (2010), Harmonized Surveillance Framework for HIV and AIDS, Tuberculosis and Malaria in the SADC Region.
- SADC (2011), Desk Assessment of the Regional Indicative Strategic Development Plan 2005-2010, Final Report Approved by SADC Council (November). Gaborone: SADC.
- UNAIDS (2013) Getting to zero: HIV in Eastern and Southern Africa. Available at: <http://www.unicef.org/esaro/Getting-to-Zero-2013.pdf>
- WHO (2008) *Commission on Social Determinants of Health – final report*. Available at: http://www.who.int/social_determinants/thecommission/finalreport/en/

WHO (2015) *Health Policy*. Available at:
http://www.who.int/topics/health_policy/en/

Yang, K. and M. Holzer (2015), Plowing ahead: Introduction to symposium on frontiers of performance management, 38 *Public Performance & Management Review*, 359-364.

ANNEX 1: SADC HSF INDICATORS

SADC HIV/AIDS Indicators

HIV prevention and social mobilisation

1. Percentage of young people aged 15-24 years who are HIV infected
2. Percentage of men and women aged 15-49 years who had sex with more than one partner in the last 12 months
3. Proportion of young people aged 10-24 years who cite a member of the family as a source of HIV and AIDS related information
4. Percentage of schools that provided life skills-based HIV education in the last academic year
5. Percentage of women and men aged 15-24 years who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission
6. Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission
7. Percentage of donated blood units screened for HIV in a quality-assured manner
8. Number of female and male condoms distributed
9. Percentage of men and women aged 15-49 years who used a condom the last time they had sex with a casual partner within the last 12 months
10. Percentage of infants born to HIV-infected mothers who are infected

Improving treatment, care and access to counseling and testing services and support

11. Percentage of healthcare facilities providing ART
12. Percentage of healthcare facilities with referrals for HIV and AIDS care and support services
13. Percentage of orphaned and vulnerable children aged 0-17 years whose households received free basic external support in caring for the child
14. Current school attendance among orphans and non-orphans aged 10-14 years
15. Percentage of children aged less than 18 years who are orphans (single, double orphans)
16. Percentage of large enterprises/companies which have HIV and AIDS workplace policies and programmes
17. Percentage of chronically ill people that are receiving home-based care from trained care providers
18. Number of providers trained in home-based care
19. Percentage who undertook an HIV test in the last 12 months and who know the results
20. Percentage of facilities providing HIV testing services

21. Percentage of population expressing accepting attitudes towards people living with HIV/AIDS (PLWHA)
22. Percentage of people with advanced HIV infections receiving ART
23. Percentage of districts or local administration units with at least one health facility providing ART

Resource Mobilisation

24. Percentage of the national budget committed to the health sector
25. Amounts of public funds for research and development of a preventive HIV vaccine and microbicide

Additional core set of indicators and data sources for HIV surveillance

26. Percentage still alive after initiating ART (1st & 2nd line) after 12 months, 24 months, 36 months etc
27. Percentage of people with advanced HIV infection receiving ART (disaggregated by age; 0-14, 15+ years)
28. Percentage of most-at-risk populations (injecting drug users, men who have sex with men, commercial sex workers) who received an HIV test in the last 12 months who know the result
29. Percentage of most-at-risk populations (injecting drug users, men who have sex with men, commercial sex workers) who are HIV-infected
30. Number of males circumcised
31. Percentage of males circumcised (disaggregated by age)

Proposed core set of collaborative indicators for HIV/TB surveillance

32. Percentage of HIV-positive people who are screened for TB on their first visit to an HIV clinic
33. Percentage of HIV-positive TB patients who are on ART
34. Percentage of HIV-positive people who are TB-positive (co-infection rate)

SADC Tuberculosis Indicators

Core set of Indicators and data sources for TB surveillance

35. TB prevalence rate (Estimated number of all active TB cases per 100000 population at a given point in time)
36. TB incidence rate (Estimated number of TB cases per year, per 100000 population)
37. TB mortality rate (Estimated number of deaths due to TB, all cases, per year per 100000 population)
38. Case detection rate per 100000 population
39. Treatment success rate

Core set of indicators for MDR-TB

40. Percentage of MDR-TB patients identified by bacteriology confirmation (MDR-TB pick-up rate)

Core set of indicators for XDR-TB

41. Percentage of XDR-TB patients identified by bacteriology confirmation (XDR-TB pick-up rate)

Core set of indicators, data sources and reporting frequency for TB/HIV collaborative activities

42. Percentage of TB patients who test HIV-positive

SADC Malaria Indicators

Core set of indicators and data sources for malaria surveillance

43. Percentage of confirmed malaria cases

44. Malaria cases per 1000 population

45. Percentage of deaths attributed to malaria disaggregated by age group

46. Proportion of IRS (indoor residual spraying) target areas covered with IRS in the last 12 months

47. Proportion of household residents who slept under an insecticide-treated net the previous night (disaggregate by age and pregnant women)

48. Percentage of pregnant women protected by IPTp (at least 2 doses)

SOURCE: SADC (2010)

ANNEX 2. HEALTH-RELATED SDG GOALS AND SUB-TARGETS

SDGs				
Total: 17 goals, 169 targets and 100 indicators (more to be developed in the negotiations)				
Goals		Targets	Indicators	In addition, the following Complementary National Indicators relate to health according to the document
1	End poverty in all its forms everywhere	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	a. Multidimensional Poverty Index	
		By 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic	a. Percentage of eligible population covered by national social protection programs	

		services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance		
2.	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	By 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round	<p>a. Proportion of population below minimum level of dietary energy consumption (MDG Indicator)</p> <p>b. Percentage of women of reproductive age (15-49) with anemia</p> <p>c. Prevalence of stunting and wasting in children under 5 years of age</p> <p>d. Percentage of infants under 6 months who are exclusively breast fed</p> <p>e. Percentage of women (15-49) who consume at least 5 out of 10 defined food groups</p> <p>f. Percentage of population with shortfalls of: iron, zinc, iodine, vitamin A, folate, vitamin B12 [and vitamin D]</p>	<ul style="list-style-type: none"> • Percentage of births attended by skilled health personnel (MDG Indicator) • Antenatal care coverage (at least one visit and at least four visits) (MDG Indicator) • Post-natal care coverage (one visit) (MDG Indicator)

			<p>g. Proportion of infants 6-23 months of age who receive a minimum acceptable diet</p> <p>h. Percentage children born with low birth weight</p>	
		<p>By 2030 end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons</p>	<p>a. Percentage of women of reproductive age (15-49) with anemia</p> <p>b. Prevalence of stunting and wasting in children under 5 years of age</p> <p>c. Percentage of infants under 6 months who are exclusively breast fed</p> <p>d. Percentage of population with shortfalls of: iron, zinc, iodine, vitamin A, folate, vitamin B12 [and vitamin D]</p> <p>e. Proportion of infants 6-23 months of age who receive a minimum acceptable diet</p> <p>f. Percentage of total daily energy intake from protein in adults</p>	

3.	Ensure healthy lives and promote well-being for all at all ages	By 2030 reduce the global maternal mortality ratio to less than 70 per 100,000 live births	<p>a. Maternal mortality ratio (MDG Indicator) and rate</p> <p>b. Percentage of births attended by skilled health personnel (MDG Indicator)</p> <p>c. Antenatal care coverage (at least one visit and at least four visits) (MDG Indicator)</p> <p>d. Post-natal care coverage (one visit) (MDG Indicator)</p> <p>e. Coverage of iron-folic acid supplements for pregnant women (%)</p> <p>f. Percentage of health facilities meeting service specific readiness requirements</p>	<ul style="list-style-type: none"> •Percentage of population with shortfalls of: iron, zinc, iodine, vitamin A, folate, vitamin B12, [and vitamin D] • Percentage children born with low birth weight •Proportion of infants 6–23 months of age who receive a minimum acceptable diet •Percentage children born with low birth weight •Percentage of births attended by skilled health personnel (MDG Indicator) •Antenatal care coverage (at least one visit and at least four visits) (MDG Indicator) •Post-natal care coverage (one visit) (MDG Indicator) •Coverage of iron-folic acid supplements for pregnant women (%) •Incidence rate of diarrheal disease in children under 5 years •Percentage of 1 year-old children immunized against measles (MDG Indicator) •Percent HIV+ pregnant women receiving PMTCT •Condom use at last high-risk sex (MDG Indicator) •Percentage of tuberculosis cases detected and cured under directly observed treatment short course (MDG Indicator) •Percentage of children under 5 with fever who are treated with appropriate anti-malarial drugs (MDG Indicator) • Percentage of people in malaria-endemic areas sleeping under insecticide-treated bed nets (modified MDG Indicator) • Percentage of confirmed malaria cases that
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				<p>receive first-line antimalarial therapy according to national policy</p> <ul style="list-style-type: none"> • Percentage of suspected malaria cases that receive a parasitological test • Percentage of pregnant women receiving malaria IPT (in endemic areas) • Neglected Tropical Disease (NTD) cure rate • Incidence and death rates associated with hepatitis • Percentage of women with cervical cancer screening • Percentage of adults with hypertension diagnosed & receiving treatment • Harmful use of alcohol • Healthy life expectancy at birth • Waiting time for elective surgery • Prevalence of insufficient physical activity • Fraction of calories from saturated fat and added sugar • Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years • Prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day • Percentage change in per capita [red] meat consumption relative to a 2015 baseline • Age-standardized (to world population age distribution) prevalence of diabetes (preferably based on HbA1c), hypertension, cardiovascular disease, and chronic respiratory disease. • [Mortality from indoor air pollution] – to be developed
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				<ul style="list-style-type: none"> • Percentage of health facilities meeting service specific readiness requirements. • Percentage of population with access to affordable essential drugs and commodities on a sustainable basis • Percentage of new health care facilities built in compliance with building codes and standards • Public and private R&D expenditure on health (% GNP) • Ratio of health professionals to population (MDs, nurse midwives, nurses, community health workers, EmOC caregivers) • Percentage of women and men aged 15–49 who report discriminatory attitudes towards people living with HIV
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		<p>By 2030 end preventable deaths of newborns and under-5 children</p>	<p>a. Percentage of infants under 6 months who are exclusively breast fed</p> <p>b. Neonatal, infant, and under-5 mortality rates (modified MDG Indicator)</p> <p>c. Percent of children receiving full immunization (as recommended by national vaccination schedules)</p> <p>d. Percentage of births attended by skilled health personnel (MDG Indicator)</p> <p>e. Antenatal care coverage (at least one visit and at least four visits) (MDG Indicator)</p> <p>f. Post-natal care coverage (one visit) (MDG Indicator)</p> <p>g. Incidence rate of diarrheal disease in children under 5 years</p> <p>h. Percentage of children under 5 with fever who are treated with appropriate anti-malarial drugs (MDG Indicator)</p>	
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		<p>By 2030 end the epidemics of AIDS, tuberculosis, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases</p>	<p>a. Percent of children receiving full immunization (as recommended by national vaccination schedules)</p> <p>b. HIV incidence, treatment rate, and mortality (modified MDG Indicator)</p> <p>c. Incidence, prevalence, and death rates associated with all forms of TB (MDG Indicator)</p> <p>d. Incidence and death rates associated with malaria (MDG Indicator)</p> <p>e. [Consultations with a licensed provider in a health facility or in the community per person, per year] – to be developed</p> <p>f.[Percentage of population without effective financial protection or health care, per year] – to be developed</p> <p>g. Incidence rate of diarrheal disease in children under 5 years</p> <p>h. Percentage of 1 year-old children immunized against measles (MDG Indicator)</p> <p>i. Percent HIV+ pregnant women receiving PMTCT</p> <p>j. Condom use at last high-risk sex (MDG Indicator)</p> <p>k. Percentage of tuberculosis cases detected and cured under directly observed treatment short course (MDG Indicator)</p>	
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			<p>l. Percentage of children under 5 with fever who are treated with appropriate anti-malarial drugs (MDG Indicator).</p> <p>m. Percentage of people in malaria-endemic areas sleeping under insecticide-treated bed nets (modified MDG Indicator).</p> <p>n. Percentage of confirmed malaria cases that receive first-line antimalarial therapy according to national policy.</p> <p>o. Percentage of suspected malaria cases that receive a parasitological test.</p> <p>p. Percentage of pregnant women receiving malaria IPT (in endemic areas)</p> <p>q. Neglected Tropical Disease (NTD) cure rate</p> <p>r. Incidence and death rate associated with hepatitis</p> <p>s. Percentage of women and men aged 15-49 who report discriminatory attitudes towards people living with HIV</p>	
		By 2030 reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention and	<p>a. Probability of dying between exact ages 30 and 70 from any of cardiovascular disease, cancer, diabetes, chronic respiratory disease, [or suicide]</p> <p>b. Percent of population overweight and obese, including children under 5</p> <p>c. [Consultations with a licensed provider in a health</p>	

		<p>treatment, and promote mental health and wellbeing</p>	<p>facility or in the community per person, per year] – to be developed</p> <p>d. Proportion of persons with a severe mental disorder (psychosis, bipolar affective disorder, or moderate-severe depression) who are using services</p> <p>e. Current use of any tobacco product (age-standardized rate)</p> <p>f. Percentage of women with cervical cancer screening</p> <p>g. Percentage with hypertension diagnosed & receiving treatment</p> <p>h. Waiting time for elective surgery</p> <p>i. Prevalence of insufficient physical activity</p> <p>j. Fraction of calories from saturated fat and added sugar</p> <p>k. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years</p> <p>l. Prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day</p> <p>m. Percentage change in per capita [red] meat consumption relative to a 2015 baseline</p> <p>n. Age-standardized (to world population age distribution) prevalence of diabetes (preferably based on HbA1c),</p>	
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			hypertension, cardiovascular disease, and chronic respiratory disease.	
		Strengthen prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	<ul style="list-style-type: none"> a. Current use of any tobacco product (age-standardized rate) b. Harmful use of alcohol 	
		By 2030 halve global deaths from road traffic accidents	<ul style="list-style-type: none"> a. Road traffic deaths per 100,000 population 	
		By 2030 ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs	<ul style="list-style-type: none"> a. Total fertility rate b. Contraceptive prevalence rate (MDG Indicator) c. Met demand for family planning (modified MDG Indicator) d. Adolescent birth rate (MDG Indicator) e. Percentage of young people receiving comprehensive sexuality education 	

		Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all	<ul style="list-style-type: none"> a. Percent of children receiving full immunization (as recommended by national vaccination schedules) b. [Consultations with a licensed provider in a health facility or in the community per person, per year] – to be developed c. [Percentage of population without effective financial protection or health care, per year] – to be developed d. Healthy life expectancy at birth d. Waiting time for elective surgery e. Percentage of health facilities meeting service specific readiness requirements f. Percentage of population with access to affordable essential drugs and commodities on a sustainable basis g. Percentage of new health care facilities built in compliance with building codes and standards h. Ratio of health professionals to population (MDs, nurse midwives, nurses, community health workers, EmOC caregivers) 	
		By 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil	<ul style="list-style-type: none"> a. Mean urban air pollution of particulate matter (PM10 and PM2.5) b. [Mortality from indoor air pollution] – to be developed c. [Indicator on chemical pollution] – to be developed 	

		pollution and contamination		
		A strengthen implementation of the Framework Convention on Tobacco Control in all countries as appropriate	a. Current use of any tobacco product (age-standardized rate)	
		Support research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration which affirms the right of developing	<p>a. Percentage of population with access to affordable essential drugs and commodities on a sustainable basis</p> <p>b. Public and private R&D expenditure on health (% GNP)</p> <p>c. [Indicator on technology sharing and diffusion] – to be developed</p>	

		countries to use to the full the provisions in the TRIPS agreement regarding flexibilities to protect public health and, in particular, provide access to medicines for all		
		Increase substantially health financing and the recruitment, development and training and retention of the health workforce in developing countries, especially in LDCs and SIDS	<ul style="list-style-type: none"> a. Official development assistance and net private grants as percent of GNI b. Domestic revenues allocated to sustainable development as percent of GNI, by sector c. Public and private R&D expenditure on health (% GNP) d. Ratio of health professionals to population (MDs, nurse midwives, nurses, community health workers, EmOC caregivers) 	
		Strengthen the capacity of all countries particularly developing countries, for early warning risk reduction, and management of	<ul style="list-style-type: none"> a. Official development assistance and net private grants as percent of GNI b. Domestic revenues allocated to sustainable development as percent of GNI, by sector c. Public and private R&D expenditure on health (% GNP) 	

		national and global health risks	d. Ratio of health professionals	
5	Achieve gender equality and empower all women and girls	Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation	a. Prevalence of girls and women 15-49 who have experienced	
		Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations	a. Percentage of women aged 20-24 who were married or in a union before age 18 b. Percentage of girls and women aged 15-49 years who have undergone FGM/C	
		Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with	a. Met demand for family planning (modified MDG Indicator)	

		the Programme of Action of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences		
6.	Ensure availability and sustainable management of water and sanitation for all	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	<p>a. Percentage of population using safely managed water services, by urban/rural (modified MDG Indicator)</p> <p>b. Percentage of wastewater flows treated to national standards [and reused] – to be developed</p> <p>c. Proportion of total water resources used (MDG Indicator)</p> <p>d. Percentage of population with basic hand washing facilities with soap and water at home</p> <p>e. Percentage of pupils enrolled in primary schools and secondary schools providing basic drinking water, adequate sanitation, and adequate hygiene services.</p> <p>d. Percentage of beneficiaries using hospitals, health centers and clinics providing basic drinking water, adequate sanitation, and adequate hygiene</p>	<ul style="list-style-type: none"> • Percentage of young people receiving comprehensive sexuality education • Percentage of population practicing open defecation • Percentage of population with basic hand washing facilities with soap and water at home • Proportion of the population connected to collective sewers or with on-site storage of all domestic wastewaters • Percentage of pupils enrolled in primary schools and secondary schools providing basic drinking water, adequate sanitation, and adequate hygiene services. • Percentage of beneficiaries using hospitals, health centers and clinics providing basic drinking water, adequate sanitation, and adequate hygiene

		by 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	<p>a. Percentage of population using safely managed sanitation services, by urban/rural (modified MDG Indicator)</p> <p>b. Percentage of population practicing open defecation</p> <p>c. Percentage of population with basic hand washing facilities with soap and water at home</p> <p>d. Proportion of the population connected to collective sewers or with on-site storage of all domestic wastewaters</p> <p>e. Percentage of pupils enrolled in primary schools and secondary schools providing basic drinking water, adequate sanitation, and adequate hygiene services.</p> <p>f. Percentage of beneficiaries using hospitals, health centers and clinics providing basic drinking water, adequate sanitation, and adequate hygiene</p>	
7	Ensure access to affordable, reliable, sustainable and modern energy for all	by 2030 ensure universal access to affordable, reliable, and modern energy services	<p>a. Share of the population using modern cooking solutions, by urban/rural</p> <p>b, Share of the population using reliable electricity, by urban/rural</p>	

9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Develop quality, reliable, sustainable and, resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	<ul style="list-style-type: none"> a. Percentage of population using safely managed water services, by urban/rural (modified MDG Indicator) b. Percentage of population using basic sanitation services, by urban/rural (modified MDG Indicator) c. Share of the population using modern cooking solutions, by urban/rural d. Share of the population using reliable electricity, by urban/rural e. Access to all-weather road (% access within [x] km distance to road) f. Mobile broadband subscriptions per 100 inhabitants, by urban/rural g. Index on ICT maturity h. Percentage of households with Internet, by type of service by urban/rural areas 	
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11	Make cities and human settlements inclusive, safe, resilient and sustainable	by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums	<p>a. Percentage of eligible population covered by national social protection programs</p> <p>b. [Consultations with a licensed provider in a health facility or the community per person, per year] – to be developed</p> <p>c. Percentage of population using safely managed water services, by urban/rural (modified MDG Indicator)</p> <p>d. Percentage of population using basic sanitation services, by urban/rural (modified MDG Indicator)</p> <p>e. Share of the population using modern cooking solutions, by urban/rural</p> <p>f. Share of the population using reliable electricity, by urban/rural</p> <p>g. Percentage of urban population living in slums or informal settlements (MDG Indicator)</p>	
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and	Significantly reduce all forms of violence and related death rates everywhere	<p>a. Violent injuries and deaths per 100,000 population</p> <p>b. Number of refugees</p>	

	build effective, accountable and inclusive institutions at all levels			
		By 2030 provide legal identity for all including free birth registrations	a. Percentage of children under age 5 whose birth is registered with a civil authority	
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	by 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP, and support statistical capacity building in developing countries	a. Evaluative Wellbeing and Positive Mood Affect	

Source; Secretary General of the United Nations (2015) Indicators and a Monitoring Framework for the Sustainable Development Goals. (accessed 25/09/2015) Available from: <http://unsdsn.org/wp-content/uploads/2015/05/150612-FINAL-SDSN-Indicator-Report1.pdf>

Annex 3: Proposal of Toolkit of Indicators for Monitoring SADC Health Policies: Definitions, Rationale and Data Sources

General Indicators

	Indicator	Denominator	Numerator	Time Span	Source	Rationale
Input (SADC)	Number of SADC schemes for training paramedics and health surveillance assistants (HSA)	Number of SADC training schemes	Number of SADC trainings for HSAs	Annually	SADC Secretariat, SADC MS, WHO RO	Proxy for proximate community based care
	Existence of SADC supported regional standards for mobile clinics	Number of SADC mechanisms to assess quantity and quality of regional clinics	Number of SADC mechanisms to assess density and quality of regional mobile clinics	Annually	SADC Secretariat	Provision of information on clinical standards for mobile clinics reaching rural areas
	Existence of regional health standards on indigenous peoples	Number of SADC regional health policy texts	Number of SADC policy texts for improvement of care for indigenous peoples	Annually	SADC Secretariat and MS	Proxy for SADC attention to vulnerability
	Number of SADC measures on affected rural women	Number of SADC regional health policy texts	Number of SADC policy texts for improvement of care for rural women suffering from the 3 diseases	Annually	SADC Secretariat and MS	Proxy on SADC attention to vulnerability
	Number of SADC measures on afflicted urban slum dwellers	Number of SADC regional health policy texts	Number of SADC policy texts for improvement of care for urban slum dwellers suffering from the 3 diseases	Annually	SADC Secretariat and MS	Proxy on SADC attention to vulnerability
	Existence of SADC special health programs targeting those living below the poverty line	Number of SADC regional policy texts	Number of SADC policy texts for improvement of care for those living below the poverty line and afflicted by	Annually	SADC Secretariat and MS	Proxy on SADC attention to vulnerability

Input (MS)	Existence of SADC standards on traditional medicines	Number of SADC regional policy texts on access to medicines	HIV/AIDS, TB and Malaria Number of SADC policy texts on traditional medicines	Annually	SADC Secretariat	Indicative of SADC awareness of rural realities on medicines for the poor
	Instances of regional pooled procurement	Number of times SADC secretariat has used pooled procurement for pharmaceuticals	Number of times SADC secretariat has used pooled procurement for pharmaceuticals For HIV/AIDS, TB and Malaria	Annually	SADC Secretariat	SADC sensitivity to need for more affordable drugs for HIV/AIDS, TB and Malaria
	Proportion of poorest households that received external economic support in the last 3 months	Total number of poorest households defined as households in bottom quintile	Number of poorest households receiving external economic support in the last 3 months	Annually	National Population Based Surveys and Demographic and Health Surveys	Identifying proportion of families reliant on out-of-pocket health payments
	Out-of-pocket payment for health as percentage of current expenditure on health	Total current expenditure on health	Total household out-of-pocket health expenditure in last 12 months	Annually	MS, WHO	Capturing the burden that health spending represents for households
Process (SADC)	Full domestication of SADC policies on HIV/AIDS, TB and Malaria in all 15 MS	Number of SADC States	Number of MS that have fully domesticated SADC HIV/AIDS, TB and Malaria policies	Annually	SADC Secretariat and SADC MS	Indicative of SADC's compliance pull for combating HIV/AIDS, TB and Malaria at the regional level
	Instances of SADC sanctioned non-compliance	Number of instances of sanctioned non-compliance of MS by SADC in health	Number of instances of sanctioned non-compliance of MS by SADC in standards for HIV/AIDS, TB and Malaria	Annually	SADC Secretariat	Assessment of willingness and capacity of SADC to ensure adherence to HIV/AIDS, TB and Malaria disciplines
	Number of MS adopting SADC health guidelines on paediatric care for the poor	Number of MS adopting SADC health disciplines	Number of MS adopting SADC educational messages on paediatric care	Annually	SADC Secretariat, SADC MS	Allows SADC to track if MSs are adhering to standards on child care

	Promotion of circumcision that is safe among the poor	Number of MS adopting SADC health guidelines	Number of MS adopting SADC educational messages on safe circumcision practices among the poor	Annually	SADC Secretariat, SADC MS	Allows SADC to track if MS are adhering to standards on safe circumcision practices
	Expansion of HSAs approach to more than 50% of SADC States	Number of SADC states	Number of SADC states reporting use of HSAs in dealing with HIV/AIDS, TB and Malaria	Annually	SADC Secretariat, SADC MS	Demonstrative of SADC Secretariat capacity to expand use of HSAs in MS
Process (MS)	Instances of trainings for community health workers (per 1000 workers)	Number of trainings	Number of community health workers being trained	Annually	MS, Global Fund	To determine expediency in trainings and access to skilled community health workers
Output (SADC)	Number of cross-border mobile populations (such as truckers and sex workers) provided with preventive messaging	Number of MS adopting SADC health disciplines	Number of MS adopting SADC health disciplines on preventive messaging for high risk population groups on HIV/AIDS, TB and Malaria	Annually	SADC Secretariat, SADC MS	Showing willingness of SADC to target preventive messages to high risk populations on HIV/AIDS, TB and Malaria
Output (MS)	Elderly Population (65+ years) accessing community health programs	Number of elderly	Number of elderly people accessing community health programs	Annually	MS, WHO	Demonstrates progress in strengthening the capacity of primary health care programs to support chronic care via community settings
	Indigenous Population accessing community health programs	Total population that belongs to indigenous groups	Number of indigenous people accessing community health programs	Annually	MS, WHO	Showing progress in strengthening the capacity of primary health care programs to support chronic care for deprived indigenous community members via

Outcome (MS)	Urban slum dwellers accessing community health programs	Number of people living in urban slum settings	Number of urban slum dwellers accessing community health programs	Annually	MS, WHO	community settings Proxy for advancements in strengthening the capacity of primary health care programs to support chronic care for deprived urban slum dwellers via community settings
	Members of vulnerable groups accessing clean drinking water and sanitary services	Total number of individuals that belong to vulnerable groups	Number of the vulnerable population accessing clean drinking water and sanitary services	Annually	MS and WHO	Indicates proportion of the poor accessing clean water and decent sanitary services
	Number of skilled health workers assigned to vulnerable groups (rural women, urban slum dwellers and indigenous groups)	Number of skilled health workers	Number of skilled health workers that treat or care for vulnerable groups	Annually	MSs	Indicative of priority placed by decision makers on the poor in terms of accessing skilled professional health workers
	SDG3.c: Increase substantially health financing and the recruitment, development and training and retention of the health workforce	Total population	Number of health professionals (MDs, nurse midwives, nurses, community health workers, caregivers)	Annually	Adapted from OWG	Tracking health workforce training and retention
	Indicator: Ratio of health professionals to population (MDs, nurse midwives, nurses, community health workers, caregivers)					
	Proportion of Population living within	Total population	Population living within 8 km of a health facility	Annually	MS population	Proxy for ease of service access

<p>regarding flexibilities to protect public health and, in particular, provide access to medicines for all***</p> <p>Indicator: Percentage of population with access to affordable essential drugs and commodities on a sustainable basis</p> <p>Immunization coverage rates for children <1 year of parents from vulnerable groups</p> <p>Antenatal care coverage (+4 visits) for women in vulnerable groups</p> <p>SDG3.2: Ending preventable deaths of newborns and under-5 year old children***</p> <p>Indicator: Percent of children</p>	<p>Total number of population who require essential drugs and commodities</p>	<p>Number of people who have access to affordable essential drugs in a regular basis</p>	<p>Annually</p>	<p>OWG</p>	<p>Indicative of access to affordable medicines and vaccines</p>
	<p>Total number of children <1 year who are fully immunized</p>	<p>Number of children <1 year who have been immunized and of parents from vulnerable groups</p>	<p>Annually</p>	<p>MS</p>	<p>Proxy for public officials' attention to preventive care for those from vulnerable groups</p>
	<p>Women who have undergone at least 4 ante-natal care visits</p>	<p>Number of women from vulnerable groups who have undergone at least 4 ante-natal care visits</p>	<p>Annually</p>	<p>MS</p>	<p>Proxy for ante-natal care for pregnant women from vulnerable groups</p>
	<p>Number of under 5 year olds</p>	<p>Number of children who received full immunization</p>	<p>Annually</p>	<p>OWG</p>	<p>Tracking preventive care for children</p>

Impact (MS)	receiving full immunization (as recommended by national vaccination schedules)					
	SDG3.1: Reduce the global maternal mortality ratio					
	Indicator: Maternal mortality ratio ***	Total recorded (or estimated) number of live births	Number of recorded (or estimated) number of maternal deaths	Annually	OWG	Improving reproductive care
	SDG3.3: Ending the epidemics of AIDS, tuberculosis, malaria***					
Indicator: Mortality rates due to HIV/AIDS, TB and malaria	Total number of deaths	Number of deaths caused by HIV/AIDS, TB and malaria	Annually	Adapted from OWG	Tracking the end of HIV/AIDS, TB and malaria	
Reduced incidence of HIV/AIDS, TB & Malaria amongst vulnerable groups in the SADC region	Total population in the SADC region	Proportion of those in vulnerable groups suffering from HIV/AIDS, TB & Malaria in the SADC region	Annually	MS	Proxy for overall pro-poor health improvement	
SDG3.8: UHC including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable						

	essential medicines and vaccines for all***					
	Indicator: Healthy life expectancy at birth	SADC region-wide healthy life expectancy	Expected number of healthy years of remaining lifetime of an individual in each member state	Annually	Adapted from OWG	Tracking UHC among the SADC countries

HIV and AIDS

	Indicator	Denominator	Numerator	Time Span	Source	Rationale
Input	Spending for HIV/AIDS targeting vulnerable groups (VGs)	Total spending for HIV/AIDS	Spending for HIV/AIDS directed towards rural women, urban slum dwellers and indigenous community members	Annually	MS	Ascertaining nature of MS prioritization of spending for the most vulnerable afflicted by HIV/AIDS
Process	Number of trainings for skilled health workers working with HIV+ patients from vulnerable groups	Number of trainings for skilled health workers addressing HIV+ diagnosed patients	Number of trainings for skilled health workers working with HIV+ patients from vulnerable groups	Annually	MS	Determining the importance placed on health workers dealing mainly with the poor afflicted by HIV
	Number of trainings for health surveillance assistants (HSAs) and community health workers (CHWs) working with HIV+ patients from vulnerable groups	Number of trainings for HSAs and CHWs addressing HIV+ diagnosed patients	Number of trainings for HSAs and CHWs working with HIV+ patients from vulnerable groups	Annually	MS	Determining the importance placed on HSAs and community health workers dealing with the poor afflicted by HIV
			Number of community	Annually	MS	

Output	Number of community outreach campaigns on behaviour change related to HIV targeting members of vulnerable groups	Number of community outreach campaigns	outreach campaigns on behaviour change related to HIV targeting members of vulnerable groups			Use of tailored community based information campaigns to generate behaviour change amongst members of vulnerable groups
	Percentage of facilities providing HIV testing services to members of vulnerable groups	Number of facilities providing HIV testing to the general public	Number of facilities providing HIV testing services to members of vulnerable groups	Annually	MS	Importance placed on HIV testing targeting the poor
	Percentage of HIV/AIDS referral facilities for care and treatment of patients from vulnerable groups	Number of referral facilities	Number of HIV/AIDS referral facilities for care and treatment of patients from vulnerable groups	Annually	MS	Detection of emphasis on referral facilities for the poor
	Percentage of the poor being tested and counselled on HIV	Number of people tested and counselled for HIV	Number of poor individuals tested and counselled for HIV	Annually	MS	Tracking testing and counselling levels for vulnerable groups
	Percentage of schools providing preventive HIV education*	Schools with teachers trained in HIV prevention	Schools with teachers trained in HIV prevention	Annually	School surveys	To identify effective channels to reach most at risk children
	Percentage of facilities providing HIV testing services*	Number of facilities allowed to provide for HIV testing	Number of facilities allowed to provide for HIV testing and actually doing so	Annually	Health Systems information	Tracking country capacity for testing and screening
Outcome	Percentage of those aged 15-24 who are HIV infected*	Those between 15-24 years surveyed	Number of those between 15-24 years who are HIV+	Annually	Population based surveys	To target response strategies
				Annually		

Impact	Proportion of HIV+ pregnant women receiving ART to reduce MTCT*	Number of HIV+ bearing women receiving antenatal care services	Number of HIV+ pregnant women receiving ART to reduce MTCT	Annually	Routine statistics	Allows for reduction of MTCT
	Number of distributed female and male condoms*	Number of those between 15-49 years reporting engagement in casual sex	Number of those between 15-49 years who engaged in casual sex using a condom	Annually	Laboratory routine statistics	Allows for tracking prevention
	Percentage facilities providing ART*	Number of facilities allowed to provide ART	Number of facilities allowed to provide ART and actually doing so	Annually	Health facility surveys	Tracking capacity for ART delivery
	Orphaned and vulnerable children between 0-17 years receiving free basic external support*	Orphaned and vulnerable children aged between 0-17 years	Number of orphaned and vulnerable children between 0-17 years receiving free basic external support	Annually	Population based surveys	Tracking the degree of needs for vulnerable children
	Attitude toward PLWHA*	Cohort surveyed	Those surveyed with supportive attitude towards PLWHA	Every 5 years	Population based surveys	Confronting stereotypes against PLWHA
	Percentage of circumcised males*	Male population surveyed	Number of males circumcised	Annually	MS departments of health	Long term prevention
	Undernourished HIV+ positive persons who are poor and are receiving therapeutic and supplementary food	Undernourished persons who are poor and are receiving therapeutic and supplementary food	Undernourished HIV+ positive persons who are poor and are receiving therapeutic and supplementary food	Annually	MS	Tracing importance placed on adequate nutrition for HIV+ patients that are members of vulnerable groups
	HIV prevalence among individuals who belong to vulnerable groups	Total number of individuals who belong to vulnerable groups	Number of existing and new HIV cases among individuals who belong to vulnerable groups	Annually	National health department	Assessing long term change in HIV prevalence amongst the poor
	HIV incidence among individuals who belong to vulnerable groups	Total number of individuals who belong to vulnerable groups who are at risk for HIV	Number of new HIV infected individuals who belong to vulnerable groups	Annually	DHS	Assessing long term change in HIV incidence amongst the poor

	Co-infection rates amongst the poor	Number of People who are poor	Number of poor individuals who are HIV+ and also TB+ and are receiving treatment	Annually	DHS	Tackling co-infection
	Percentage of HIV+ persons who are TB+*	Total number of HIV infected people	Number of HIV+ individuals who have TB	Annually	HIV and TB records	Tracking co-infection

Tuberculosis

	Indicator	Denominator	Numerator	Time Span	Source	Rationale
Input	Spending for TB targeting vulnerable groups (VGs)	Total spending for TB	TB spending directed towards rural women, urban slum dwellers and indigenous community members	Annually	MS	Ascertaining nature of MS prioritization of spending for the most vulnerable afflicted by TB
Process	Number of trainings for skilled health workers working with TB patients from vulnerable groups	Number of trainings for skilled health workers addressing TB diagnosed patients	Number of trainings for skilled health workers working with TB patients from vulnerable groups	Annually	MS	Determining the importance placed on health workers dealing mainly with the poor afflicted by TB
	Number of trainings for HSAs and CHWs working with TB patients from vulnerable groups	Number of trainings for HSAs and CHWs addressing concerns of TB diagnosed patients	Number of trainings for HSAs and CHWs working with TB patients from vulnerable groups	Annually	MS	Determining the importance placed on HSAs and community health workers dealing with the TB afflicted poor
Output	MDR-TB vulnerable patients identified by bacteriology confirmation**	MDR-TB patients identified by bacteriology confirmation	MDR-TB patients identified by bacteriology confirmation and who belong to vulnerable groups	Annually	MS	Tracking MDR-TB pick-up rate amongst the poor

Outcome	XDR-TB vulnerable patients identified by bacteriology confirmation**	XDR-TB patients identified by bacteriology confirmation	XDR-TB patients identified by bacteriology confirmation and who belong to vulnerable groups	Annually	MS	Tracking XDR-TB pick-up rate amongst the poor
	Isoniazid and rifampicin uptake for vulnerable groups	Number of those accessing Isoniazid and rifampicin	Number of those accessing Isoniazid and rifampicin who are members of vulnerable groups	Annually	MS	Assessing access to TB treatment for the poor
	Diagnosis facilities for TB	Number of laboratories that have the necessary equipment to treat and diagnose TB	Number of laboratories that have the necessary equipment to treat and diagnose TB in areas populated by those in vulnerable groups	Annually	MS	Detecting diagnostic facilities addressing the concerns of members of vulnerable groups
	Treatment success rate*	Number of sputum+ cases on treatment	New sputum-smear+ cases who completed treatment	Annually	Routinely collected data on patients on treatment: TB & lab registers	Tracking treatment for TB
	Percentage of TB+ persons who are HIV+*	Number of TB patients receiving HIV testing and counselling	Number of TB patients that are HIV+ among those counselled and tested	Annually	Routine health services statistics sentinel surveys	Co-infection targeting for TB patients
	Second line TB treatment accessed by the poor	Number of those accessing second line TB treatment	Number of those from vulnerable groups accessing second line TB treatment especially for MDR-TB cases	Annually	Routine health services surveys and TB registers	Assessing access to second line TB treatment for the poor
Impact	TB incidence for those in vulnerable groups	Number of individuals belonging to vulnerable groups who are at risk for TB	Number of individuals belonging to vulnerable groups who have been diagnosed with TB	Annually	National health department and TB registries	Assessing long term change in TB incidence amongst the poor
	TB prevalence for individuals belonging to	Number of individuals who belong to vulnerable groups	All new and pre-existing cases of TB among people	Annually	DHS	Assessing long-term change in TB prevalence

	vulnerable groups		belonging to vulnerable groups			amongst the poor
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Malaria

	Indicator	Denominator	Numerator	Time Span	Source	Rationale
Input	Spending for malaria targeting vulnerable groups	Total spending for malaria	Spending for malaria directed towards rural women, urban slum dwellers and indigenous community members	Annually	MS	Ascertaining nature of MS prioritization of spending for the most vulnerable afflicted by malaria
Process	Number of trainings for skilled health workers working with malaria patients from vulnerable groups	Number of trainings for skilled health workers caring for malaria diagnosed patients	Number of trainings for skilled health workers working with malaria patients from vulnerable groups	Annually	MS	Determining the importance placed on health workers dealing mainly with the poor afflicted by malaria
	Number of trainings for HSAs and CHWs working with malaria patients from vulnerable groups	Number of trainings for HSAs and CHWs addressing concerns of malaria diagnosed patients	Number of trainings for HSAs and CHWs working with malaria patients from vulnerable groups	Annually	MS	Determining the importance placed on HSAs and community health workers dealing with the malaria afflicted poor
Output	Malaria diagnosis facilities that reach vulnerable groups	Number of laboratories that have the necessary equipment to diagnose and treat malaria	Number of laboratories that have the necessary equipment to diagnose and treat malaria in areas populated by those in vulnerable groups	Annually	MS	Detecting diagnostic facilities addressing the concerns of members of vulnerable groups suffering from malaria
Outcome	Percentage of pregnant	Number of pregnant women	Number of pregnant	Annually		Tracking malarial

Impact	women protected by intermittent preventive treatment (IPTp)*	attending antenatal clinics	women taking at least 2 doses of IPTp		Routine antenatal clinics data	treatment for pregnant women
	Percentage of poor pregnant women protected by intermittent preventive treatment (IPTp)*	Number of poor pregnant women attending antenatal clinics	Number of poor pregnant women taking at least 2 doses of IPTp	Annually	Routine antenatal clinics data	Tracking malarial treatment for poor pregnant women
	Those in vulnerable groups receiving first line anti-malaria treatment	Number of patients accessing first line anti-malaria treatment	Number of those in vulnerable groups receiving first line anti-malaria treatment	Annually	Routine departmental and clinical surveys	Determining if poor patients can access first line malarial treatment
	Household residents sleeping under insecticide-treated nets (ITNs)*	Number of household residents	Number of household residents sleeping under insecticide-treated nets	Biennially	Household surveys	Malaria prevention
	Poor household residents sleeping under insecticide-treated nets**	Number of poor household residents	Number of poor household residents sleeping under insecticide-treated nets	Biennially	Household surveys	Malaria prevention amongst the poor
	Malaria mortality rates for those in vulnerable groups	Total number of malaria deaths	Number of deaths of poor individuals caused by malaria	Annually	National health department	Assessing long term change in malaria infection and mortality rates amongst the poor
	Malaria cases per 1000 population*	Total Population	Number of confirmed malaria cases	Annually	Routine data	Tracking malaria incidence

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