

**Preliminary Regional Stakeholder and Policy Analysis
for the International Multidisciplinary Programme to
Address Lung Health and TB in Africa (IMPALA)**

African Institute for Development Policy (AFIDEP)

December 2018

Table of Contents

Introduction	3
Background: Lung health in Africa	3
Tuberculosis	3
Chronic lung diseases	5
The International Multidisciplinary Programme to Address Lung Health and TB in Africa (IMPALA)	6
IMPALA regional policy analysis rationale	6
Research questions	7
Methods.....	8
Phase 1: Rapid desk review of regional lung health policies and programmes	8
Phase 2: Rapid desk review of scientific literature related to regional lung health policy.....	9
Phase 3: Survey of regional stakeholders in lung health policy	9
Sample.....	10
Data collection and analysis.....	10
Results from phase 1: Rapid desk review of regional lung health policies and programmes	10
Regional economic blocs	10
African Union (AU)	10
East Africa Community (EAC)	11
Economic Community of West African States (ECOWAS)	12
Economic Community of Central African States (ECCAS).....	12
Southern African Development Community (SADC)	13
Regional health bodies and organisations	13
World Health Organisation (WHO) Regional Office for Africa (WHO AFRO)	13
East, Central, and Southern African Health Community (ECSA-HC).....	14
Network of African Parliamentary Committees on Health (NEAPACOH)	14
Lung health-specific regional bodies and organisations	15
The Union Against Tuberculosis and Lung Disease – Africa Region	15
Pan-African Thoracic Society (PATS)	15
Africa TB Parliamentary Caucus	15
African Tobacco Control Alliance (ACTA)	15
Key donors	16
Conclusions	16
Regional policy engagement objectives	18
Reference list.....	19

Introduction

Background: Lung health in Africa

Globally, it is estimated that 1 billion people suffer from acute and chronic respiratory conditions (Forum of International Respiratory Societies 2017). The five principle conditions that contribute to the global burden of respiratory diseases are asthma, chronic obstructive pulmonary disease (COPD), acute respiratory infections, tuberculosis (TB) and lung cancer (Forum of International Respiratory Societies 2017). Respiratory diseases, second only to cardiovascular diseases, account for more than 10% of all disability-adjusted life years (DALYs) and make up five of the thirty most common causes of death (Forum of International Respiratory Societies 2017). COPD, Lower respiratory infections, lung cancer and tuberculosis are among the top causes of death worldwide (WHO, 2018).

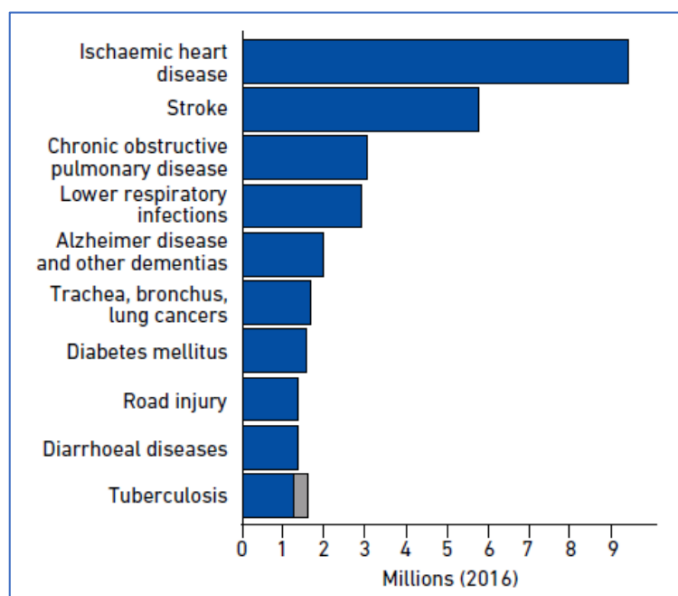


Figure 1: Top causes of death worldwide 2016 (WHO, 2018)

Tuberculosis

Tuberculosis is a major global health concern, with an estimated 10 million people falling ill with TB and 1.6 million deaths annually (WHO, 2018). TB mortality translates to approximately 4,400 people dying of TB every day—an unacceptably high statistic. Sub Saharan Africa (SSA), in particular, has a high burden of disease (Figure 2), accounting for 25% of the TB cases globally. Over 25% of TB deaths occur in the African Region, with an estimated 413,000 people dying from the disease in 2017. There were 464,633 cases of TB among people living with HIV were notified 72% of these were in the WHO African Region showing a high burden of TB HIV coinfection in Sub Saharan Africa (WHO, 2018).

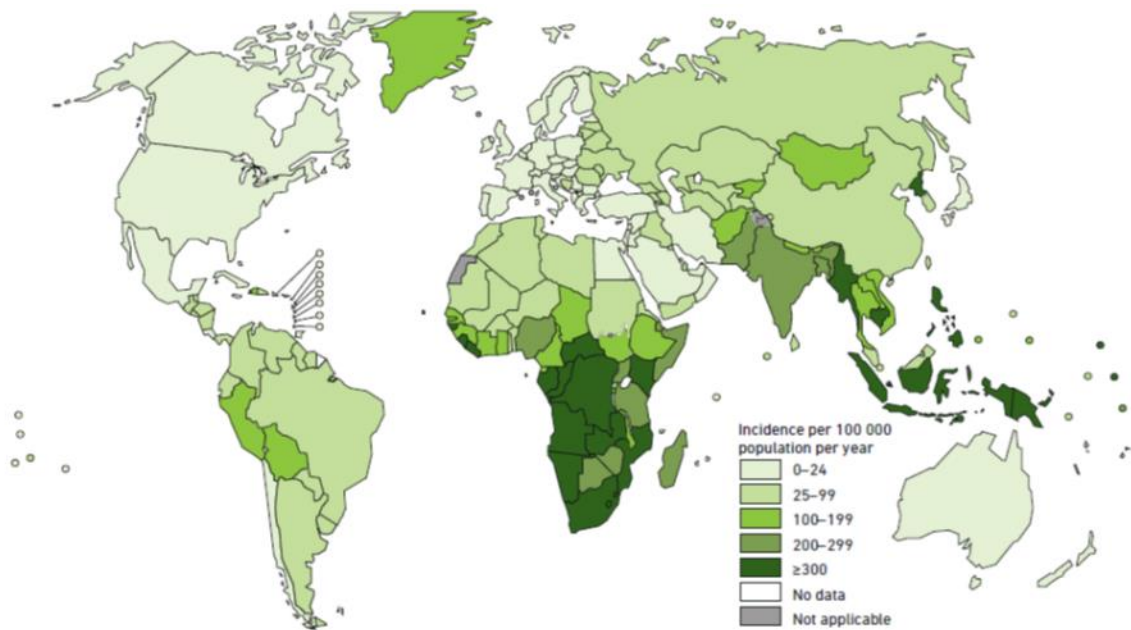


Figure 2: Estimated TB incident rates in 2017 (WHO, 2018)

Numerous gains have been made in TB control over the years with 54 million deaths averted between 2000 and 2017.

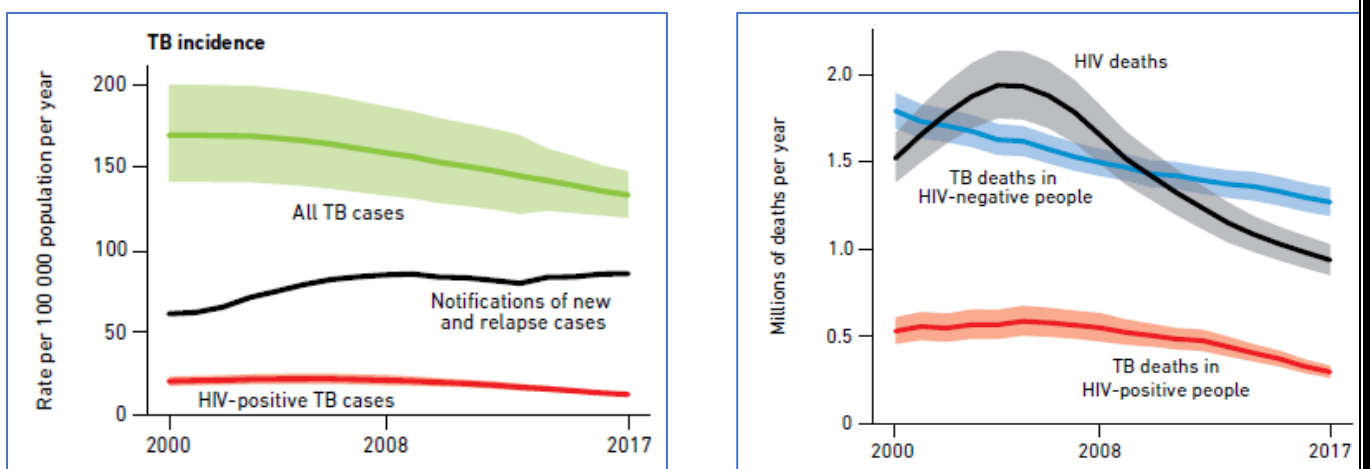


Figure 3: Global trends in estimated incidence and number of TB deaths (WHO, 2018)

However, current actions and investments fall short in the quest to end TB. The WHO END TB strategy aims to reduce the incidence of TB by 90%, decrease mortality by 95% and reduce the catastrophic costs related to TB to 0% by 2035 compared to 2015 (WHO, 2015). Under the Sustainable Development Goals (SDGs), specific targets are a 90% reduction in absolute number of TB deaths and 80% reduction in TB incidence compared to 2015. Unfortunately, these targets have not yet been met. Globally 40% of the people with TB are still not being diagnosed and hence do not receive treatment; in SSA, half of patients are not diagnosed and hence do not receive treatment. In addition, there is inadequate funding and slow development of new tools and technologies to accelerate the decline of TB. Social determinants of health are also not being addressed; poverty is closely related to TB, with

TB disproportionately affecting the poor as well as leading to poverty due to exorbitant medical costs. All these current gaps require political commitment and bold policies to address.

On 26th September 2018, the first ever United Nations High Level Meeting on TB (UNHLM TB) was held in New York, in a bid to bridge this gap. The meeting brought together heads of state, UN leadership and other global leaders; technical agencies and academia; private sector and philanthropic foundations; civil society and other relevant partners. The theme of the meeting was “United to End Tuberculosis: An Urgent Global Response to a Global Epidemic” and aimed at accelerating efforts in ending TB and reaching all affected people with prevention and care. UNHLM TB was the biggest and best opportunity to raise political prioritisation of TB. It resulted in a political declaration on TB, endorsed by Heads of State, which will form the basis for future TB response. Relatedly, there was commitment on a coordinated global response and financial resources for TB, in a bid to save lives.

Although UNHLM TB was a giant step forward, there is still need for multi sectoral regional coordination and monitoring of these commitments in Africa. Mapping key policy organisations to spearhead these efforts will ensure the success and achievement of the END TB Strategy goals, as well as the SDG targets on TB.

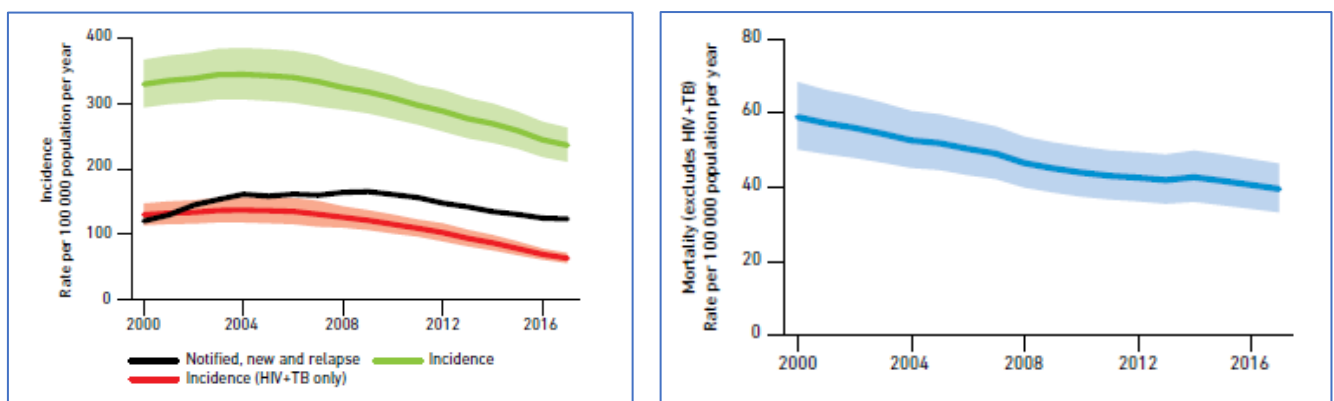


Figure 4: WHO Africa Region trends in estimated incidence and number of TB deaths

Chronic lung diseases

Global estimates indicate there were 251 million cases of COPD in 2016, with 3.17 million deaths in 2015 (5%). More than 90% of the deaths were in LMICs (WHO, 2017). Moreover, 235 million people, mostly children, suffer from asthma around the world. In 2015, there were 383,000 deaths due to asthma. Although there is a paucity of data about non-communicable lung diseases, namely asthma and COPD in SSA, estimated prevalence is wide—ranging from 9.4-22.4% and 6-20% for COPD and asthma, respectively (Adeloye, 2014). Despite the noted increase in the burden of these lung diseases, they are still likely to be “under-estimated, under-diagnosed, under-treated as well as inadequately prevented” according to Ahmed et al, 2017. This evidence gap indicates the need for further research lung health in SSA. Unlike TB, for which there is a plan for global response, programming on chronic lung diseases is still disjointed, requiring further policy engagement.

The International Multidisciplinary Programme to Address Lung Health and TB in Africa (IMPALA)

International Multidisciplinary Programme to Address Lung Health and TB in Africa (IMPALA) is a four-year collaborative programme led by the Liverpool School of Tropical Medicine (LSTM) and funded by the National Institute of Health Research (NIHR) that supports researchers, strengthens research institutions, and fills evidence gaps to address high-burden lung health issues in Africa, many of which lack sufficient funding and research evidence. Comprised of 22 partner institutions across 14 countries, 10 of which are in Africa, IMPALA engages in multi-disciplinary collaborative research across clinical and public health, applied social science, health systems, health economics and modelling, policy, and implementation science disciplines to produce implementable solutions to critical issues surrounding lung health. The work will focus specifically on intersections between non-communicable lung disease, acute lung disease, air pollution, and tobacco-related disease; and how each of these interact with TB. IMPALA currently supports a multidisciplinary group of five postdoctoral researchers and five PhD students conducting lung health research in Africa.

The Pathways to Impact component of IMPALA, co-led by the African Institute for Development Policy (AFIDEP), has the overarching goal of creating demand for and enabling the use of evidence generated through IMPALA research in lung health policy decisions, programmes and practice. This will be done by:

1. Strengthening the capacity of IMPALA researchers to engage with policy makers and the policymaking process at the national and regional levels through training and mentorship;
2. Identifying policy and programme barriers to behaviours and environments that protect lung health through policy analyses at the project and regional levels; and
3. Developing and implementing a comprehensive policy engagement, evidence uptake, and accountability strategy.

The policy analysis work completed by IMPALA research teams at the project level and by AFIDEP at the regional level will inform the development of a comprehensive policy engagement and evidence uptake strategy. The training and ongoing mentorship of IMPALA researchers will support these efforts, enable researchers to 1) conduct policy analysis work and develop policy engagement and evidence uptake strategies at the project level, and 2) effectively implement their project level-strategies as well as the overall strategy.

IMPALA regional policy analysis rationale

There have long been calls to extend the use of health policy analysis in low and middle-income countries (LMICs) (Walt and Gilson 1994; Reich 1996; Gilson et al 2008a), as the literature has shown the importance of incorporating “politics, process and power” into studies involving health policy and systems (Gilson et al 2008b). Health policy analysis can play a critical role in meeting health aims by showing why some health issues receive more attention than others, identifying barriers in implementation, and identifying stakeholder

positions on health issues, which can be used to develop strategies to advance reforms (Buse et al 2007).

To inform the development of an overall policy engagement and evidence uptake strategy for IMPALA, AFIDEP will conduct an analysis of lung health policy and programmes at the regional level (both at the continental level as well as West, East, Central, and Southern Africa). The analysis will be conducted in three phases – a preliminary desk review of regional lung health policies and programmes, a desk review of scientific literature on policy issues related to lung health, and a survey of IMPALA partners, including experts in the field of lung health in Africa.

Research questions

The overall aim of this first phase of work is to make recommendations for IMPALA policy engagement at the regional level and to develop a preliminary policy engagement strategy. This strategy will be a living document that will be informed by the second and third phases of the analysis and adapted as necessary throughout the life of the programme.

This first phase of work sought to answer the following questions:

1. What policies and programmes exist at regional level to tackle lung health challenges in the region?
2. What lung health issues are prioritised in these policies? What lung health issues are not prioritised in these policies?
3. Who are the main actors in lung health policy development and advocacy at the regional level (including donors)? What are their interests and roles? Where is there potential for IMPALA to expand key actors' involvement in lung health/TB?
4. What opportunities exist for regional policy engagement with key stakeholders?

The second and third phases of work will seek to answer the following, in addition to expanding on the above:

1. What factors influence lung health policy and programmes in Africa (or sub-Saharan Africa)?
 - a. What factors influence regional policies, investments and commitments to lung health? (international, economic, or cultural influences)
 - b. Are regional bodies influencing, in any way, member country policies, investments and commitments to lung health? For instance, have they required member countries to do any specific things in their efforts to tackle lung health issues?
2. What investments are regional bodies currently making in lung health? What investments are needed by regional bodies to promote behaviours and environments which protect lung health?
3. What structures are in place to facilitate discussion and advocacy for lung health at regional level? (i.e. are there regional technical working groups (TWGs) on lung health at the regional level?)

4. What is the role of evidence in addressing barriers to promoting and sustaining behaviours and environments which protect lung health at the regional level?

Methods

This analysis will involve a rapid desk review of regional lung health policies and their implementation in Africa (conducted in two phases), a survey of IMPALA partners and researchers to identify key regional policies, policy issues, stakeholders, and decision-making platforms, and key informant interviews with policy actors from identified regional decision-making platforms.

Phase 1: Rapid desk review of regional lung health policies and programmes

This analysis draws from a rapid desk review of key stakeholders (regional economic, governance, public health and lung health/TB organisations) in Africa as well as their lung health/TB policies, programmes and platforms. The rapid desk review was conducted by four researchers (including one lung health expert) and took place over the course of two months, from the beginning of September 2018 to the end of November 2018.

Lung health and/or TB-specific organisations were identified through Google searches with the terms [Lung OR Lung Health OR TB OR tuberculosis OR Disease] AND [chronic OR acute] AND [strategy OR program* OR advoca* OR organi* OR network OR fund] AND [Africa] AND [East OR South OR West OR Central]. Websites of the eligible organisations and of regional economic, governance and public health bodies (e.g. African Union, East Africa Community, Southern African Development Community, Africa CDC) were scanned to find policies, programmes, and platforms related to TB/lung health.

Policies and programmes were first reviewed if they included the terms [TB OR tuberculosis OR lung OR respiratory OR non-communicable] in their titles or descriptions. Due to time constraints, review of the policies and programmes involved using the 'find' function for the terms [TB, tuberculosis, lung, respiratory, non-communicable]. Those eligible for inclusion in the analysis had content on 1) acute or chronic lung health policies, strategies, frameworks and reports; 2) acute or chronic lung health programme and strategy development, implementation or advocacy. Relevant content was added to an excel sheet shared between reviewers.

The organisations with relevant TB/lung health policies and/or programmes were then further reviewed to identify platforms for TB/lung health-related policy engagement. In particular, reviewers searched organisations' websites and google with the following terms [conference OR technical working group OR TWG OR forum OR meeting OR policy OR practice] AND [organisation name OR organisation abbreviation]. Platforms eligible for inclusion had content on decision-making, policy, experts, leaders, heads of state, ministry of health, ministers, stakeholder engagement and evidence dissemination. Relevant content was added to an excel sheet shared between reviewers.

The researchers reviewed content in the shared excel sheet to determine 1) Lung health policies or strategies at regional level; 2) Lung health issue(s) prioritised; 3) Grouping of lung health diseases with other diseases/health issues; 4) Key regional actors in lung health policy development and advocacy; 5) Structures for discussing and advocating for lung health policy; 6) Factors that influence lung health policies in Africa; 7) Investment in lung health programme implementation; and 8) The role of research/evidence in lung health policy development, implementation and advocacy. Themes and trends were discussed among researchers until consensus was met.

The following analysis presents the regional lung health/TB policy and stakeholder landscape within which IMPALA is operating. Key regional stakeholders and their relative opportunity (or lack of opportunity) for IMPALA regional policy engagement were identified, given their regional power, influence, involvement and interest in lung health/TB. Those with promising potential to contribute to IMPALA's Pathways to Impact objectives are indicated as priority stakeholders, along with their relevant platforms.

Phase 2: Rapid desk review of scientific literature related to regional lung health policy

Due to time constraints, the review will be limited to articles focusing on lung health issues being investigated by the IMPALA PhD and Post Doc fellows and published between 2008 and 2018. The following search terms will be applied: [Lung Health OR Disease] AND [chronic OR acute] AND [policy OR strategy OR program* OR advocacy] AND [policymak* OR practi* OR stakeholder*] AND [Africa] AND [East OR South OR West OR Central]. Google Scholar and websites of organisations focusing lung health policy, programmes and advocacy will be used to search for peer reviewed and grey literature.

Scientific articles will be eligible for inclusion if they focus on Acute or Chronic lung health policy, programme and strategy development, implementation or advocacy including content and implementation gaps and challenges; and the role of evidence in acute or chronic lung health policy and programme development and implementation. Articles not focusing on lung health from the perspective of policy development and implementation will be excluded.

After removal of duplicates, abstracts of retrieved articles will be screened against the inclusion and exclusion criteria. Then remaining papers will be read in full and screened against the inclusion and exclusion criteria. Papers shall be shared between and reviewed by two reviewers. Selected papers will be reviewed by a third reviewer. Differences will be discussed between the three reviewers until consensus is reached.

Phase 3: Survey of regional stakeholders in lung health policy

A survey tool will be designed and administered to IMPALA partners and researchers to identify key regional lung health policies, policy issues, stakeholders involved in regional policy development and implementation, advocacy and research including their interests and power to influence change, and key decision-making platforms for lung health. This will provide information on key organisations and grey literature that should be reviewed as

part of the rapid desk review. It will also provide information on key policy actors to interview.

While the IMPALA PhDs and Post-Doctoral Research Assistants (PDRAs) will be conducting policy analyses for each of their projects, research projects are not being undertaken in all 11 IMPALA countries. As such, we will need to collect country-level information on policies, policy issues, stakeholders, and platforms in addition to regional information.

Sample

The survey will be administered to 5 research programme leads, 11 country leads, 5 PhD students and 5 PDRAs.

Data collection and analysis

Survey monkey will be used to gather the data, manage the survey dataset and conduct data analysis. Additional analysis may be conducted in excel or SPSS as needed. Responses to open ended questions will be post-coded to transform it into quantitative data. Descriptive analysis will be used to analyse the data by survey question. We will also ask participants to share PDF copies of relevant policies at the regional or country level.

Results from phase 1: Rapid desk review of regional lung health policies and programmes

This report presents the findings from the first phase; a preliminary, rapid analysis of regional lung health policies and programmes. Generally, high priority is placed on TB at the regional level, with little mention of other areas of lung health. Furthermore, regional policies referencing TB are typically grouped with HIV/AIDS and/or malaria, rather than being TB-specific.

Regional economic blocs

African Union (AU)

A leading regional governance body in Africa, the African Union (AU) has policies on preventing tuberculosis (TB), however none of the policies are TB-specific (Organisation of African Unity, 2001; AU, 2003; AU, 2006; AU, 2012; AU, 2016). In fact, TB is always grouped with HIV/AIDS and often with Malaria-specific (Organisation of African Unity, 2001; AU, 2003; AU, 2006; AU, 2012; AU, 2016). As HIV/AIDS and TB are common co-morbidities, this coupling and integrated approach makes sense (AU, 2016). However, the lack of policies solely focused on TB can fail to capture the nuance and disease-specifics that are needed. Relatedly, this implies that funding for TB efforts is only in relation to HIV/AIDS, rather than standing alone. Despite the aforementioned policies covering TB, the AU lacks policies on other lung health diseases or lung health, in general—marking a major gap.

Africa Centres for Disease Control and Prevention (Africa CDC)

In early 2017, the AU launched Africa CDC, Africa's regional public health agency (Africa CDC Official Launch, 2017). Although Africa CDC does not have any policies related to TB or lung health, it does note the need to address growing antimicrobial resistance (AMR) against diseases like TB in its 2018-2023 Framework for Antimicrobial Resistance (Africa CDC, 2018). Accompanying the AMR framework is Africa CDC's Anti-Microbial Resistance Surveillance Networks (AMRSNET), a network of public health institutions to mitigate harm from AMR organisms (Africa CDC Antimicrobial Resistance Surveillance Networks, 2018). Otherwise, part of Africa CDC's strategic objectives is to strengthen countries surveillance networks for priority diseases, including TB (Africa CDC, 2017). Generally, Africa CDC, a relatively young yet critical regional public health stakeholder lacks involvement in lung health or TB. Although this is a major gap, it also marks an opportunity to spark Africa CDC's lung health involvement.

East Africa Community (EAC)

EAC is an intergovernmental organisation composed of six member states in the African Great Lakes region in Eastern Africa: Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda. Within health, the EAC has a strategy for communicable and non-communicable diseases (NCDs) with no mention of TB or lung health. The strategy seeks to establish an EAC information exchange system for communicable and NCDs; Establish a supranational public health laboratory and strengthen national public health laboratories; Strengthen promotive, preventive, curative and rehabilitative health services for NCDs; and Strengthen the capacity of EAC Partner States to diagnose and treat communicable and NCDs (EAC, "About EAC"). EAC also has a standing working group on Control and Prevention of Communicable and Non-Communicable diseases (EAC, "Health"). Since EAC has a focus on health with no clear priority placed on lung health or TB, there is an opportunity to engage EAC to promote the prioritization of lung health.

East African Public Health Laboratory Networking Project

One of the EAC's programmes is the East African Public Health Laboratory Networking Project (EAPHLNP) in Burundi, Kenya, Rwanda, Tanzania and Uganda (2010-2020). The EAPHLNP is a World Bank-funded project, implemented by the EAC Partner States in collaboration with the East African Community Secretariat, the East Central and Southern Africa Health Community (ECSA-HC), the US Centres for Disease Control and Prevention and WHO. The objective of the project is "to establish a network of efficient, high quality, accessible public health laboratories for the diagnosis and surveillance of tuberculosis and other communicable diseases." Beyond the service delivery components of the project, EAPHLNP seeks to share learnings and best practices within the five countries (EAC, "EAPHLNP"). Present in three of the IMPALA countries, EAPHLNP is, therefore, a relevant programme to engage in and which can contribute to the development of regional policy recommendations and guidelines for TB control and prevention.

Economic Community of West African States (ECOWAS)

ECOWAS is composed of 15 member states in West Africa: Benin, Burkina Faso, Cabo Verde, Cote D'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. Beyond facilitating an environment for networking and advocacy work, ECOWAS seeks to establish a channel for sharing experiences and accelerating research on TB in West Africa. In collaboration with WHO, ECOWAS was involved in the formation of the West African Regional Network of Anti-Tuberculosis Programmes (WARN-TB) to harmonise policies and disease control strategies across countries, pool technical expertise from multiple contexts, and elevate community interests to policy-making and agenda-setting audiences to better control TB in Africa (USAID, 2016). ECOWAS's involvement in TB control through generating evidence to inform policies and programmes is well-aligned with IMPALA's policy engagement objectives. While ECOWAS may represent a strategic stakeholder to amplify TB efforts, targeting the West African Health Organisation (WAHO), a specialised agency of ECOWAS, might be more strategic.

West African Health Organisation (WAHO)

WAHO is a specialized agency of ECOWAS responsible for health issues. Though WAHO does not have a specific focus on lung health, WAHO's vision "is to be recognized by the Member States and the International Community as a proactive instrument of regional health integration that enables high-impact and cost-effective interventions and programmes" (WAHO, 2016). TB is noted as a top cause of morbidity in the region, however malaria is more of a priority. There is little mention of other lung health issues.

Factors contributing to the relative advantage of WAHO as a strategic regional stakeholder include: its political mandate; existence of a direct line of communication with the political decision-makers of Member States as well as the capacity to propose to Member States for adoption conventions, agreements and regulations expected to regulate some precise aspects of health in the region. Additionally, WAHO has the ability to advocate at the highest level for the adoption and implementation by Member States of resolutions relating to health approved at the international level, facilitate exchange of resources between countries, and to harmonise health policies while leveraging on its membership of ECOWAS to mobilize resources. Apart from the capacity to facilitate the ratification of agreements and other conventions relating to health among Member States and Strategic Partners, WAHO has the ability to promote health interventions that specifically address the needs of West African countries (WAHO, "About WAHO").

Economic Community of Central African States (ECCAS)

ECCAS is composed of 10 member states in Central Africa: Angola, Burundi, Cameroon, Central African Republic (CAF), Chad, Republic of the Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe, and Rwanda. ECCAS aims to promote and strengthen cooperation in order to realize a balanced and self-sustained economic development, particularly in the fields of industry, transport and communications, energy, agriculture, natural resources, trade, customs, monetary and financial matters, human resources, tourism, education, culture, science and technology and the movement of

persons with a view to achieving collective self-reliance, raising the standards of living, maintaining economic stability and fostering peaceful relations between the member States and contributing to the development of the African continent (UNECA, “ECCAS”). ECCAS’s lack of involvement in lung health, TB, or even health, in general, makes it a weak platform for policy engagement.

Southern African Development Community (SADC)

SADC is composed of 16 member states in Southern Africa: Angola, Botswana, Comoros, Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, and Zimbabwe. SADC has TB-specific policies: the 2010 Harmonised Minimum Standards for Prevention, Treatment and Management of TB in the SADC Region (SADC, 2010) and SADC’s Declaration on TB in the Mining Sector (2012) (SADC, 2012). SADC’s TB-specific policies are likely due to the high TB prevalence in Southern Africa; the WHO estimated that 54% of Africa’s reported TB cases in 2011 were in Southern Africa (SADC, 2013). Similar to the AU, SADC also has policies on TB in relation to HIV/AIDS and Malaria (SADC, 2009; SADC, 2009). There is, therefore, opportunity for funding and efforts to address TB, as HIV/AIDS prevalence is very high in Southern Africa, accounting for more than 37% of all people living with HIV (SADC, 2013). Apart from policies, SADC publishes an annual TB report—to monitor progress on TB control and providing stakeholders with “an overview of the epidemiology of the disease and progress on TB control in the Region,” (SADC, 2013). Despite the aforementioned policies covering TB, SADC lack policies on other lung health diseases or lung health, in general—marking a major gap.

Regional health bodies and organisations

World Health Organisation (WHO) Regional Office for Africa (WHO AFRO)

As one of the regions under the global WHO, WHO AFRO is a technical agency covering 47 countries in Africa. WHO AFRO contributes to policy development in lung health and Tuberculosis that offer guidance to countries globally. One of the core mandates of WHO AFRO is TB is demonstrated by its framework for implementing the End TB Strategy in the African Region (2016 – 2020). Specifically, WHO AFRO aims to reduce the number of TB deaths in the region by 35%, the number of TB patients by 20% and attain 0% TB-affected families facing catastrophic costs due to TB (WHO AFRO, “WHO African Region Country Offices”). To do so, WHO AFRO has staffing dedicated to TB control which liaises with country offices (WHO AFRO, “Organisational structure”). Though WHO Global has programmes in chronic respiratory diseases listed under noncommunicable disease (WHO AFRO, “About us”). WHO AFRO offers a strategic platform for engagement in chronic lung diseases beyond TB in influencing of TB and lung health policy.

West African Regional Network for Tuberculosis Control (WARN-TB) and Central African Regional Network for Tuberculosis Control (CARN-TB)

WARN-TB was initiated in 2015 by the WHO Special Programme for Research and Tropical Disease (TDR) in line with the End TB Strategy. Its focus is on developing more effective

approaches to TB care, using implementation and operational research to investigate barriers and design new solutions for individual countries and the entire sub-region. Similarly, CARN-TB replicates and builds on the WARN-TB model for a step-wise approach to strengthen TB control through country-led research, in line with the global End-TB strategy.

The objectives include:

- (i) To provide a platform for partnership collaboration and exchanges of best practices among national TB control programmes (NTPs);
- (ii) To promote harmonization of strategies and practices for the control of TB within the region;
- (iii) To promote the conduct and build capacity for operational research for TB control within the region and;
- (iv) To support high level advocacy and resources mobilization for TB control.

In terms of funding, the network is supported by international NGOs such as the Union against Tuberculosis and Lung Diseases and the Damien Foundation; and international organisations including WAHO, the Global Fund to fight AIDS, Tuberculosis and Malaria, WHO intercountry support and the WHO Global TB Programme, in addition to TDR (TDR, 2018; TDR, “WARN-TB”). WARN-TB and CARN-TB are, therefore, important platforms for amplifying IMPALA’s TB efforts across West and Central Africa.

East, Central, and Southern African Health Community (ECSA-HC)

ECSA-HC is an inter-governmental health organisation that seeks to foster coordination between member states to address health needs. ECSA-HC has multiple projects related to TB, including the World Bank-funded Southern Africa Tuberculosis and Health Systems Support (SATBHSS) Project which seeks to target the most affected areas in Southern Africa, such as mining communities (SATBHSS, “About”). Other relevant projects include a Global Fund Grant to improve TB diagnostics in the region by building a regional network of National Reference Laboratories as well as the previously mentioned EAPHLNP project which aims to strengthen public health laboratory systems (ECSA, “Projects”). Given ECSA-HC’s mandate to address member state’s health needs, our policy engagement should seek to demonstrate member countries’ unmet lung health needs to drive ECSA-HC’s involvement in lung health issues outside of TB.

Network of African Parliamentary Committees on Health (NEAPACOH)

NEAPACOH is a network that engages members of parliament (MPs) that are part of Parliamentary Committees on Health to strengthen the execution of their mandated functions of legislation, oversight, and representation to address health challenges in Africa. While their stated objectives are meant to address urgent health challenges generally, the focus of their annual meetings in recent years has overwhelmingly been on reproductive health and family planning, which reflects the interests of development partners involved in the meetings (Oronje, 2017). There is an opportunity here to encourage a focus on other priority health areas, such as TB and lung health.

Lung health-specific regional bodies and organisations

The Union Against Tuberculosis and Lung Disease – Africa Region

The Union Africa Region is made up of more than 700 organisations and individuals. It is a regional organisation under International Union Against Lung Health (The Union). It is a membership organisation. The aims of The Union are: to gather and to disseminate knowledge on all aspects of tuberculosis and lung disease, as well as on resulting community health problems; to alert doctors, decision makers, leaders of opinion and the general public to the dangers presented by tuberculosis, other lung diseases, HIV, and non-communicable diseases as well as the community health problems associated with them; to co-ordinate, assist and promote the work of its members throughout the world; to establish and maintain close links with the World Health Organisation, other United Nations organisations, and government and non-government institutions in health and development sectors (The Union, “Members”). This can be a platform for influencing TB and lung health policy.

Pan-African Thoracic Society (PATS)

PATS is a professional society for lung healthcare professionals whose purpose is to promote lung health in Africa through education, research, advocacy, quality care, and strengthening African capacity to address lung health challenges on the continent. PATS’ activities include advocating for and representing African lung health issues in global forums, promoting collaboration between lung health organisations, and strengthening capacity for lung health researchers through the Pan African Thoracic Society – Methods in Epidemiologic, Clinical and Operations Research course (PATS-MECOR) (PATS, “What we do”). Networking with PATS lung health professionals can strengthen IMPALA’s visibility, network and influence and should therefore be prioritised.

Africa TB Parliamentary Caucus

The Africa TB Parliamentary caucus founded in 2015 is one of their regional caucuses under the global TB caucus. The global caucus aims to achieve a *sustainable political response to TB*. In order to achieve this, the caucus aims to catalyse formation of national platforms to ensure response to TB is locally led, advocate for TB at the G20 level and create a platform for government accountability among the high TB burden countries. One of the major achievements of the caucus has been involvement of the UN high level meeting for TB that was held in New York on 26th September 2018. This ensured political commitment for TB control. The measures of success for the caucus is increased domestic resources for TB control and influencing policy changes to improve the response to the epidemic. The African TB caucus is a potential advocacy body that can influence critical regional policies on TB. (Global TB caucus website)

African Tobacco Control Alliance (ACTA)

ACTA describes itself as a non-profit, non-political Pan-African CSO network with the aim to promote health by preventing an epidemic of tobacco use on the continent (ACTA, “What is

ACTA”). ACTA’s activities include supporting country and regional partners in drafting tobacco policy/legislation campaigns, conducting tobacco taxation campaigns, providing technical assistance to members/governments Ministries of Health, doing media campaigns, and training journalists and policymakers (ACTA, “What we do”). ACTA’s alternative approach to lung health control through tobacco control can complement IMPALA’s advocacy and policy components.

Key donors

Key international donors are important, policy-influencing stakeholders to consider. For example, the Global Fund (GF) is an organisation designed to accelerate the end of AIDS, TB and malaria as epidemics. Founded in 2002 the GF is a partnership between governments, civil society, the private sector and people affected by the diseases. It raises and invests nearly US\$4 billion a year to support programmes run by local experts in countries and communities most in need. In fact, GF provides more than 65% of all international financing for TB and more than US\$5.9 billion has been disbursed as of end 2017. Given their massive investment in TB, the GF is a critical stakeholder in the landscape of TB control and financing.

Other prominent donors in lung health, like USAID, CDC, and PEPFAR, fund a number of implementing organisations that support HIV and TB activities. USAID, in particular, funds Challenge TB by KNCV Tuberculosis Foundation, TB South Africa by University Research Company, and Tuberculosis Accelerated Response and Care by Centre for Health Solutions-Kenya.

CDC and PEPFAR fund organisations for TB/HIV care including ICAP, Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), and University of Maryland, among others in high burden countries.

TB is traditionally well-funded, however, funding for other lung health issues is minimal. For example, in Kenya, this represents a gap – while some small programmes have been funded through pharmaceutical companies for asthma care, this is mostly commercial. More needs to be known about funding for asthma and other lung health issues at the regional level.

Conclusions

Although high priority has been placed on TB at the regional level, there is little to no focus on other lung health issues. This may be due, in part, to an evidence gap on lung health issues other than TB at the regional level. There is, therefore, an opportunity for IMPALA to promote interest, investment, and research in overall lung health as a priority issue at the regional level, including but not limited to TB. More research and data collection is needed to make a case for increased focus on and investment in other lung health issues. Based on our analysis, we recommend the IMPALA regional policy engagement a) promote a focus on lung health, beyond just TB, at the regional level (including research, data collection, and investment); b) make IMPALA research accessible and tell the IMPALA story in regional forums; and c) support IMPALA researchers in becoming key actors in lung health at the regional level (Appendix). To achieve these broader goals, we recommend prioritising policy

engagement with the following key influential stakeholders, taking advantage of their relevant platforms.

As the leading regional governance body in Africa, the AU is a critical stakeholder for IMPALA policy engagement. In fact, the AU has the power and influence to set agendas and health priority areas by uniting high-level African stakeholders. Because our analysis identified a major gap in regional investment in lung health issues other than TB, the AU presents an opportunity to bring regional attention to other lung health issues. Engagement with the AU will be led by AFIDEP—requiring tailored policy briefs, policy/priority health recommendations and high-level networking and advocacy. Regional governance bodies, including WAHO, ECSA-HC, EAC, and SADC, are well-funded and positioned to influence data collection among their member states. We should, therefore, take opportunities to engage said regional governance bodies as they arise.

Given that Africa CDC is a new regional public health agency that lacks involvement in lung health, they are a priority stakeholder to engage. Given its research and programmatic focus, engagement with Africa CDC will be driven by IMPALA researchers.

World TB Day on March 24 marks a unique opportunity to call Africa CDC's attention to TB as a priority lung health disease. More critical, however, is IMPALA presence at Africa CDC's annual conference to promote IMPALA-generated research and its researchers.

WHO AFRO is instrumental in highlighting evidence that works and ensuring it gets to policy discussions and guidance to countries. Briefing them on IMPALA and sharing our key findings will be important for translating research findings into policy. Platforms to engage WHO AFRO include international and regional conferences as well as in IMPALA annual meetings. Critical is IMPALA presence at the second WHO Africa Health Forum, to be held in Cabo Verde in March 2019, with the theme of Achieving Universal Health Coverage and Health Security in Africa: The Africa We Want to See. Due to WHO AFRO's focus on both research and politics, IMPALA's lung health and policy experts are best suited for engagement.

Influencing regional governments, particularly regional parliamentary networks, is a crucial step in transforming research into policy and practice. Comprised of parliamentarians advocating for ending TB in Africa, the Africa TB Caucus is a priority stakeholder for IMPALA policy engagement.

Engaging the Caucus on the intersectionality of TB and other lung health will be important in bringing the lung health agenda to the fore. The Caucus' annual meeting marks a strategic platform for IMPALA engagement, to be led by AFIDEP. Another strategic parliamentary stakeholder is NEAPACOH. Comprised of parliamentarians that are members of Parliamentary Committees on Health, NEAPACOH provides the opportunity to look beyond TB to other areas of lung health—contributing to the IMPALA policy engagement's first objective. NEAPACOH's annual October meeting is an ideal platform for engagement as AFIDEP is a co-convener.

Finally, the Union Against Tuberculosis and Lung Disease – Africa Region is a strategic stakeholder for engagement as it now has a renewed focus on lung diseases apart from TB

and the president of the Union, Dr Chakaya, is an IMPALA affiliate. To ensure the Union-Africa Region champions lung health issues, beyond TB, concerted engagement is needed. The Union's next biannual conference, taking place May 2019 in Zimbabwe, is an opportunity for AFIDEP to present evidence syntheses on lung health issues other than TB, and for IMPALA researchers to promote IMPALA's lung health research.

Regional policy engagement objectives

Based on our analysis, we recommend promoting a focus on lung health, beyond just TB, at the regional level (including research, data collection, and investment); making IMPALA research accessible and telling the IMPALA story in regional forums; and supporting IMPALA researchers to becoming key actors in lung health at the regional level. See the preliminary policy engagement strategy appended.

Table 1: IMPALA regional policy engagement objectives

Objectives	Outputs	Indicators of success
1. Increase awareness and raise the profile of lung health issues overall, beyond just TB, with the aim to encourage research and routine data collection on, and investment in, other lung health issues	1 regional agenda-setting policy brief; presentations by IMPALA researchers at regional platforms on lung health issues other than TB	More lung health issues discussed at regional level platforms, beyond TB; increased demand for and interest in research on lung health issues, beyond TB
2. Make IMPALA research accessible and tell the IMPALA story in relevant regional policy platforms	1 regional policy brief about IMPALA overall; regional policy briefs about IMPALA research (# of projects); presentations by IMPALA researchers on IMPALA and IMPALA research at relevant regional platforms (conferences, etc.)	Visible IMPALA presence at key regional platforms; IMPALA research published in open-access journals; IMPALA research discussed and used (cited, etc.)
3. Support IMPALA researchers in their involvement in regional platforms so that they successfully promote their research findings and become actors in lung health at the regional level	AFIDEP to provide mentorship to IMPALA researchers on policy engagement and evidence uptake; provide technical input for relevant policy products to aid engagement activities	IMPALA researchers able to prepare relevant policy products to aid engagement activities; IMPALA researchers actively participating in key regional platforms and the relevant regional technical working groups

Reference list

Adeloye D, Basquill C, Papan A, Chan KY, Rudan I, Campbell H. An Estimate of the Prevalence of COPD in Africa: A Systematic Analysis. COPD [Internet] 2014 Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24946179>. [PubMed]

Ahmed R, Robinson R, Mortimer K. The epidemiology of non-communicable respiratory disease in sub-Saharan Africa, the Middle East, and North Africa

African Tobacco Control Alliance. What is ACTA? Retrieved December 6, 2018 from: <http://atca-africa.org/en/about-us/what-is-atca>

African Tobacco Control Alliance. What we do. Retrieved December 6, 2018 from: <http://atca-africa.org/en/about-us/what-we-do>

African Union (AU). (2003). *DRAFT MAPUTO DECLARATION ON HIV/AIDS, TUBERCULOSIS, MALARIA AND OTHER RELATED INFECTIOUS DISEASES* (AU Declaration). Retrieved from: [http://www.who.int/violence_injury_prevention/violence/global_campaign/en/Declaration Maputo.pdf](http://www.who.int/violence_injury_prevention/violence/global_campaign/en/Declaration_Maputo.pdf)

African Union (AU). (2006). *ABUJA CALL FOR ACCELERATED ACTION TOWARDS UNIVERSAL ACCESS TO HIV AND AIDS, TUBERCULOSIS AND MALARIA SERVICES IN AFRICA* (AU Declaration). Retrieved from: https://au.int/sites/default/files/pages/32894-file-2006_abuja_call.pdf

African Union (AU). (2012). *ROADMAP ON SHARED RESPONSIBILITY AND GLOBAL SOLIDARITY FOR AIDS, TB AND MALARIA RESPONSE IN AFRICA* (AU Declaration). Retrieved from: https://apf.francofonie.org/IMG/pdf/5c-annexe_2_rapport_sur_le_vih_c_levrat_suisse__feuille_de_route_de_l_union_africaine_anglais.pdf

African Union (AU). (2016). *Catalytic Framework to End AIDS, TB and Eliminate Malaria in Africa By 2030* (AU Declaration). Retrieved https://au.int/sites/default/files/pages/32894-file-catalytic_framework_english.pdf

Africa CDC Official Launch. (2017, January 30). Retrieved November 29, 2018, from <https://au.int/en/newsevents/20170131/africa-cdc-official-launch>

Africa CDC. (2018). *AFRICA CDC FRAMEWORK FOR ANTIMICROBIAL RESISTANCE, 2018-2023* (Africa CDC Framework).

AFRICA CDC ANTIMICROBIAL RESISTANCE SURVEILLANCE NETWORKS (AMRSNET). (2018). Retrieved November 29, 2018, from <http://www.africacdc.org/about/africa-cdc-antimicrobial-resistance-surveillance-network>

Africa CDC. (2017). *Africa Centres for Disease Control and Prevention Strategy at a Glance (2017-2021)*.

Buse K, Dickinson C, Gilson L, Murray SF. How can the analysis of process and power improve health outcomes? Moving the agenda forward, ODI Briefing Paper 26., 2007, London Overseas Development Institute

East African Community. About EAC. Retrieved December 6, 2018 from: <https://www.eac.int/about-eac>

East African Community. East Africa Public Health Laboratory Networking Project. Retrieved December 6, 2018 from: <https://www.eac.int/health/disease-prevention/east-africa-public-health-laboratory-networking-project>

East African Community. Health. Retrieved December 6, 2018 from: <https://www.eac.int/health>

East, Central, and Southern Africa Health Community. Projects. Retrieved December 6, 2018 from: <http://ecsahc.org/our-projects/>

East, Central, and Southern Africa Health Community. 67th Health Ministers Conference. Retrieved December 6, 2018 from: <http://ecsahc.org/hmc/>

FORUM OF INTERNATIONAL RESPIRATORY SOCIETIES, 2017. The Global Impact of Respiratory Disease. Second edn. Sheffield: European Respiratory Society.

Gilson L, Raphaely N. The terrain of health policy analysis in low and middle income countries: a review of published literature 1994-2007, Health Policy and Planning, 2008, vol. 23, Issue 5, 1 (pg. 294–307)

Gilson L, Buse K, Murray SF, Dickinson C. Future directions for health policy analysis: a tribute to the work of Professor Gill Walt, Health Policy and Planning, 2008, vol. 23, Issue 5 (pg. 291–293)

The International Union Against Tuberculosis and Lung Disease (The Union). The Union Africa Region Members. Retrieved December 6, 2018 from: <https://www.theunion.org/where-we-work/africa/members>

Organisation of African Unity (OAU). (2001). *Abuja Declaration on HIV/AIDS, Tuberculosis and Other Related Infectious Diseases* (AU Declaration). Retrieved from http://www.un.org/ga/aids/pdf/abuja_declaration.pdf

Oronje, R. Working with parliamentary committees on health to tackle health issues in Africa. African Institute of Development Policy Study Report. 2017. Available from: https://www.afidep.org/download/research-reports/25.06.2018-NEAPACOH-Study-Report_Web.pdf

Pan-African Thoracic Society. What we do. Retrieved December 6, 2018 from: <http://panafricanthoracic.org/about-us/what-we-do>

Reich M. Applied political analysis for health policy reform, *Current Issues in Public Health*, 1996, 2:186-191

SADC. (2009). *Minimum Standards for HIV and AIDS, TB, Hepatitis B and C, and Sexually Transmitted Infections Prevention, Treatment, Care and Support in Prisons in the SADC Region* (Rep.). Retrieved from https://www.sadc.int/files/4714/1171/9009/Minimum_Standards_for_HIV_and_AIDSTB_Hepatitis_B_and_C_and_SexuallyTransmitted_Infections_PreventionTreatment_Care_and_Support_in_Prisonsin_the_SADC_Region.pdf

SADC. (2010). *Harmonised Minimum Standards for the Prevention, Treatment and Management of Tuberculosis in the SADC Region* (Rep.). Retrieved from https://www.sadc.int/files/2014/1171/8198/Harmonised_Minimum_Standardsfor_the_Prevention_Treatment_andManagement_of_Tuberculosis_in_theSADC_Region.pdf

SADC. (2012). *Final Draft SADC Declaration on TB in the Mining Sector* (Rep.). Retrieved from <https://www.scribd.com/document/100523250/Final-Draft-SADC-Declaration-on-TB-in-the-Mining-Sector>.

SADC. (2013). *STATE OF TUBERCULOSIS IN THE SADC REGION* (Rep.). Retrieved from https://www.sadc.int/files/7814/1890/8349/000_14_SADC_Tuberculosis_Report_2012.pdf

The Southern Africa Tuberculosis and Health Systems Support Project. About SATBHSS. Retrieved from <http://www.satbhss.org/about-satbhss>

TDR. (2018). New central African network to boost TB research builds on west African experience. Retrieved December 6, 2018 from: <https://www.who.int/tdr/news/2018/new-central-african-tb-network/en/>

TDR. West African Regional Network for Tuberculosis Control. Retrieved December 6, 2018 from: https://www.who.int/tdr/research/tb_hiv/warn-tb/en/

United Nations Economic Commission for Africa. ECCAS – Economic Community of Central African States. Retrieved December 6, 2018 from: <https://www.uneca.org/oria/pages/eccas-economic-community-central-african-states>

USAID. (2016). REGIONAL ACTORS ADDRESSING TUBERCULOSIS IN AFRICA: Comparative Advantages, Challenges, and Opportunities

Walt G, Gilson L. Reforming the health sector in developing countries: the central role of policy analysis, *Health Policy and Planning*, 1994, vol. 9 (pg. 353-70)

West African Health Organisation (WAHO). About WAHO. Retrieved December 6, 2018 from: http://www.wahooas.org/spip.php?page=rubriqueS&id_rubrique=24&lang=en

West African Health Organisation (WAHO). (2016). Strategic Plan, 2016-2020. Retrieved December 6, 2018 from http://www.wahooas.org/IMG/pdf/VERSION_ANGLAISE_CORRIGEE.pdf

WHO AFRO. WHO African Region Country Offices. Retrieved December 6, 2018 from: <https://afro.who.int/countries>

WHO AFRO. About us. Retrieved December 10, 2018 from: <https://afro.who.int/about-us>

WHO AFRO. Organisational structure. Retrieved December 10, 2018 from: <https://afro.who.int/about-us/organizational-structure>

World Health Organisation. (2017). COPD Fact Sheet. Retrieved from: [http://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](http://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd))

World Health Organisation. (2015). The END TB Strategy. Geneva: World Health Organisation.

World Health Organisation. (2018). Global Tuberculosis Report. Geneva: World Health Organisation.