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Strategic Plan for Leadership and Management for the Africa Centres for Disease Control Institute for Workforce Development

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Abstract

Strategic Plan for Leadership and Management for the Africa Centres for Disease Control Institute for Workforce Development

By Bridget Miller

Background: The Africa Centres for Disease Control, created to support Africa Union (AU) Member States (MS), is mandated to protect the health of Africa. To address issues of the public health workforce, the Institute for Workforce Development (IWD) was created supported by Emory University, Rollins School of Public Health. One priority identified for workforce development was leadership and management competencies for all senior level leaders and managers in National Public Health Institutes (NPHI). Though there are many stakeholders working to increase leadership and management competencies in AU MS, there is no current strategy outlining future of leadership and management training.

Objectives: This project created a 5-year strategic plan for leadership and management competency training for the Africa CDC IWD. This plan provides mission, vision, and values statements, as well as strategic goals and objectives for leadership and management in Africa NPHI.

Methods: To assess the current situation of senior level leadership and management, all relevant literature and key informant interviews were reviewed. A SWOT analysis determined the strengths, weaknesses, opportunities, and threats to success to the leadership and management training, plus implementation and monitoring and evaluation plans were created for leadership and management competency training in AU MS.

Results: A 5-year strategic plan was created for leadership and management training. The overall goals and objectives were developed based on information gathered. An implementation plan was created with specific activities for stakeholders and a monitoring and evaluation plan was detailed for yearly reporting. The SWOT analysis was reviewed and incorporated into the plan to ensure success.

Discussion: This strategic plan outlines the current state of leadership and management in AU MS, as well as the goal of what it should be in the next five years. This plan provides the opportunity for stakeholder collaboration toward the common goal of strengthening leadership and management competencies in Africa. However, there remain challenges with adequately measuring and evaluating leadership and management competencies. This plan will increase the ability of public health leaders in AU MS to inspire and motivate teams of public health workers while also effectively managing partnerships and resources.

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Chapter 1. Introduction

Leadership and management competency are crucial to improve health systems and the overall well-being of nations. Even if a country has a well-designed health system, there is a need for leadership and management to ensure public health goals are met. Dr. William Foege, former director of the U.S. Centers for Disease Control (CDC), stated that "lack of management skills appears to be the single most important barrier to improving health throughout the world."

[1] This is especially true in low- to middle- income countries, including among many of the African Union (AU) Member States (MS). [2]

The Africa Centers for Disease Control and Prevention (ACDC) – established Jan 2017 – supports AU MS to create a healthier Africa through disease prevention, detection, and response. Workforce development is one goal of the ACDC; the strategic objective is to "support Member States in capacity building in public health through, medium- and long-term field epidemiologic and laboratory training programmes". [3] To achieve this goal, representatives from AU MS convened a Task Force for Workforce Development in 2018 that outlined specific actions to further improve the quality of existing programs, increase the number of programs, and strengthen career opportunities relating to public health workforce. [4]

To further address development of a strong workforce in MS, ACDC, along with Rollins School of Public Health (RSPH) at Emory University, has established the ACDC Institute for Workforce Development (IWD). The IWD intends to implement a training platform for MS through national public health institutes (NPHIs). NPHIs are the natural home for public health leadership, as they are the focal point for public health within each country. They are also interconnected and linked to the ACDC, as the International Association of National Public Health Institutes (IANPHI) has been working to build the capacity of NPHIs since 2006. [5]

Leadership and management training is one priority of the IWD, focusing on building competencies, skills, and behaviors associated with strong leadership. [4] An initial leadership and management training course was conducted using Canvas as the learning management system in 2019, targeting senior level leaders and managers of NPHIs in AU MS. [BM1]

Leadership and management skills are essential to develop a strong health system. [6] Though there have been ongoing initiatives to develop public health leadership and management competency in Africa, a gap remains in strengthening skills on all levels - including executive, mid, and peripheral levels. And there is a need to develop a 5-year strategic plan outlining leadership and management practices recommended by the ACDC IWD, addressing all levels of leadership across AU MS. Strategic plans are essential to assess the current situation of an organization and provide direction for future activities.

This project created a 5-year strategic plan for leadership and management for the ACDC, addressing all levels of leadership across AU MS. This strategy will address challenges and consider what knowledge and skills are needed to reach the goal of strong public health leaders. Overall, the strategic plan will outline what the system should look like in three to five years, and what steps must be taken to achieve this goal. This strategic plan aims to establish a common goal and objectives for the ACDC regarding leadership and management, set priorities, focus on resources, and ultimately assess and adjust the direction of leadership and management training within the IWD.

When encouraging health systems that are responsive to population needs, it is clear strong leadership and management skills are needed for efficient health systems that are responsive to needs of a population. [7] Former CDC director Dr. Thomas Frieden stressed "for many public health programs, implementation is essentially a management problem. Even if

political commitment, resources, and a technical package are in place, effective management may not be." [1]. Effective leadership and management is very relevant to low- and middle-income countries, which are often characterized by resource scarcity and high burdens of disease. [8] Leadership and management on a national level can improve health systems through setting strategic direction, setting policy, and allocating resources. [8] As Africa faces numerous health problems and must strengthen fragile health systems, leadership and management skills are invaluable in reaching this goal. [9] As the specialized technical institution for the AU to prevent diseases in MS, the ACDC has the unique position to provide leadership and management training to Africa MS. [10] Creation of a strategic plan is essential to provide the direction and goals of this training within the ACDC IWD. The strategic plan will seek to answer the research question, "What must ACDC's IWD do to ensure effective leadership and management training in AU MS NPHIs?"

Terms

AHLMN - The African Health Leadership and Management Network

AU – African Union

ACDC – Africa Centers for Disease Control and Prevention

CDC – Centers for Disease Control and Prevention

IANPHI – International Association of National Public Health Institutes

IMPACT - Improving Public Health Management for Action

IWD – Institute for Workforce Development

L & M – Leadership and Management

LMG – Leadership, Management, and Governance

MoH – Ministry of Health

NPHI – National Public Health Institute

RCC – Regional Collaboration Centre

RSPH – Rollins School of Public Health

USAID - United States Agency for International Development

Chapter 2. Literature Review

Understanding Leadership and Management

Leadership and management are distinct but overlap in practice. Though neither has one solid definition, leadership focuses on developing and inspiring others while management is a set of task-oriented processes. [8] Strong leaders are those who have the ability to inspire others, have a compelling vision, and are able to gain the trust of those they lead. [11] Managers, on the other hand, possess skills in planning, budgeting, organizing, staffing, controlling and problem solving. [12, 13] There has been a call in recent years for senior level staff to possess both sets of these skills, as they are important parts of the same job. [14] A holistic approach of "managers who lead" allows for more successful health care programs, organizations, and facilities by resulting in higher-quality services and sustainable health outcomes. [15]

Worldwide, managers have spoken out on their own lack of leadership and management skills upon appointment to leadership positions. [16] In public health, it is common for those with clinical degrees to be appointed to leadership and management positions with no prior training. Often, staff don't get introduced to the idea of leadership and management until they are relatively senior, resulting in a gap in planning and consistent vision within an organization.

Though many receive on-the-job training, this training is often too late and not as comprehensive as is needed. [17] A case study in three African countries from the World Health Organization (WHO) found that the bulk of managers in public health were service providers, specifically doctors, who had previously received no training for leadership and management skills. [18]

Leadership and Management in the Africa CDC

Africa CDC's mission is "strengthen the capacity, capability and partnerships of Africa's public health institutions to detect and respond quickly and effectively to disease threats and outbreaks based on science, policy and data-driven interventions and programmes." [19] The Africa CDC works with the 55 Member States (MS) of the Africa Union (AU), with 46 belonging to sub-Saharan Africa [20]. African countries have unique historical, political, and sociocultural context which influence their needs in leaders and managers. [21, 22] One research study suggests that five key themes among Africa leaders include "having an aspirational, value-based vision for improving the future health of the country, being self-aware and having the ability to identify and use complementary skills of others, investing in and managing relationships, using data in decision making, and sustaining a commitment to learning". [23]

ACDC's strategy for workforce development aligns with those of the AU to develop public health capacity of member states, ensure appropriate institutions and infrastructure exist, and reach Sustainable Development Goals through identification of human resources. [4] In the ACDC's Framework for Workforce Development, leadership and management are specified as an important area to focus on through trainings. [4] National Public Health Institutes (NPHIs) can serve as a mechanism for the strengthening of workforce development, as one core function of NPHIs is human resource development and training. [24] This is only one of the reasons the ACDC supports the development of NPHIs in each MS. [19] To achieve their objectives and strategic pillars, ACDC works directly with not only NPHIs but also Regional Collaboration Centres (RCCs), which serve as regional hubs for activities and coordination among MS. Currently, there are five RCCs: Northern Africa, Central Africa, Eastern Africa, Western Africa, and Southern Africa. [25] These centers play a crucial role of coordination among MS and

support among NPHIs and are a valuable resource for activities such as leadership and management training.

The ACDC IWD, in partnership with RSPH, has designed training courses in priority areas targeted at senior level public health professionals at NPHIs. One course offered in 2019 through the IWD was a 4-week Leadership and Management course, led completely online through Canvas. This course "combined theory with practice through lectures, additional reading of relevant literature, written assignments, group exercises and case studies as well as experience-sharing by individuals who are successfully leading or have led public health agencies in developing countries". [26] E-learning courses, accessed online through a user-friendly platform, have great potential to "improve health professionals' knowledge, skills, attitudes, behaviors and satisfaction". [27] The use of e-Learning can greatly benefit essential leadership and management trainings. E-learning provides the opportunity for trainings to be timely to relevant situations, more accessible for all members to collaborate together without traveling, and tailored to diverse settings. [28]

Development Approaches

As leadership and management are such broad fields, there are different approaches to develop these skills. Specifically focusing on low- and middle- income countries, development can take the form of formal training, on the job training, and action learning. [8] Formal training is the most common approach in low- and middle- income countries currently. Leadership and management skills cab be taught in a classroom setting as part of a post-graduate degree, certificate program, or short-course training. [29] On the job training is offered through the organization, and can vary from a more formal effort to more "accidental" training in the workplace. [12] Action learning, or action research, includes learning by doing and capacity

building. [30, 31] This approach to development usually uses on the job work experiences to facilitate more formal training, encouraging integration of current work and projects into the learning. [32] One study calls out the fact that increasing public health capacity requires much more than supporting individuals to obtain PhDs. Training leaders also requires sustained engagement and on-the-job training for these individuals to succeed. [33]

These approaches to development present several shortcomings in the current development approaches to leadership and management. They tend to focus more on the hard management skills and less on the soft leadership skills. [8] There is more of an emphasis on the cognitive intelligence aspects, such as technical and operational skills, than there is on social intelligence aspects. Social intelligence skills are essential for effective leadership, including the ability to inspire and motivate others, to mentor, and to lead organizational change. [34, 35]

Existing L&M Plans and Programs

Many different approaches to strengthening leadership and management on the African continent currently exist and have shown success. The African Health Leadership and Management Network (AHLMN) was created to strengthen health leadership and management of institutions in Africa. This network serves as a community of practice and a forum for collective advocacy for health related resources. [36] Numerous programs are also already working to improve leadership and management skills in AU MS. Improving Public Health Management for Action (IMPACT), a program through the U.S. CDC, aims to "build a cadre of highly-trained public health managers throughout the world". [37] IMPACT is a 2-year on-the-job training program, where fellows gain experiential learning while continuing their positions within a country's Ministry of Health (MOH). Fellows also receive a mentor during their training

to guide their development. [38] Networks like this are essential to collaboration among AU MS when facing similar challenges in leadership and management practice.

Several plans exist addressing leadership and management development in Africa. The Global Health Workforce Alliance, hosted by the WHO, includes leadership in their strategic plan. They focus on offering timely support to health leaders to ensure they are able to overcome any challenges they face. [39] USAID's concept model on improving leadership, management, and governance to strengthen health systems, highlighting the USAID-funded Leadership, Management, and Governance (LMG) Project. Their LMG approach focuses on the people rather than only the systems, training individuals and teams within organizations, networks, and institutions. In Health Systems Global's strategic plan, the need for strong leadership and management is emphasized as a priority. To achieve leaders with strong skills, there is a call for more health policy and systems research. [40] All plans are similar in emphasizing the need for leadership and management to achieve better health outcomes in countries.

L&M Competencies

Numerous competencies exist for effective leadership and management. These competencies are useful in assessing knowledge and skills, identifying training needs, developing workforce development and training plans, crafting job descriptions, and conducting performance evaluations. [41] Senior-level staff in particular must have competencies enabling them to oversee major programs and operations, setting a vision, and creating a culture of quality within their organization to improve health. [41] Three main competencies required for leaders and managers include cognitive, social, and emotional intelligence. Cognitive intelligence includes business skills and systems thinking while social intelligence includes more social awareness and relationship building. [8] Emotional intelligence is perhaps the most important competency for

leaders and managers to possess. Emotional intelligence refers to "a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions". [42] Four main components of emotional intelligence include self-awareness, self-confidence, self-management, and self-motivation. [8] An individual must reflect on one's own leadership skills and personal leadership style in order to improve upon their own emotional intelligence. This can be supplemented through exercises such as goal setting and continuous learning. [42]

The IMPACT program outlined competency domains to ensure effective leadership and management. These competencies were program planning and management, communications and use of communications tools, community partnership development and community assessment, analysis and assessment, organizational leadership and systems awareness, basic public health sciences and practice, budget and financial planning skills, and emergency planning, preparedness, and response skills. [38]

In the online e-Learning class, ACDC's IWD outlined learning objectives for leaders and managers. These included: apply skills and behaviors associated with effective leadership and management; evaluate the leadership and management role within the organization; design and manage systems that are responsive to organizational requirements and ethical accountability; develop strategies to delegate tasks and supervise team members effectively and efficiently; develop strategy for creating and managing change in the organization; explain the importance and methods of using data for decision-making; describe the stages of project management; explain the importance and methods of using data for decision-making; align and motivate individuals, systems, and resources toward a common purpose and outcomes; use human and financial management principles and instruments to solve operational challenges and improve

performance and identify monitoring and evaluation methods to acquire information for regular monitor key performance indicators. [26]

Summary

Strong public health leaders and managers are essential to achieve a strong health system in every country. To give these leaders the skills they need to succeed in Africa, the specific need and situation on the continent must first be addressed. Utilizing the ACDC and the network of NPHIs on the African continent will allow countries to collaborate and share resources, while providing training targeted at individuals and teams who will benefit the most. E-Learning provides a promising platform in reaching leaders in a timely, relevant, and collaborative fashion. Different development approaches must be assessed to determine the most effective method to leadership and management development, and current programs and plans in existence must be reviewed to create a unified strategy. In addition, core competencies of leaders and managers must be emphasized to focus the trainings on what skills and competencies are needed most for them to improve upon their own personal skills and experiences.

Chapter 3. Methods

A strategic plan was developed for the ACDC IWD training for leadership and management, targeted at NPHI senior-level management. Strategic planning is an important process for any organization, as it is a tool that provides direction for the future. For the ACDC, these plans are valuable to ensure all stakeholders are aware of the direction future programs will take, as well as the ACDC's mission, vision, and values for these programs. Steps taken to create a strategic plan include identifying a strategic position, gathering information, performing a SWOT analysis, and formulation of the plan including all monitoring and evaluation information.

As this strategic plan falls under the ACDC IWD, it is critical that the plan aligns with missions and values already stated and published by the ACDC. To understand the position of the ACDC, all documents published in relation to this topic were reviewed. The ACDC's 5-year strategic plan, as well as the ACDC Framework for Workforce Development, were carefully studied to identify the overall vision of the institution, as well as their stance and framework for workforce development, which includes trainings for leaders and managers. This strategic plan was created with acknowledgement of the overall mission of the ACDC and IWD.

A literature review was conducted to gain a better understanding of leadership and management, as well as what approaches currently exist. There was a specific focus on AU MS. PubMed's advanced search feature was used with all relevant terms relating to leadership and management. Relevant literature included an overview of leadership and management, it's specific context under the ACDC, existing development approaches, existing leadership and management programs in AU MS, and core competencies that leaders and managers should

possess. Information from the literature review contributed to conceptual development of the strategic plan.

Following the literature review, existing information compiled for the IWD's leadership and management training was reviewed for common themes. This included previous course content for the first leadership and management training on canvas, and a needs assessment previously conducted through key informant interviews. All information was compiled into relevant themes to be addressed by the strategic plan.

Next, a SWOT analysis was conducted to assess the strengths, weaknesses, opportunities, and threats to leadership and management training led by the ACDC IWD. This analysis was conducted through utilization of previous research stated. After creating the four lists, priorities were identified relating to strengths, weaknesses, opportunities, and threats. Information gathered from this analysis was used in formulation of the strategic plan.

Mission, vision, and values statements were identified for the strategic plan. These statements outline what the plan hopes to accomplish. A strategic objective with strategic goas identified through research and the SWOT analysis were developed. These strategic objectives served as the objectives for monitoring and evaluation. More detailed outputs and outcomes were identified for each of the strategic objectives, as well as yearly targets and end-of-project targets. The monitoring and evaluation roles and responsibilities were further outlined according to stakeholder, to ensure feasibility of recording progress. A communication plan was developed to ensure information is appropriately shared to all stakeholders. Risks were further assessed through creation of a fishbone diagram, identifying main themes contributing to leadership and management and specific topics falling under those themes. An implementation plan with expected achievements and activities was developed and outlined in the strategic plan.

This strategic plan is intended to serve as a tool for management activity, set priorities, focus energy and resources, and strengthen operation in general. It will allow stakeholders to focus on a common goal relating to developing leadership and management competencies in AU MS. It aims to show a vision of where the ACDC IWD is heading in the next five years, relating to leadership and management development. The author was not required to submit an application for IRB approval, as this special study project did not involve human subjects research.

Chapter 4. Africa CDC Strategy for Leadership and Management in Public Health, 2021-2025

Vision: Sustainable and successful public health systems in Africa, made possible through well led and managed AU MS

Mission: Strengthen leadership and management skills of staff working in Africa NPHIs, to ensure effective public health capacity

Values Statement: This strategic plan values leaders and managers personal growth through taking the steps necessary to identify their own needs and wants. ACDC IWD greatly values the expertise senior level leadership has to offer and wishes to enhance their ability to lead and inspire others while effectively and efficiently managing teams in their NPHI.

Goals and Objectives

Strategic Goal: Create an effective, accessible, and sustainable leadership and management training for senior level NPHI directors in AU MS.

Strategic Objectives:

- Possess attributes of a world class training and development system to support learning for leaders and managers in public health roles in Africa
- Ensure the organizational culture values and supports full competency development and lifelong learning for staff
- Strengthen executive leadership and participation in the training courses through the Africa CDC
- Provide training and development resources that are specifically matched to needs and objectives of NPHIs

- 5. Ensure all staff are competent and include a balanced mix of public health expertise
- 6. Use advanced technologies such as online e-Learning, both synchronous and asynchronous
- 7. Ensure strong administrative coordination of all training and development efforts
- 8. Leverage internal resources through appropriate use of outside resources
- 9. Support leaders and managers through self-paced training systems by instructional mode, utilizing video and multimedia sources

Funding, Staffing, and Timeline

To ensure sustainability and continued public health leadership and management development in AU MS, dedicated funding to the IWD must continue. Currently, funding exists in grants made possible through the partnership of the ACDC IWD and Rollins School of Public Health, Emory University. Other proposed sources of funding will align with that of the ACDC, which include budget of the AU, voluntary contributions of MS themselves, support from the Africa Private Sector, contributions from development partners, and additional foundations around the world [19]. Staff targeted through training include senior level managers and leaders at NPHIs in AU MS. The training materials will be developed by current faculty and research assistants at RSPH. For specific leadership and management related areas, experts will be called upon to record lectures summarizing important material. These experts can include RSPH staff, U.S. CDC personnel, ACDC personnel, and NPHI leaders who have shown success. This strategy will follow a timeline of five years, Jan 2021 – Dec 2025. Mid- and end-of-strategy evaluations will be completed to ensure strategic objectives are effectively being met.

Monitoring and Evaluation

There is a strong need for monitoring and evaluation (M&E) of the leadership and management trainings to better understand the effect of the training. A base line will first be collected for all indicators, and then progress will be tracked continuously with annual reporting. Mid-term evaluations will take place in June, 2023 while end-of-strategy evaluations will occur in December, 2025. Monitoring tools will be developed by Africa CDC IWD in partnership with MS to effectively track implementation progress. To ensure that the leadership and management training if relevant, efficient, effective, and sustainable, the evaluation process will be iterative. Changes to the plan may be made throughout the 5-year period. Following completion of the strategic plan, analysis of data will ensure formulation of a new plan to ensure future progress. Monitoring cycles specific to individual stakeholders (Table 1) plus indicators and targets for M&E (Appendix 2) are critical.

Table 1. Roles and Responsibilities of Stakeholders in Monitoring and Evaluation, Africa CDC Institute for Workforce Development

Stakeholder	Roles and Responsibilities	Monitoring Cycle
Africa CDC IWD	 Development of online leadership and management trainings on Canvas 	Annual
	 Lead updates to monitoring and evaluation systems 	Continuous
	 Reviews and tracks strategic plan progress in RCCs and NPHIs 	Continuous
	 Complete mid-term and end-of-strategy evaluations 	June, 2023 December, 2025
RCC	 Provide opportunities for collaboration, communication, and technical support among regional NPHIs 	Continuous
	 Evaluate progress in regional NPHIs 	Semi-annually
	 Assist regional NPHIs in planning, implementation, and evaluation overall 	Continuous
NPHIs	 Complete trainings made available by the ACDC IWD and track progress overall 	Continuous

Communication Plan

- ACDC Institute for Workforce Development has a main web page found under the Africa
 CDC website. The specific webpage can be accessed through https://africacdc.org/africa-cdc-institute-for-workforce-development/.
- All leadership and management training will take place through Canvas, a web-based learning management system. The Canvas webpage for Africa CDC IWD will serve as the platform for communication surround the trainings as well as host the virtual training lectures and resources. Members must accept invitations to the Canvas page and register with an email address.
- A collaborative environment including sharing successes and failures is essential to the success of all MS. Leadership of NPHIs are encouraged to collaborate and communicate their successes and challenges through the Canvas site discussion section.
- Collaboration through RCCs will be a key element to the success of leadership and management trainings. RCCs will be responsible for communication through the region, encouraging collaboration through regional meetings and trainings.
- Interviews with senior NPHI leadership has been completed and will be used to improve
 courses based on need identified. Subsequent interviews will take place to further identify
 the effectiveness of the training.

Implementation Plan

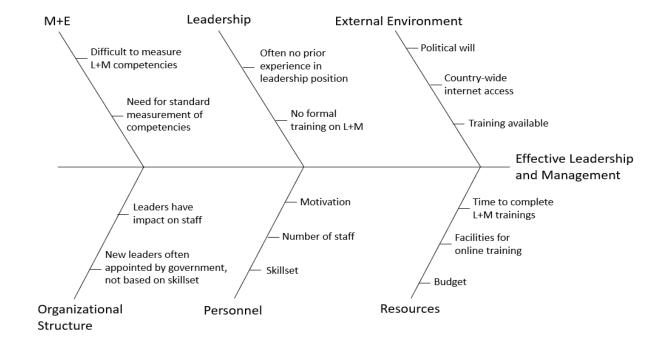
This plan will include specific activities to address issues that affect successful leadership and management in country. A SWOT analysis (Appendix 1) identifies the current strengths, weaknesses, opportunities, and threats to successful leadership and management Implementation

of this strategic plan will be led by the ACDC IWD in partnership with Rollins School of Public Health. RCCs will play a role in organization and monitoring. NPHIs will be responsible for ensuring the participation and training of senior level staff members. Roles of strategic partners (Table 1) and mre specific activities relating to the strategic objectives (Appendix 3) are outlined.

Risk Assessment

A root-cause analysis (Figure 1) was conducted by using a fishbone tool. This analysis, which took into account interviews conducted with NPHI senior level leaders and managers, determined the many factors which contribute to effective leadership and management in AU MS NPHIs. M&E factors include the difficulty to measure leadership and management competencies, as well as a need for standard measurement tools. Leadership factors include there often being no prior experience in leadership positions for current leaders, as well as no formal training on leadership and management competencies for these senior level officials. External environmental factors such as political will for NPHIs, country-wide internet access, and existing trainings available also contribute to effective leadership and management. Organizational structure includes the impact leaders have on staff within the organization and the appointment of leaders and managers by government. Factors affecting personnel include motivation to follow their leaders, skillset of workers to accomplish tasks and support managers, and the number of staff available. Resources include time and facilities available to complete leadership and management trainings, as well as the budget to carry out internal trainings and projects.

Figure 1. Fishbone Analysis of Factors Contributing to Leadership and Management Competencies, Africa CDC Institute for Workforce Development



SWOT Results

A SWOT analysis (Appendix 1) outlines the strengths, weaknesses, opportunities, and threats to leadership and management training implemented by the ACDC IWD. These four aspects are critical to reduce the chance of failure in this project through understanding what is lacking and what hazards might arise when implementing the training.

There are many strengths identified to enable successful implementation of this plan.

There already exists a strong network of NPHIs, IANPHI, which can be leveraged to encourage collaboration and completion of trainings. In addition, ACDC's mandate includes ensuring the health of African populations, which will generate political will to complete essential trainings, such as this. Many stakeholders are currently working in this area in Africa, providing expertise and financial support. The countries targeted already have diverse and technically strong leaders, whose skills and expertise can be utilized through regional and AU collaboration. RCCs exist to facilitate these collaborations. Lastly, the ACDC is established and in a mentorship position to NPHIs, as it has a good reputation and trust throughout Africa.

Weaknesses must be considered to understand issues that may affect the success of this training. Currently, many leaders have not received formal leadership and management training. These leaders are also divers and at different stages in their competencies, meaning trainings must be tailored to leaders and managers with different levels of leadership and management training. Access to internet is another identified weakness, as trainings are online. Leaders must utilize internet connection as well as electricity that is adequate for them to complete trainings. Staff support to leaders may not allow for them to gain leadership and management competencies, as staff may lack in numbers or lack technical skills and motivation to support leaders in projects. Though RCCs exist, they are not fully established and many lack clear

objectives. Language barriers may also be an issue, as trainings must be completed in all languages in Africa. This includes English, French, Arabic, and Portuguese.

Opportunities exist for the ACDC IWD to utilize for success of training. NPHIs currently exist and have been identified as a best practice, allowing for a growing interest in leadership and management trainings for lead public health officials. Existing networks and key partners provide a strong opportunity for collaboration on projects, and overall support of this strategic plan. The ACDC Framework for Workforce Development is published, which serves as a strong resource in development of this strategic plan.

Threats to success of this project must be considered and mitigated wherever possible. With NPHIs, leaders and managers are often appointed through government. Political will must exist to support the value that leadership and management competencies bring in public health settings. In addition, long-term funding is an issue with trainings such as these, as the strategy should be sustainable and fully funded by AU MS in the future. Leadership and management training is also time consuming. There must be great personal interest from senior level leaders and managers to take the time necessary to invest in these trainings and evaluate their own competencies.

Chapter 5. Discussion, Recommendations, and Conclusion

The objective of this special study project was to draft a strategic plan for leadership and management training under the ACDC IWD. First, a literature review was completed to better understand all literature relating to leadership and management training in Africa. Next, interviews from key informants were reviewed to help develop goals and activities. A SWOT analysis was then conducted to understand what could potentially impact success of the project. The strategic plan was developed to provide recommendations based on these analyses.

The research question sought to answer "What must ACDC's IWD do to ensure effective leadership and management training in AU MS NPHIs?" Creation of this plan, with all steps listed above, provided an answer to that question. The ACDC IWD should follow recommendations outlined in this plan, including activities and monitoring and evaluation measures.

Recommendations and Next Steps

This strategic plan outlines the current state of leadership and management competency training under the ACDC IWD, as well as a recommendation for the direction this training should take in the future. This plan aligns with the goals and mandate of the ACDC IWD, and is targeted at advancing leadership and management in AU MS. The recommendations in this plan allow the ACDC IWD to continue working toward their overall goals outlined in their Framework for Workforce Development. It is important to consider whether the findings in this project can be applied to other online trainings led by the ACDC IWD. The strengths, weaknesses, opportunities, and threats are specific to senior level leadership and management in AU MS.

We recommend that the ACDC IWD and AU work together to implement this strategic plan, for the years 2021 – 2025. RCCs should be utilized to ensure regional collaboration and compliance with leadership and management competency training. The M&E plan enables an iterative process of ensuring trainings are culturally relevant and meeting the needs of MS NPHIs. Following the 5-year period of this plan, the leadership and management situation in Africa can be re-assessed for development of another strategic plan for these competencies.

Limitations

One main limitation of this project is the current lack of M&E tools for leadership and management in public health, specifically in African countries. Without this, it is difficult to determine what the best practices are for training on these competencies. Soft skills, such as these, are often overlooked for more hard, technical skills. Demonstrating and advocating for training in leadership and management is difficult when there is no hard evidence supporting the direct impact that these competences can have on public health. Though these skills are more challenging to monitor, monitoring and evaluation must be emphasized to better understand the overall impact they can have.

In addition, this plan was developed without direct input from AU MS themselves.

Though relevant literature and key informant interviews were completed, development of this plan could have benefited greatly from senior level leaders and managers across Africa providing their input. This could be achieved through a focus group of technical working group of NPHI directors discussing and developing the plan themselves. Though the author is knowledgeable on the topic and much research was completed, firsthand experiences from those in leadership roles is much more valuable in development of resources. This, however, is not always feasible as

senior level leaders and managers in AU MS are very busy with other projects and managing public health teams of their own.

Public Health Implications

Overall, this strategic plan is successful in outlining the direction leadership and management should take in the next five years in AU MS. Senior-level leadership and management, such and NPHI management, has a huge impact on public health on a national scale. Leaders and managers, when possessing critical competencies addressed in the trainings, are able to inspire and lead the public health workforce they manage. They are also able to create and sustain essential partnership for projects while managing resources available to them. The training outlined in this strategic plan has the opportunity to reach every corner of Africa, by encouraging countries to invest in their own future by developing strong leaders with strong competencies. This project will ultimately lead to AU MS countries with strong leaders, who are capable of leading teams to protect and respond to public health issues their countries may face.

Appendix 1. SWOT Analysis for Leadership and Management Training, Africa CDC Institute for Workforce Development

Strengths

- Strong network of NPHI directors already identified and connected through IANPHI
- Mandate of Africa CDC and Africa Union to ensure the health of African population
- Involvement of multiple stakeholders in the field of leadership and management across African Region, including technical and financial support
- Diverse and technically strong leaders and managers in place
- RCCs enable regional collaboration among MS
- ACDC support from the AU enables a trust and mentorship position taken by the ACDC

Opportunities

- There is growing interest in leadership and management trainings in AU MS, fueled by the existence of NPHIs
- Existing, successful networks can be leveraged to complete leadership and management trainings
- Willingness of key partners to support leadership and management training is growing
- The ACDC Framework for Workforce Development exists and outlines many ways to move forward

Weaknesses

- Many leaders have not received formal leadership and management training
- Access to internet may not be consistent among MS, as well as steady electricity for WIFI use to take courses
- Staff support to support leaders and managers not always strong, including number of staff, technical skills, and motivation
- RCCs not fully established in areas and do not yet have clear objectives
- Language barriers may be an issue in non-English speaking countries

Threats

- Political will to support leaders and managers, as well as appoint senior level officials who have leadership and management skills, may not always exist
- Lack of long-term funding strategy for sustainability
- Leadership and management training is timeconsuming and requires personal interest to succeed

Appendix 2a. Indicators and Targets for Monitoring and Evaluation for Leadership and Management Training, Africa CDC Institute for Workforce Development

Results	Description	tainable leadership and management trainin Indicators	Baseline	Targets					
resures	Description	maioutoris	Value	2021	2022	2023	2024	2025	Total
Objective 1	. Training possesses attributes of	a world class training and development syste	em to support	learning	for lead	ers and	manager	s in publ	lic health
roles in Afr				-	,				
Outcome	Training courses with world class attributes	Number of training courses possessing world class attributes		1	1	1	1	1	5
Outputs	1.1. World class attributes identified for training	Number of attributes identified		5	2	1	1	1	10
	1.2. World class attributes incorporated into trainings	Number of attributes incorporated into trainings		5	2	1	1	1	10
Objective 2	. Ensure the organizational cultu	re values and supports full competency deve	lopment and li	ifelong l	earning i	for staff			
Outcome	All cultural values identified in MS	Number of MS assessed for cultural values		55					55
Outputs	Cultural values met	Number of MS reporting cultural values are met				20	40	55	55
		and participation in the training courses th	rough the Afri	ica CDC	·				
Outcome	Yearly courses available for leadership and management	Number of courses made live on leadership and management competencies		1	1	1	1	1	5
Outputs	Leaders participating	Number of MS with leaders participating in training		20	30	40	50	55	55
Objective 4	. Provide training and developme	ent resources that are specifically matched to	needs and ob	jectives	of NPHI	[s			
Outcome	Relevant resources developed for NPHIs	Number of resources tailored to needs and objectives of NPHIs		2	2	2	2	2	10
Outputs	NPHIs assessed for needs and objectives	·		55					55
Objective 5	. Ensure all staff are competent a	nd include a balanced mix of public health e	xpertise						
Outcome	All staff in NPHIs are competent and balanced	Number of MS reporting competent staff		20	30	40	50	55	55
	5.1. Leaders and managers are competent	Number of leaders and managers showing competency in the subject area		20	30	40	50	55	55
Outputs	5.2. Supporting staff are competent	Number of leaders reporting supporting staff are competent		20	30	40	50	55	55
-	5.3. NPHIs have a balanced mix of public health expertise	Number of NPHIs having a balanced mix of public health expertise		20	30	40	50	55	55

Appendix 2b. Indicators and Targets for Monitoring and Evaluation for Leadership and Management Training, Africa CDC Institute for Workforce Development (continued)

Results	Description	Indicators	Baseline		NPHI directors in AU Member States Targets				
	•		Value	2021	2022	2023	2024	2025	Total
Objective 6. Use advanced technologies for learning, such as distance based learning and asynchronous learning									
Outcome	Advanced learning technology	Advanced learning technology identified		5	2	2	1	1	15
	used	and incorporated							
Outputs	6.1. Distance-based learning used	Number of courses using distance-based learning		1	1	1	1	1	5
o arpars	6.2. Asynchronous learning	Number of courses using asynchronous		1	1	1	1	1	5
	used	learning							
Objective 7	. Ensure strong administrative co	oordination of all training and development	efforts						
Outcome	Strong administrative	Number of coordination systems identified		1					1
	coordination exists	for training and development							
Outputs	Training efforts have strong	Number of training efforts with strong		1	1	1	1	1	5
	administrative coordination	coordination							
Objective 8	. Leverage internal resources thr	ough appropriate use of outside resources							
Outcome	Resources leveraged	Number of resources leveraged for training		5	2	2	1	1	15
Outputs	8.1. Internal resources	Number of internal resources leveraged for training		3	1	1	1	1	7
	8.2. External resources	Number of external resources leveraged for training		2	1	1			4
Objective 9. Support leaders and managers through self-paced training systems by instructional mode, utilizing video and multimedia sources									
Outcome	Self-paced training systems created	Number of training systems created		1	1	1	1	1	5
Outputs	Leaders and managers supported	Number of leaders and managers supported through self-paced training		20	30	40	50	55	55

Appendix 3. Achievements and Activities for Leadership and Management Training, Africa CDC Institute for Workforce Development

Go	Goal: Create an effective, accessible, and sustainable leadership and management training for senior level NPHI directors in AU Member States							
	Objective	Expected Achievements	Activities					
1.	Training possesses attributes of a world class training and development system to support learning for leaders and managers in public health roles in Africa	All attributes of effective training programs are identified and applied by December, 2025	 Assess world class training programs to identify attributes Implement attributes into all training courses On a yearly basis, re-evaluate attributes and assess if new systems exist 					
2.	Ensure the organizational culture values and supports full competency development and lifelong learning for staff	All yearly trainings incorporate cultural values specific to the AU MS supported	 Assess all MS NPHIs for cultural values relevant to L&M Incorporate values into trainings on a yearly basis Assess feedback on cultural relevance of trainings 					
3.	Strengthen executive leadership and participation in the training courses through the Africa CDC	Africa CDC releases yearly courses targeted at training leaders and managers in AU MS	 Create yearly courses relevant to L&M competencies in MS Encourage senior level NPHI leader and manager participation through available networks and RCCs 					
4.	Provide training and development resources that are specifically matched to needs and objectives of NPHIs	Tailor 100% of training and development resources to the needs of NPHIs	 Assess all needs of NPHIs and RCCs for needs and objectives, compile and analyze all needs Incorporate these needs into training courses Create relevant resources to be used by MS NHPIs 					
5.	Ensure all staff are competent and include a balanced mix of public health expertise	All MS possess competent staff with a diverse ix of public health expertise	 Assess leaders and managers for their competency levels and needs, as well as resources needed for supporting staff Tailor trainings and resources available to support the identified needs for competency and diverse public health expertise 					
6.	Use advanced technologies for learning, such as distance based learning and asynchronous learning	All yearly trainings utilize most advanced technologies for learning	 Yearly assessment of advanced technologies relevant to leadership and management training under the ACDC Incorporate these technologies in a user-friendly way into all training courses 					
7.	Ensure strong administrative coordination of all training and development efforts	Strong administrative coordination exists for 100% of trainings and development efforts	 Ensure administrators are invested and coordinated when creating and deploying trainings to AU MS Assess administration yearly to make any changes needed for success 					
8.	Leverage internal resources through appropriate use of outside resources	All internal resources are leveraged to ensure success of training courses	 Assess all internal and external resources on a yearly basis to ensure all needs are met Utilize these resources in the most effective way possible 					
9.	Support leaders and managers through self-paced training systems by instructional mode, utilizing video and multimedia sources	100% of leaders and managers in AU MS are supported through online trainings	 Ensure all yearly trainings are self-paced and easy to use for leaders and managers to benefit from Encourage all AU MS NPHI senior level leaders and managers participate in trainings by using existing networks and RCCs 					

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