



Zambia Management and Leadership Academy

Final Evaluation Report

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This document reports the research team's findings and does not necessarily represent the views of BRITE, Abt Associates, the ZISSP project, the Merck Foundation, or the US Agency for International Development

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Acronyms

APAS	Annual Performance Appraisal System
ART	Anti-Retroviral Therapy
BRITE	BroadReach Institute for Training and Education
CDF	Constituency Development Fund
DHIS	District Health Information System
DHMT	District Health Management Team
DSA	Daily Subsistence Allowance
EMO(N)C	Emergency Obstetric (and Neonatal) Care
GRZ	Government of the Republic of Zambia
HMIS	Health Management Information System
HR	Human Resources
ICT	Information and Communication Technology
IDI	In-depth Interview
M&E	Monitoring and Evaluation
M&L	Management and Leadership
MCDMCH	Ministry of Community Development, Maternal, and Child Health
MNCH	Maternal, Neonatal, and Child Health
MOH	Ministry of Health
MP	Member of Parliament
MS	Management Specialist
MSH	Management Science for Health
NGOs	Non-Governmental Organisations
NIPA	National Institute for Public Administration
PA	Performance Assessment
PADESA	Pan African Development Education for Southern Africa
REACT	The Response to Accountable Priority Setting for Trust in Health Systems Project
RBF	Result Based Financing
RHC	Rural Health Center
QI/QA	Quality Improvement or Assurance
SMART	Specific, Measurable, Attainable, Relevant, Time bound
SPSS	Statistical Package for Social Sciences
USAID	United States Agency for International Development
WHO	World Health Organisation
ZISSP	Zambia Integrated Systems Strengthening Program
ZMLA	Zambia Management and Leadership Academy
ZPCT	Zambia Prevention Care and Treatment program

Executive Summary

The Zambia Management and Leadership Academy (ZMLA) training program was designed to support government efforts to equip healthcare managers with the knowledge and skills to lead, own, and transform the health sector. With funding from USAID and the Merck Foundation, ZMLA is led by the Ministry of Health (MOH) and the Ministry of Community Development, Mother and Child Health (MCDMCH). The program is also technically supported by the Zambia Integrated-Health Systems Strengthening Project (ZISSP)¹ and its subcontractor the BroadReach Institute for Training and Education (BRITE). ZMLA is recognized and accredited by the National Institute for Public Administration (NIPA). Presented below are the ZMLA project evaluation objectives and findings:

Evaluation Objective 1: To measure the extent to which the ZMLA program has contributed to improved management and leadership skills among trainees.

Key findings: Trainees reported being adequately trained with the proportion of trainees feeling ready to manage and lead being 43% before the training compared to 98% after being trained ($p < 0.000$ at the 5% significance level). Average case study scores showed that all case study implementation teams could apply ZMLA tools to public health projects post ZMLA training. Evaluation results also showed that ZMLA increased trainee confidence to perform management tasks, and trainees reported increased job motivation.

Evaluation Objective 2: To evaluate organisational benefits resulting from the ZMLA training.

Key findings: Qualitative analysis from interviewees showed that their work environments improved in the following aspects: more organized process for the annual appraisal system, better shared vision and coordination in the workplace; shorter and more effective meetings; better understanding and appreciation of roles in teams; improved delegation and handover practices; more appreciation of finance processes; and improved reporting practices. Quantitative findings from the work climate survey showed that the most improved aspect of the work environment was the resolution of human resource issues.

Evaluation Objective 3: To describe the overall conduct of the ZMLA program and useful lessons for future program scale-up activities and implementation.

Key findings: Trainees reported that the short, intensive trainings held near their work sites were minimally disruptive to their work. ZMLA participants reported that they found the ZMLA syllabus practical and tailored to the local health system and environment. Overall, the quantitative and qualitative findings demonstrated that participants valued the training with 98% of about 500 participants reporting that they would recommend ZMLA to their peers. Stakeholders from NIPA, the community and policymakers at both ministries responsible for health reported a desire for the program to continue as an important component of health systems strengthening.

Evaluation Objective 4: To evaluate the extent to which the ZMLA training contributed to improved service delivery.

Key findings: The study design which is highly qualitative did not allow for objective evaluation of the impact of ZMLA training on service delivery as initially envisioned. This objective was therefore not achieved.

¹ ZISSP is led and managed by Abt Associates Incorporated.

Conclusion: The management and leadership self-confidence survey and case study scores showed that ZMLA contributed to improved leadership and management confidence and skills. A significant proportion of ZMLA trainees reported that the program had improved their job motivation and they had observed changes in the resolution of human resource issues in their workplace. The greatest perceived improvements in the workplace were reported by participants whose senior managers were also trained in ZMLA. However, about half of the teams trained had difficulties in the following areas: developing model of care frameworks in supply chain management, planning for delegation and developing job descriptions. Despite participants appreciating and applying monitoring and evaluation concepts successfully, only half of all district level case study projects were implemented or monitored. Mentorship and follow up of case study projects after group mentorship sessions was reported as weak. Despite these challenges, the current ZMLA model of training was reported as being practical and minimally disruptive for trainees and their employers. Most participants reported that they would recommend the training to colleagues. In sum, top leadership in the ministries responsible for health, participants, mentors, and trainers openly appreciated the program and reported that ZMLA should continue.

Recommendations:

- It is recommended that the ministries responsible for health (MoH and MCDMCH) should compel health program managers and supervisors at all levels of the organisational structure to undergo the ZMLA training.
- The ministries responsible for health (MoH and MCDMCH) with support from partners should seek to support the institutionalization of ZMLA with local academic institutions such as the National Institute for Public Administration (NIPA) and University of Zambia. District institutions should budget for ZMLA tuition fees for managers in need of management and leadership skills through their annual action plans. In the long term, ZMLA should be included in clinical training courses. For clinicians with known ambitions of managing health institutions, ZMLA should be offered as an optional in-service training course at eligible training institutions across the country.
- Going forward, BRITE should design a more robust evaluation approach to effectively track the impact of ZMLA trainings. Experimental or quasi-experimental approaches such as clustering and randomization to intervention and control groups for instance could demonstrate attribution of ZMLA activities to changes in service delivery. Such knowledge would be needed to inform scale up of such a program across the country.
- As BRITE is the originator of the curriculum, BRITE should revisit ZMLA content relating to the development of models of care in supply chain management, delegation and the development of health worker job descriptions. More time should be spent during training sessions to explain these concepts. Additionally, mentorship should emphasize more on the concepts that case study teams struggle to grasp and apply. Going forward, the program should improve the follow-up and mentorship of participants after group mentorship sessions to support case study development.
- Although a key result area for ZMLA was to develop mentorship and coaching capacity in the ministries responsible for health, mentors should only be allowed to mentor colleagues after they themselves have completed the program.
- In order to translate theory into practice, NIPA should request that participants implement case study projects in order to graduate. Trainees should be encouraged to leverage off other health initiatives and programs in their districts to support their case studies.

1 Background and Rationale

Effective leadership and management can improve health service delivery.² Research in both the private and public sector demonstrates that leadership and management skills are essential ingredients of high performance.³ According to the World Health Organisation, leadership and governance are one of the six key building blocks for an effective health system.⁴

A critical challenge that Zambia currently faces is that district health teams are often led by newly qualified medical doctors whose pre-service training emphasizes clinical skills over management and leadership skills. The dissolution of civil service induction programs and the restructuring of the Central Board of Health in the recent history of Zambia has also led to many health managers across all professions being unprepared for their roles in management.

Although the National Institute of Public Administration (NIPA) once offered a higher diploma in Health Management to the public service, few institutions or managers have ever enrolled for the course. The NIPA health diploma succeeded the European funded Pan African Development Education program for Southern Africa (PADESA). Once the donor funding through PADESA concluded, many new managers in the health system could not attend the course. This was attributed to the relative costs or expense of attending the diploma program, long distances to the training college and lengthy duration of the course. Due to a critical shortage of health workers in the health system, many health managers could not afford to leave their work stations for extended periods of time.

Recognizing these constraints, in 2011 the Zambian Ministry of Health (MOH) developed the Governance and Management Capacity Building (GMCB) Strategic Plan (2012-2016) whose overarching goal was to improve health sector governance environment that is Result oriented, Accountable and Transparent. Therefore, the Zambia Management and Leadership Academy (ZMLA) created to support the realization of the government's capacity building plan to equip healthcare managers with the knowledge and skills to lead, own, and transform the health sector.

ZMLA is led by MOH and the Ministry of Community Development, Mother and Child Health (MCDMCH). The program receives technical support from the Zambia Integrated Health Systems Strengthening Project (ZISSP) through its subcontractor BroadReach Institute for Training and Education (BRITE). The ZMLA training program is recognized and accredited by NIPA.

² McKinsey & Company. Develop Leaders, Deliver Change. 2011

³ McKinsey & Company. Based on analysis of Organisational Health Survey database (N = 60,000). 2009.

⁴ The other five building blocks: a well-performing workforce; a well-functioning health-information system; equitable access to essential medical products, vaccines, and technologies; and adequate financing. *Everybody's business: Strengthening health systems to improve health outcomes*, World Health Organisation, Geneva, Switzerland, 2007.

1.1 Program Logic Model and Theory of Change

The ZMLA logic model (as shown in Figure 1) was adapted from Donald and James Kirkpatrick's⁵ learning and training evaluation theory to conceptualize the pathway through which the program produces desired results. The model suggests that through exposure to program activities (workshops, mentoring, case studies), program trainees should:

1. Demonstrate increased knowledge
2. Be more confident in carrying out management and leadership functions
3. Experience improved job motivation
4. Improve management skills and behaviours that increase daily work performance

Complementing the logic model is the McLeroy et al (1988)⁶ socio-ecological model of behavioural change which suggests that behaviour is also determined by the following factors that led to the justification of recruiting cross functional⁷ trainees:

- Personal factors: Characteristics of individuals which include knowledge, attitude, behaviour, self-perceptions etc. included in this the developmental history of individuals
- Formal and informal social networks and social support systems: These include friends, families, and work systems
- Institutional factors: These include social institutions, rules, and other organisational characteristics
- Community factors: Relationships among organisations, institutions, individuals, cultural systems, beliefs
- Public laws and policies.

In addition, the ZMLA logic model was informed by work done by the Management Sciences for Health (MSH).⁸ In MSH's conceptual framework, after gaining confidence and skills in management and leadership, trainees should exhibit improvements in:

1. Problem analysis,
2. Use of data in decision making,
3. Strategic planning
4. Running of meetings,
5. Supervising and
6. Motivating employees.

The MSH model postulates that as a result of these changes in trainees' work practices, the work climate at trainees' work places should improve and as a result, program performance and service delivery should also improve. For example, evidence of the success of such assumptions has been reported in Kenya for instance.

⁵ Donald Kirkpatrick and James Kirkpatrick (2006). *Evaluating Training Programs: Four Levels*. Berrett-Koehler; third edition.

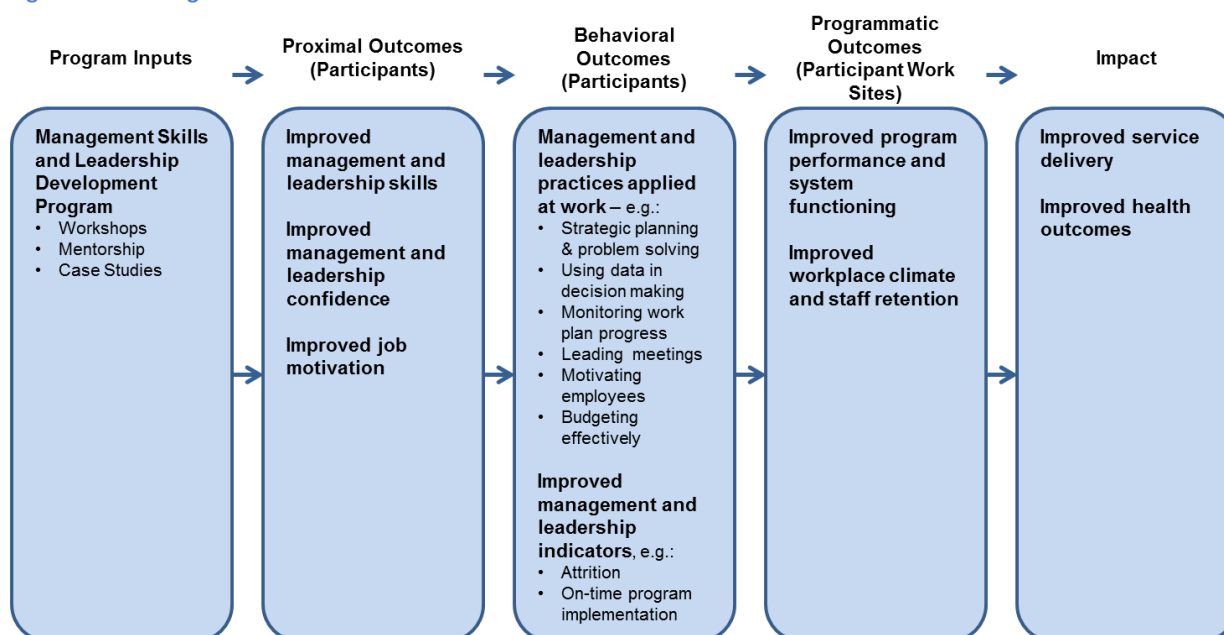
⁶ McLeroy, K. R., Bibeau, D., Steckler, A. and Glanz, K. (1988) An ecological perspective on health promotion programs. *Health Education Quarterly*, 15, 351–377.

⁷ Cross functional means that training cohorts reflect the diversity of a functional team across professions, hierarchy and community stakeholders.

⁸ Nancy LeMay and Alison Ellis. Evaluating leadership development and organisational performance. Management Sciences for Health, 2006

The six month leadership development program implemented in 67 management teams in Kenya showed sustained increases in health coverage at district level six months after the training program was completed.⁹

Figure 1: ZMLA Logic Model



1.2 Overview of the ZMLA Program

Established in 2010, ZMLA is an intensive and comprehensive management and leadership course tailored to meet the needs of health professionals and leaders working in the Zambian health system. The ZMLA program was designed to contribute to the improvement of management skills in order to increase the use of quality health services within 27 ZISSP target districts. More specifically, the ZMLA program aimed to:

- Strengthen the capacity of provincial health level staff to mentor or coach district and facility staff
- Support sustainable skills to mobilize and manage human and financial resources
- Improve budget execution
- Improve coordination and synergy of reproductive, child and malaria health services.
- Improve management and leadership skills at the district and facility level

The ZMLA training and mentorship sessions were delivered by a team of four to five trainers from BRITE, ZISSP, NIPA and MOH nominated experienced health managers. Each ZMLA training cohort had 20 to 30 participants. Participants were selected and invited by ZISSP management specialists in consultation with the two ministries (MoH and MCHMCH) based on their profession and position in their management team or community. Once selected it was mandatory for participants to complete at least 75% of the course. Each training cohort was targeted to represent the diversity of professional groups, regional institutions, health facilities and the communities that ought to work as a team in a particular region.

⁹ Seims et al. Strengthening management and leadership practices to increase health-service delivery in Kenya: an evidence-based approach. Human Resources for Health. 2012, 10:25.

As of September 2014, the program had enrolled 767 trainees from all levels of the health system (central, provincial, district, hospital and community). The training program was implemented over three phases described below:

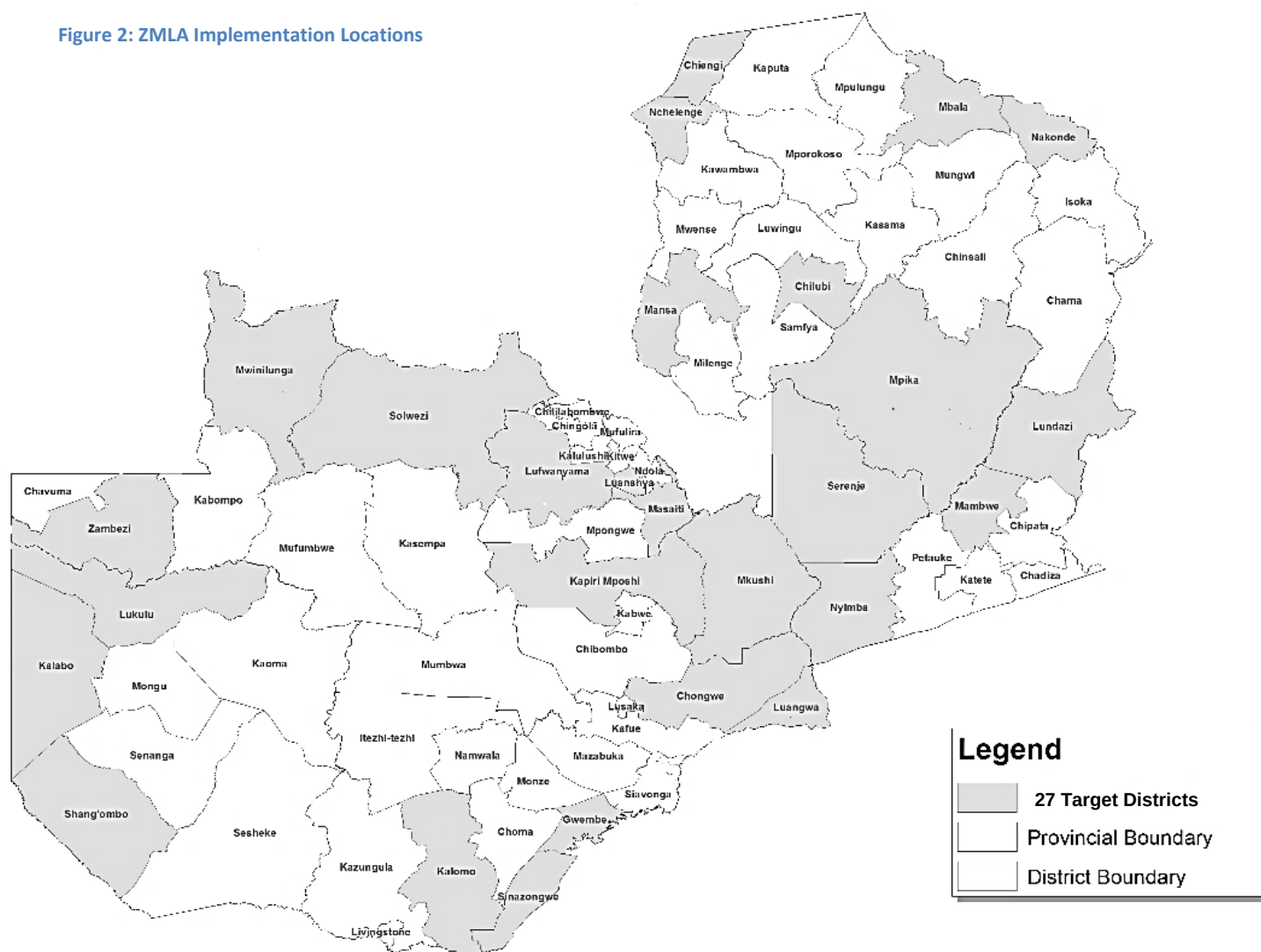
Training phases allowed the program to keep trainer to participant ratios consistent and manageable. This allowed ample time for support, follow up and mentorship of participants in between training sessions.

Table 1: Recruitment and Completion Dates for ZMLA Implementation Phases

	Enrollment and Completion Dates	Number of Trainees Enrolled	Number of Cohorts Trained (20 – 30 in each cohort)
Phase I	Oct 2011 – Jun 2013	474	18
Phase II	Dec 2013 – June 2014	177	9
Phase III	Jul 2014 – Dec 2014	116	4

The program was initially designed to be implemented over one year for each cohort. By the final phase of implementation, this time was halved. Participants from phase one of implementation were trained for a minimum of 12 months which extended to a maximum of 18 months for some participants. The first phase of programme implementation took longer than anticipated due to a number of unforeseen circumstances which included inter-alia; (i) fairly long MoH approval processes for the mentorship design and approach (ii) long periods of curriculum development and validation processes and (iii) periods when trainings could not be conducted due to competing national events such as planning or performance assessments. By the second phase of implementation, adjustments to the scheduling of course reduced the course length to just six months. The first phase of the program was completed in June 2013, the second phase concluded a year later in June 2014. The third phase of 116 trainees is expected to conclude in December 2014.

Figure 2: ZMLA Implementation Locations



The ZMLA training approach combines three components – workshops, case study development and mentorship (Table 2). All three training components work synergistically to introduce simple management and leadership tools to trainees and encourage them to apply these tools in their day-to-day duties, medium term projects, and local initiatives.

Table 2: Course Components and Structure

Component	Structure	Objective
Workshops	Four workshops lasting two to three days each and held quarterly in phase I and every other month in phase II/ III.	Build technical knowledge in a broad range of management and leadership core management areas.
Case Study	On-going small group (5-8) practical problem-solving activities at a health facility over six months	Apply management and leadership skills learned in workshops to real-life settings in order to embed skills.
Mentorship	Small group sessions of four to six members following each workshop, each lasting two days. Group sessions were supplemented by occasional individual one on one sessions with mentors held in person or by phone or email as and when mentees request them.	Provide opportunities for personalization of workshop training, specific problem-solving assistance, and relationship-building with experienced managers.

To motivate participants and encourage full participation, the ZMLA course was accredited by NIPA. To attain NIPA certification with a higher diploma in management and leadership, participants were required to have attended four workshop sessions, four group mentorship sessions and successfully completed post training quizzes and case studies. The content of didactic training workshops is described in Table 3 below:

Table 3: Summary of Curriculum Content

Workshop	Content delivered over 2-2.5 day for each Workshop	
1	Module 1: Problem Definition Problem definition Strategic and operating planning Strategic planning frameworks Relevance of strategic planning to the organisation Problem Analysis Tools Prioritization Critical Thinking and Pressure Testing Critical Path	Module 2: Strategic Planning Basics of supply chain management Value chains and implementation frameworks Model of care Developing implementation plans and Work plans Internal and external stakeholder identification and analysis Bottlenecks and the Marginal Budgeting for Bottlenecks Planning process in Zambia Performance assessments Zambia planning resources (tools and guidelines)
2	Module 3: Project Management Fundamentals Organisational structures and charts Definition of a project, project management and project manager role Defining project success Leadership versus. Management Running and participating in meetings	Delegation Decision rights Teamwork Providing useful feedback Change management
3	Module 4: HR Management Employee lifecycle Recruitment and retention strategies Incentive systems and motivation tools HR Development Performance management – supervision, discipline and appraisal)	Module 5: Finance Management Financial management overview Budgeting, forecasting, and reporting Cost management Financial statements and reporting
4	Module 6: Strategic Information management M&E as management tool M&E approach	M&E metrics Building information culture Using and maintaining information systems

Delivery of ZMLA took into account a number of factors such as duration of the program, time taken per module away from participant's work stations; ensuring adult learning methodologies were deployed

including group approaches to facilitate shared learning. In essence, ZMLA strived to balance the need to provide in-service training with the need to limit the absence of health workers in facilities. This was to sustain continuity in health service provision and not compound challenges the health system is already facing. Therefore to reduce the time spent by participants away from their workstations, each ZMLA workshop session was designed to take no longer than two-and-a-half days.

Following each workshop, group mentorship was provided over an additional two days. As outlined in the subcontract between BRITE and ZISSP, 30% of ZISSP management specialist time was to be allocated to mentorship and follow up of trainees. To ensure ZMLA practices were supported and sustained within district and facility teams, ZMLA trained 47 senior managers from provincial and central MOH offices. These mentors were chosen and seconded by the MOH Directorate of Technical Support Services and were often high ranking individuals within the MOH management structure at provincial and central level. Mentors were taught how to mentor and coach colleagues on how to apply ZMLA tools to their case study and in their work setting, especially during key management cycles of: support supervision, performance assessment and planning.

During the course of the training, participants in need of additional support could access one-on-one mentorship via phone, email and where possible, in person. Participants were free to contact any of the trainers and mentors any time after scheduled training and mentorship sessions whenever they needed support.

At the start of the training program, participants were divided into groups of five to eight and tasked with designing a case study to address a particular public health issue using ZMLA tools. Case studies achieve the dual benefit of allowing teams to develop solutions that can be implemented in their work places while furthering skill development. The graduation of participants was only dependent on course attendance and submission of satisfactory case study project proposals, not necessarily the implementation of the case study.

All ZMLA case study teams were tasked to identify and design solutions to a pertinent public health challenge in their districts or regions. The case study development process supported participants in their quest to find ways to improve service delivery in innovative and practical ways. The topics some case-studies sought to address included for instance; finding ways to increase the supply of medicines, commodities and equipment in a health facility; improve clinical staff to patient ratios; improve standard operation procedures; improve facility transportation; or increase community outreach. Each case study group was assigned a mentor to support them with the process of deciding which problems were most pertinent. Mentors also guided participants in assessing the feasibility of solutions generated using ZMLA tools.

By design, phase one (I) ZMLA recruits were limited to developing case studies in 18 poorly performing maternal health delivery facilities. Teams in the first phase of implementation were asked to focus on maternal child health as a thematic focus in order to contribute to the government's program to reduce maternal mortality in 2010.¹⁰ Trainees were expected to use district health maternal health indicators to

¹⁰ In May 2009 the African Union launched the Campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA) to trigger concerted and increased action towards improving maternal and new-born health and survival across the continent. As such, CARMMA is not a new initiative; rather, it is derived from the key priority areas enshrined in the AU Policy Framework for the promotion of Sexual and Reproductive Health and Rights in Africa (2005) and the Maputo Plan of Action (2006). The main objective of CARMMA is to expand the availability and use of universally

identify the worst performing health facility in their region (since participants are skilled clinicians, they were asked to use DHIS data to justify which facility their team would focus on in a succinct problem statement). Teams were given the freedom to use maternal health indicators that they collected routinely to justify which facility to focus on. They were further asked to use ZMLA tools to analyse root causes of the facility's challenges, and design interventions that would improve maternal health services in that targeted facility.

From a 2013 performance evaluation report,¹¹ it was reported that among Phase 1 case study teams, only those that were comprised of district level health teams were in a position to implement their case studies without external funding. The nine teams which had a majority of participants from provincial or national institutions were far less likely to successfully implement their team's case studies. This was because health facility sites which were the focus of the case study development process were not in their supervisory field of influence given their position in the health system.

Building on the lessons learnt from the challenges of case study implementation in the first phase, in subsequent phases, case studies were not limited to maternal health themes or the worst performing site in the region. Instead, participants were free to focus on any pressing public health issue in their institution or region. Phase II case studies focused on a variety of major health challenges including but not limited to: reproductive health, malaria, HIV, TB, trauma and immunization at facility, regional or policy level.

Table 4: Trainee Demographic Characteristics and Attendance

Demographic	Characteristics	Total Trainees Enrolled	Attendance	
			4 Workshop sessions only	4 Workshop + 4 mentorships
Gender	Female	222	71%	63%
	Male	545	72%	63%
Recruitment Phase	Phase I (Enrolled between 2011-12)	474	82%	68%
	Phase II (Enrolled in 2013)	177	91%	91%
	Phase III* (Enrolled in 2014)	116	Ongoing(	Ongoing
Job Category	Administrative	197	68%	59%
	Managerial	96	68%	58%
	Technical Medical	224	74%	66%
	Technical Non-Medical	132	69%	65%
	Technical Public Health	81	83%	70%
	Traditional Leader	9	56%	56%
	Not Specified	28	89%	61%
System Level	National	56	54%	39%
	Provincial	199	83%	68%
	District	357	67%	61%
	Facility	146	78%	72%
	Community	9	56%	56%
Residence	Rural	464	72%	61%
	Urban	303	72%	67%
	Total	767	72%	63%

By September 2014, 552 trainees received a ZMLA workshop certificate of attendance after attending all four workshops (72% of 767 enrolled). By September 2014, 68 % of phase I trainees and 91% of phase II

accessible quality health services, including those related to sexual and reproductive health that are critical for the reduction of maternal mortality.

¹¹ 2013 ZMLA Performance Evaluation Report.

trainees received a NIPA higher diploma in Management and Leadership after completing all four workshops and the related mentorship sessions plus having developed case-studies (Table 4 above).

1.3 Evaluation Objectives and Questions

The overall objective of ZMLA is to provide trainees with management and leadership skills that can be used in their day-to-day duties to improve service delivery. The program was evaluated to assess the extent to which intended program outcomes were achieved. The specific evaluation objectives and research questions are summarized in Table 5 below.

Table 5: Evaluation Objectives and Study Questions

Objectives	Questions
To measure the extent to which the ZMLA program has contributed to improved management and leadership skills among program trainees	How has the program affected trainees' management and leadership knowledge and skills?
	How has the program affected trainees' management and leadership confidence and job motivation?
	How did trainees' management practices change since ZMLA?
To evaluate organisational benefits that resulted from ZMLA trainings	How has the workplace environment changed since ZMLA training was implemented? I.e. in what ways has the program affected staff as individuals, their teams, and the organisation as whole?
	What organisational challenges did ZMLA training address?
	What specific processes have individual trainees and workplaces established to address persistent organisational challenges after undergoing the ZMLA training?
	Is there noticeable improvement in the development and implementation of action plans, performance management, etc., to address both organisational and service delivery challenges?
	To what extent was content from the formal training shared with other staff members who did not directly participate in the program?
To describe the overall conduct of ZMLA program and identify lessons useful for future program scale-up activities and implementation.	Is the format, content, and delivery of training, mentorship, and case studies relevant to the trainees?
	What aspects of ZMLA were most valued by trainees?
	What aspects did not have the desired outcome, were not useful, or need to be otherwise strengthened?
	How was the ZMLA program implemented in each phase, and was it implemented according to plan? (If not, what was changed?)
	How does the program compare (in terms of content, approach,) to other Management and Leadership training programs?
To evaluate the extent to which ZMLA training contributed to improved service delivery.	To what extent has ZMLA affected service delivery at case study sites?

This report highlights the successes and challenges of the ZMLA program based on the evaluation of Phase I and II implementation conducted between June 2014 and August 2014.

2 Methodology

2.1 Study Design

The evaluation employed a cross-sectional mixed study approach. Both qualitative and quantitative methods were used to address the evaluation objectives, and to triangulate findings.

2.2 Target Population

Responses from ZMLA trainees from the first two phases of implementation were included in the study to gain perspectives on the outcomes of the program so far. Stakeholders were interviewed to gain in-depth insights on the ZMLA program across all phases of implementation. These perspectives were from; participants, trainers, key NIPA figures, BRITE team leaders, MOH directors and ZISSP team leads.

2.3 Data Sources

2.3.1 Routine Data Collection Tools

Routine data collection tools were used to monitor ZMLA progress and program quality as described in Table 6. Knowledge quizzes were designed to test all trainees' knowledge of several concepts before and after being trained and how much knowledge was gained. Participant feedback forms were collected after each training session. All case study plans developed by participants were submitted to NIPA and reviewed to assess participants' ability to use ZMLA tools (Annex 1: Case Study Score Card, page 28).

Table 6: Summary of Routine Data Collection Tools

Data Collection Tool	Key Evaluation Objectives Addressed	Type	Notes on Data Collection
Pre- and Post-Workshop Knowledge Quizzes (not presented here)	Objective 1 Management and leadership knowledge and skills	Quantitative	Ten question quizzes were administered to all trainees before each workshop and repeated after each workshop.
Case Study Scoring Cards (page 28)	Objective 1 Management and leadership knowledge and skills	Quantitative	NIPA assesses participants' case study assignments against a standardized scoring sheet. To mitigate bias, two assessors score each assignment.
Workshop and Mentorship Evaluation Feedback Forms (page 30)	Objective 4 Program format, content, and delivery	Quantitative	Administered to all trainees after each workshop.

2.3.2 Management and Leadership Survey

The management and leadership survey was used to measure changes in confidence and job motivation among ZMLA trainee respondents. The tool was administered twice to 164 phase I and 280 phase II ZMLA trainees: at the beginning and at the conclusion of the training. The self-perception confidence questions in the survey were premised on Albert Bandura's¹² concept of self-efficacy which posits that a person who feels greater confidence in his or her ability to perform a specific behaviour is more likely to successfully perform that behaviour. The management and leadership tool (page 32) used a:

¹² Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W.H. Freeman.

- 10-point Likert scale to measure responses to statements relating to management capacities, and a
- 5-point Likert scale to measure responses to statements relating to job-satisfaction and commitment to the organisation.

Participant identity cards (IDs) were used in the questionnaire in order to pair perceptions per participant response before and after each training session.

2.3.3 Workplace Climate Survey

The workplace climate survey was implemented in December 2013 and again in August 2014. Data from the survey are analysed and presented in this report to complement and triangulate responses to qualitative probes. The survey was only administered to the worksites of phase II trainees that were trained from December 2013 to June 2014. Phase I participants did not fill in the workplace climate survey before they started ZMLA, making it inappropriate to use data collected from phase I to measure perceived changes without recollection biases. Phase I data was thus not used in this evaluation.

The workplace climate survey was designed to measure existing conditions and changes in the workplace environment as scored before and after the course. Given that district health teams were more likely to be saturated with managerial trainees, only district community health office staffs were sampled. The survey targeted everyone at a workplace, regardless of exposure to the ZMLA course.

The survey was self-administered with a ten-point Likert scale measuring personal perceptions of the work environment (page 36). The survey was administered at the start of the ZMLA trainings and shortly after the conclusion of the training (one to two months after the conclusion of trainings) in nine randomly selected districts community health offices. Unlike the management and leadership survey, there was no pairing of responses from the start and end of the training and the data set had no individual identifiers to track unique respondents.

2.3.4 Qualitative Data Collection Tools

Qualitative data was collected from 70 key informant interviews (Table 7), including 62 ZMLA trainees and 8 ZMLA implementers (team leaders, mentors and trainers). The selection of respondents was purposeful and based on respondents' positions within their organisations and their experience of the ZMLA program. Efforts were made to ensure that key informants from all stakeholders were represented, these are described below and in Annex 20: List of Anonymized Key Informants, page 60. All the provincial health offices were visited for key informant interviews. Districts community health offices were selected based on the implementation of case studies in phase I and the locations of the districts randomly selected for the phase II work climate survey mentioned above. The probes used for qualitative interviews are presented in Annex 13 and Annex 14.

Table 7: Public Health System Level and Job Categories of Key Informants Interviewed.

Public Health Systems Level	Job Category or Perspective	Number
District	Case Study Respondent (part of case study team)	5
	Clinical Care Specialist	1
	District Medical Officer	9
	Finance Officer	1
	Health Management Information Officer	1
	Hospital Administrator	1
	Human Resource Officer	2
	Medical Superintendent	1
	NGO Coordinator	1
	Planner	2
	Public Health Officer	2
	Sub Total	24
Health Facility	Health Facility Manager	4
	Nursing Officer	2
	Sub Total	6

Public Health Systems Level	Job Category or Perspective	Number
District	Case Study Respondent (part of case study team)	5
	Clinical Care Specialist	1
	District Medical Officer	9
	Finance Officer	1
	Health Management Information Officer	1
	Hospital Administrator	1
	Human Resource Officer	2
	Medical Superintendent	1
	NGO Coordinator	1
	Planner	2
	Public Health Officer	2
	Sub Total	24
Health Facility	Health Facility Manager	4
	Nursing Officer	2
	Sub Total	6
National	MOH Director	1
	Trainer	2
	ZMLA Implementer	5
	Sub Total	7
Provincial	Clinical Care Specialist	1
	Finance	3
	Human Resource Officer	2
	Management Specialist	8
	Nursing Officer	2
	Planner	3
	Provincial Medical Officer	8
	Principal Dental Therapist	1
	Public Health	2
	Sub Total	30
	Grand Total	70

2.4 Data Management

Quantitative data were entered and managed in Microsoft Access and SPSS. Data were cleaned and all outliers were validated by checking against hard copy entries. Qualitative data were recorded using digital recorders, downloaded and backed up at the end day of interviews. Transcription was done by trained research assistants. The lead consultant and the co-consultant checked all transcribed data to ensure quality.

2.4.1 Quantitative Data Analysis

Quantitative data were exported to SPSS Version 19 for analysis. Simple frequencies were used to explore the data. The basic unit of analysis was individual participants and ZMLA trained workplaces. Chi-squared tests were used to test the significance of changes in the proportion of respondents that felt more or less confident about leadership and management roles after ZMLA training. Chi-squared tests were also used to test the statistical significance of any changes in the proportion of respondents who felt that the work climate was conducive for productivity post ZMLA training. T-tests were used to assess the significance of observed differences between sample means of respondent self-scores pooled across management, leadership and work climate scores before and after training. For both Chi-squared and t-tests, were set at the 95% confidence level and 5% significance level.

2.4.2 Qualitative Data Analysis

Transcripts were exported to NVivo 10 for analysis. Coding was done by the main lead consultant. Content analysis and data coding followed pre-determined themes based on the research questions formulated from the evaluation scope of work.

2.5 Study Limitations

Where qualitative data was solely relied upon, the findings of this study are not generalizable. Additionally, self-reported Likert scales used in all the surveys are affected by a tendency of participants to report higher scores at baseline or before trainings, causing a ceiling effect that limits the upper scores if improvements higher than 10 or 5 were perceived.

Based on the logic framework for the ZMLA program which hypothesized that if well applied and implemented, the ZMLA course should lead to improved service delivery in the health sector. However, the evaluation study design did not include a comparison group nor did it cluster randomize the training districts to control and implementation groups. It was not possible to exclusively attribute any noted changes in service delivery to ZMLA. Due to this study design limitation, this evaluation did not attempt to assess the impact of ZMLA training on service delivery.

2.6 Ethical Consideration

The study obtained permission from the University of Zambia Biomedical Ethics Committee and the Ministry of Health. All participants who responded to the MLA survey, work climate survey and qualitative probes were asked to provide written consent. For routine data, written consent was not sought from participants for module quizzes and training feedback forms although participants were communicated to verbally during training sessions that feedback was optional and no personal identifiers were required on the form. Participants were also told that the feedback would be used to inform amendments to and refinement of the course. All data were stored securely in a password protected Access database, and where analysed and presented, were anonymized.

3 Results

Presented below are the key results of the evaluation study according to each of the evaluation objectives. As indicated in the study methodology, findings from various data sources were used to validate and minimize research bias. The findings have been arranged according the following three (3) key objectives;

- Contribution to improved management and leadership skills
- Organisational benefits resulting from ZMLA trainings
- Overall conduct of ZMLA and lessons learnt

3.1 Contribution to Improved Management and Leadership Skills

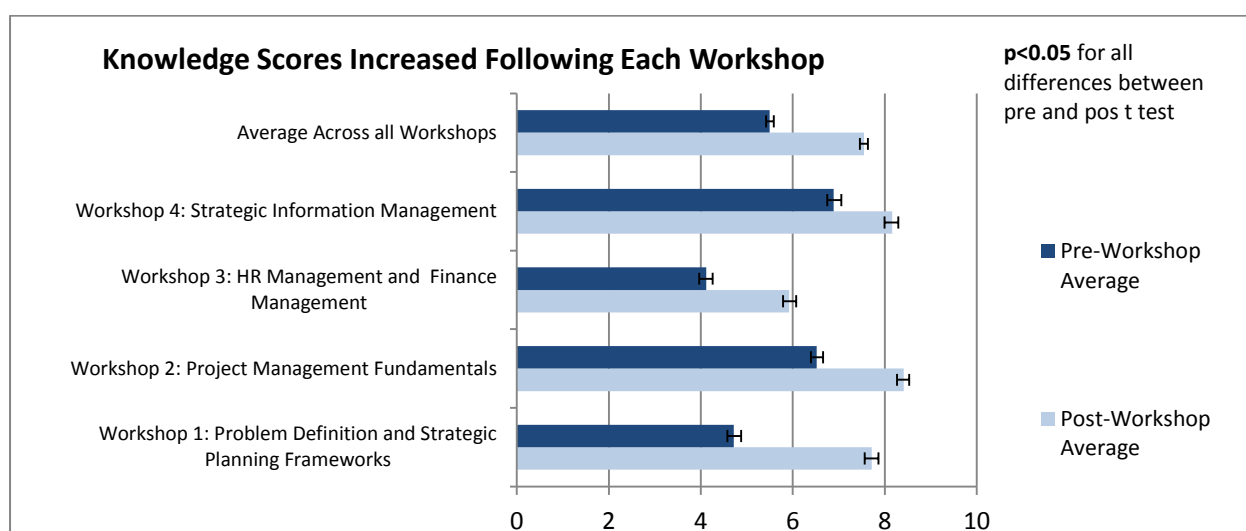
The first objective of the evaluation was to measure the extent to which ZMLA contributed to improved management and leadership skills among program participants. These aspects were assessed using pre and post training knowledge tests and the management and leadership confidence survey described in the methods section.

3.1.1 Knowledge Gaps and Knowledge Gained

Trainees completed quizzes to assess their individual knowledge of leadership and management prior to and following each of the four workshops. The quizzes were graded out of a total score of ten. In total, 1998 quizzes were analysed. **Error! Reference source not found.** illustrates that ZMLA trainees were able to retain new information from the training and improve their understanding of the specific skills taught in the workshops.

On average, knowledge levels increased by 2.1 points (38%, $p < 0.05$ at 5% significance level) after each workshop. The most significant change in terms of gain in knowledge was noted for workshops 1 and 2, by 3.0 (63%) and 1.9 (29%) points respectively. Workshops 4 showed the least change in skills score 1.3 (19%) points.

Figure 3: Knowledge Scores Pre & Post Workshops



Furthermore, to supplement individual knowledge assessments through pre and post- test quizzes, the program required participants to demonstrate their understanding of various ZMLA concepts by applying them to practical case studies. Table 8 shows participants' scores from NIPA case study assessments.

The results indicated that participants performed best in the area of creating relevant and sound monitoring and evaluation frameworks (93%), but had difficulties in developing a model of care illustration (58%), delegation plan (56%), and job descriptions (50%).

Table 8: Phase I Case Study Scores

Scoring Factors	Avg. Score	Total Points Possible	Average % of Points Obtained
M&E Framework	27.9	30	93%
Direct and cross-cutting functions listed	4.1	5	83%
SMART objectives developed	3.9	5	78%
Work plan/ Gantt Chart	3.8	5	75%
Solutions identified and prioritized	3.7	5	74%
Strategic planning and problem tools have been applied to ID root causes	3.7	5	73%
Decisions rights matrix	3.6	5	73%
Organisational structure for the project	3.6	5	72%
Budget	3.6	5	72%
Model of care illustration	2.9	5	58%
Delegation Plan	5.6	10	56%
Job description clearly defined for all key players in the organisational structure	5.0	10	50%
TOTAL	71.4	95	75%
N			72

See Annex 1: Case Study Score Card, page 28. Phase II case study scores were not complete at the time of the evaluation.

3.1.2 Leadership and Management Skills

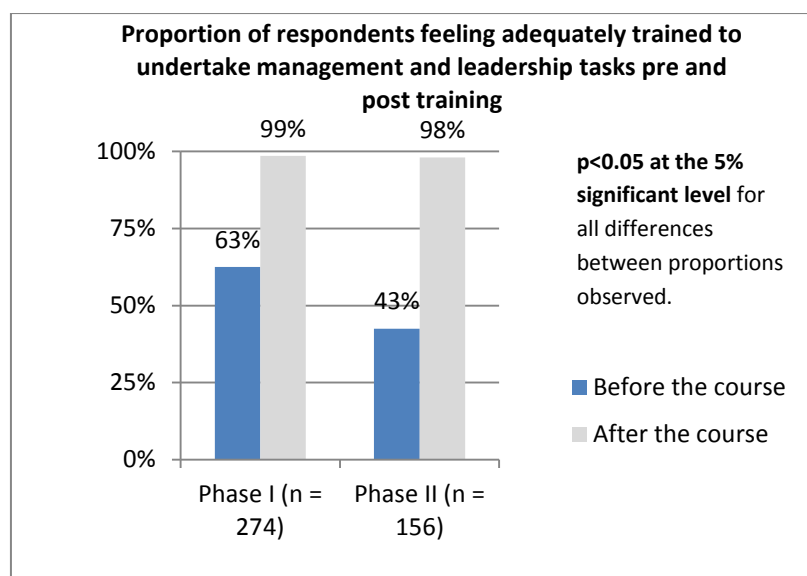
To understand how the training improved individual leadership and management skills, both qualitative and quantitative methods were used. The demographics of the respondent's to the management and leadership survey are presented below (Table 9).

Table 9: Demographic Characteristics of Leadership and Management Survey Respondents

Demographic Characteristic	Phase I	Phase II	Grand Total
Public Health Systems Level	1	1	2
District	101	104	205
Facility	51	45	96
National	18	3	21
Provincial	109	11	120
Residence			
Rural	82	101	183
Urban	198	63	261
Gender			
Female	85	48	133
Male	195	116	311
Job Category			
Administrative	66	46	112
Managerial	26	24	50
Technical Medical	94	56	150
Technical Non-Medical	45	29	74
Technical Public Health	30	8	38
Traditional Leader	1	1	2
Not Categorized	18		18
Total:	280	164	444

A comparison of the average self-rated scores from 444 management and leadership survey responses before ZMLA and after ZMLA training showed an increase in the proportion of participants that felt adequately trained to undertake management and leadership tasks (F – Phase I: 63% before to 99% after, Phase II : 43% before to 98% after).

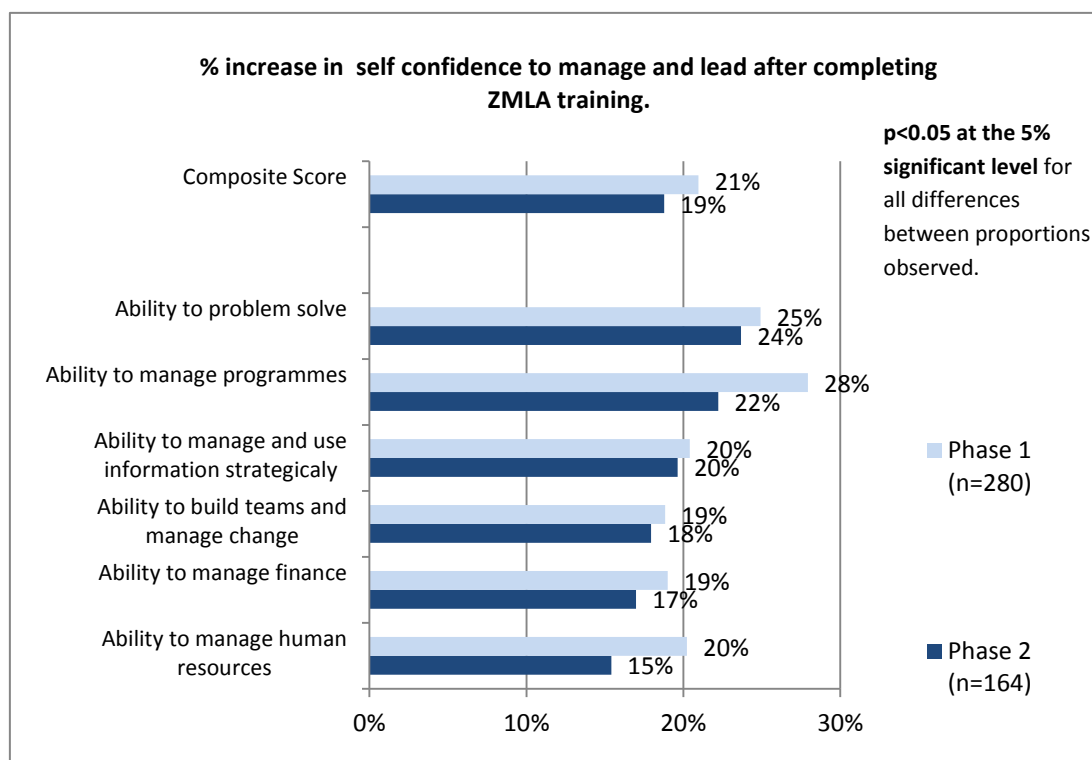
Figure 4: Self-Assessment of ZMLA Trainee Management and Leadership Readiness



Note: Annex 6: Percentage of Trainees Feeling Adequately Trained in Management & Leadership (Crosstab and Chi-square Test) page 43.

In addition to participants feeling adequately trained after undergoing the training, an assessment of self-perceived improvement in undertaking a range of management and leadership tasks significantly improved ($p<0.05$ at the 5% significance level). F highlights self-perceived percentage changes in mean scores for six broad management and leadership tasks (See Annex 5: Paired Samples Test (Mean Differences for Leadership and Management Tool)).

Figure 5: Percentage Change in Management and Leadership Self Confidence



The greatest changes were noted under the themes ‘problem solving’, ‘planning’ and ‘managing programs’. The differences across all themes were statistically significant for all variables in the leadership and management tool (Annex 5: Paired Samples Test (Mean Differences for Leadership and Management Tool) and Annex 7: MLA Survey Themes, page 44).

Qualitative findings complemented the above quantitative results. More than half of trainee respondents (34 of 62) interviewed in-depth reported that they felt more motivated and that the training had improved the way they worked.

“I think ZMLA is addressing what I would call the core problem from my perspective, from what we see in health sector, because the challenge really revolves around leadership and management. It comes down to the most efficient ways of using resources and someone has to have the leadership roles clearly outlined. I think it gives you the tools to break down the problem and see what solutions you can come up with at your level”. - ZMLA Trainee and mentor

As an example, some trainees felt more confident when preparing their annual action plans – captured as an ‘ability to problem solve’ in the management and leadership survey. Using ZMLA tools on planning, some trainees reported that they no longer copied and pasted plans from previous years but developed original action plans with competence and efficiency. Similarly, many trainee respondents (39 of 62) felt better equipped to ‘plan’ as expressed by one trainee:

“...If you look at what we do, it’s mainly to do with planning. Like right now we are doing planning, we are developing our work plans, we look at the medium term expenditure framework going into the strategic plans...all those things that we were learning in ZMLA....,now we are not scared to go for planning...we now know how it should be done and my team is ready.” ZMLA trainee, Nchelenge.

3.1.3 Job Motivation

To measure changes in job motivation before and after undergoing the ZMLA training, a series of questions were asked in the management and leadership survey.

The focus of the assessment was around (i) commitment to their career in the organisation, (ii) optimism about future success in the organisation, (iii) degree to which the respondent enjoyed tackling new challenges arising in work, (iv) and degree to which the respondent felt positive and upbeat most of the time when working. F and F show the mean differences and associated confidence intervals for a 5-point Likert scale trainee responses before and after training. Commitment to a career in their organisation and feelings of positivity when at work were the most notable changes in trainee job motivation. These findings were consistent across phase I and II.

Qualitative findings showed that some key informants felt that the ZMLA training contributed to their decision to stay in the public health service. The reasons given by just over half of the trainees (32 of 62) was that they now felt empowered and confident to be managers in the health sector and that they felt more motivated with skills and knowledge gained from the ZMLA.

“Job motivation has improved, of course may be not in terms of remuneration but in terms of motivation, because when you know what you are supposed to do it becomes a motivation on its own.” ZMLA trainee, Mansa

Figure 6: Phase I Job Motivation following ZMLA Training

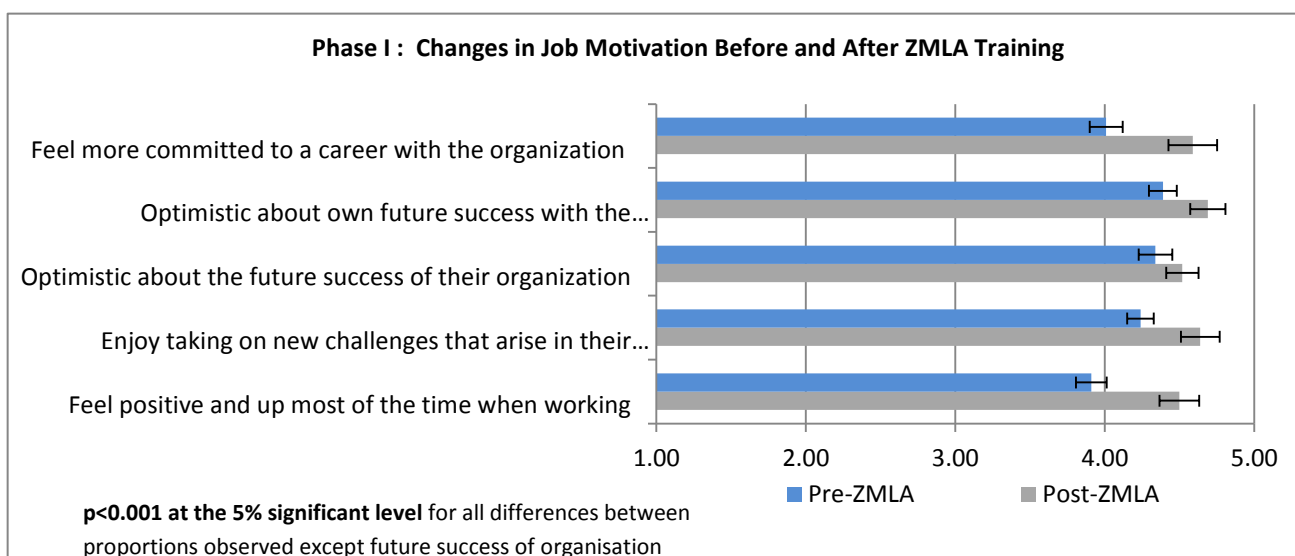
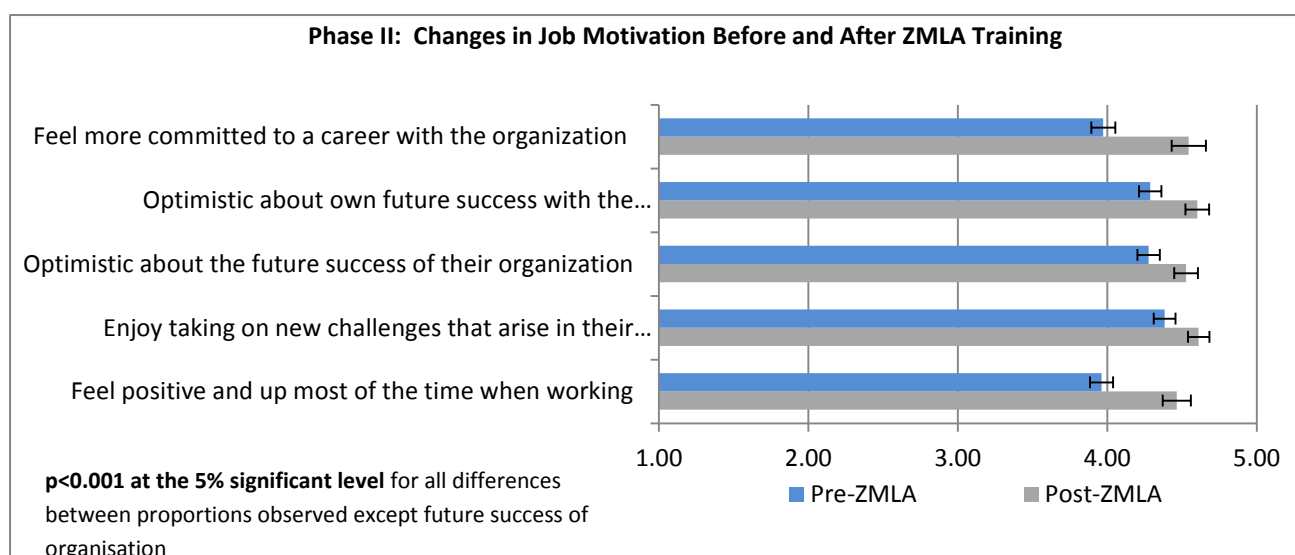


Figure 7: Phase II Job Motivation following ZMLA Training



Note: Annex 5: Paired Samples Test (Mean Differences for Leadership and Management Tool) page 41.

3.2 Organisational Benefits Resulting from ZMLA Trainings

The second objective of the evaluation was to evaluate any organisational benefits that resulted from ZMLA trainings. This section presents results of the quantitative workplace climate survey (before and after training) supported by qualitative findings.

3.2.1 Changes in the Workplace Climate

In evaluating the organisational benefits that resulted from ZMLA trainings, quantitative data from the workplace climate survey were grouped thematically and presented below in F. Qualitative themes derived from in-depth interviews were used to complement quantitative findings. The characteristics of the phase II work climate respondents are presented in Table 10 below.

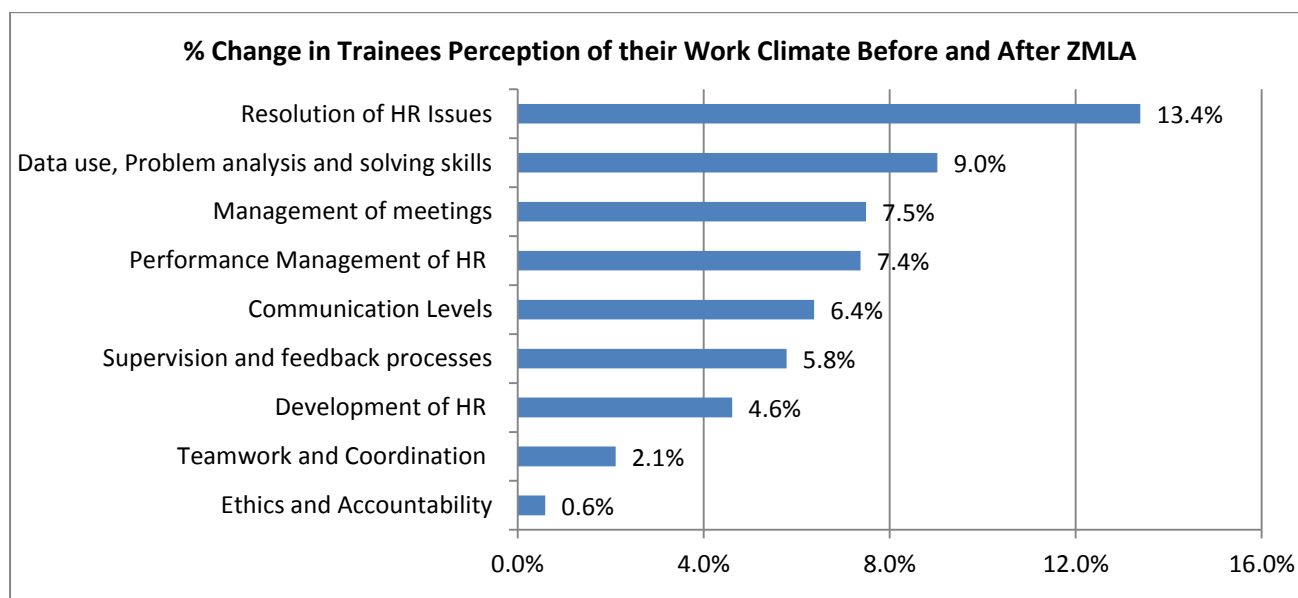
Table 10: Work Climate Survey Respondent Characteristics

	Demographic Characteristic	Pre-ZMLA	Post-ZMLA
District Medical Office	Chilubi	7	6
	Chongwe	7	10
	Lundazi	6	6
	Masaiti	16	9
	Nchelenge	7	6
	Shangombo	12	2
	Sinazongwe	9	8
	Zambezi	9	11
	Job Category		
	Administrative	26	20
	Managerial	9	7
	Technical (clinical)	23	15
	Technical (non-clinical)	6	9
	Technical (public health)	9	7
ZMLA/None ZMLA	ZMLA Participant	47	36
	Non ZMLA Participant	26	22
Gender	Female	13	14
	Male	60	44
	Total	73	58

Note: Administrative cadres included finance, administration and HR officers. Technical non-clinical category included planners and strategic information cadres. Technical public health included public health officers, health promotion officers, surveillance officers and environmental health officers.

Survey results show that respondents perceived improvements in the workplace environment, which were most prominent for human resource management issues, and the least prominent for ethics and accountability. The calculated before and after percentage change for work environment themes ranged from 5.8% to 13.4% as shown in F, but were only statistically significant for the resolution of HR issues ($p < 0.05$ at 5% significance level).

Figure 8: Evaluation of Work Climate Survey



Note: For detailed analyses on individual items analysed in the workplace survey, please refer to:

- Annex 8: Phase II Work Climate Survey Mean Scores Before and After ZMLA Training,
- Annex 9 : Phase II Work Climate Survey Independent Samples Test
- Annex 10: Work Climate Survey Themes.

HR Performance Management

The survey showed that ZMLA had improved trainees' understanding of the internal annual performance appraisal system (APAS). The ZMLA human resource module covered the use and application of APAS in detail. Qualitative findings revealed perspectives from informants who shared that their managers started applying APAS in their workplaces after ZMLA training. Many trainees who came from districts or provinces where the top managers were not ZMLA trained complained of delays in being appraised and wished their managers also trained in ZMLA.

"We are now doing APAS, though not all staff are trained. With the few who were trained through ZMLA, we have been helping others to make individual work plans. There were a number of staff who were not confirmed but now some of them have been confirmed after completing their APAS." ZMLA trainee Chongwe

Respondents explained that ZMLA had made it easy to understand APAS. In one district health team visited, it was reported that all employees had commenced the use of APAS. It was observed by the evaluation team that workplaces that had not fully implemented APAS had managers that had not undergone ZMLA training.

Meetings

Qualitative interviews reported improvements in the meeting culture and a greater appreciation for the importance of meetings. Almost all interviewees confirmed that the manner in which they now conducted meetings had improved after the ZMLA training. The workplace climate survey findings show that the way meetings were conducted in the workplace was amongst the top three work environment themes that were most improved post-ZMLA training. Meetings were brief and to the point and included action items and responsible individuals.

".....We have changed how we hold meetings. What we have started doing is that before a management meeting, we ask for departmental inputs ...then set up an agenda with time allocation for each agenda item. If you want something discussed, it has to be sent early so that it is included in the agenda. We also circulate the agenda before each meeting. At the end of the meeting there are action points with responsible people clearly shown... this was not the case before ZMLA" ZMLA trainee, Chongwe

Shared Vision, Teamwork and Coordination

Interviewees reported that a shared vision was more emphasized following ZMLA training. Trainees had a greater understanding of their role and how it supported the shared vision. Improvements in management accountability and ability to delegate were also noted.

"One of the things that has changed is [that there is] at least more coordination between the members at the district health office here and more importantly, being able to document whatever we discuss in management and having action points, and following those up. We have reached a point now where almost everyone knows about management and you can easily delegate." ZMLA trainee, Nchelenge

Improvement in shared vision, team work and coordination seemed to have improved more in work places where the overall manager and his/her were trained in ZMLA.

"Training of top leadership was extremely key. It was key because it also made sure that the leadership understands what's happening. I think it puts the whole system of the health sector into perspective and I think it was really strategic to train provincial medical offices and clinical care specialists indeed the people that may not have been trained in the concepts may not really appreciate them" ZMLA mentor and trainee, Solwezi.

Financial Management and Accountability

Although financial management and accountability was not explicitly covered in the workplace climate survey, qualitative interviews indicated that for some work places, appreciation of finance systems among trainees improved post ZMLA training. In some work places, trainees who were not financial managers appreciated the role of the accountant more and the need to adhere to financial regulations as shared below:

“The ZMLA training drew participants from all departments. The biggest challenge we had was managing the human resource, the people from different units. As accounts unit, I think we are very knowledgeable with financial regulations, but that was not the case with people from other departments. After the ZMLA training we are seeing great improvement and compliance to financial regulations, there is now strict adherence to budgets. People here were not very comfortable with the bureaucracy we have in accounts, but after the training they appreciate and they understand the importance of observing these controls.” ZMLA trainee, Kasama

Managers were said to have been made aware that finance documentation should be made available to support payout of funds before they could append their signatures. There were less audit queries in one site visited:

“There is great improvement and this is evidenced by the reduction in the number of audit queries. So our financial management has greatly improved, audit queries have gone down.” ZMLA trainee, Chipata

However, quantitative analysis of the workplace climate survey showed that ethics and accountability showed the least improvement after ZMLA trainings across all ZMLA worksites.

3.3 Overall Conduct of ZMLA

To assess the aspects of the training program which were most useful or require amendment, analysis of routinely collected participant feedback data was triangulated with themes generated from key informant interviews. Key themes and aspects of the program arising from the analysis provided perspectives on participant commitment, the quality of workshop sessions, mentorship activities, case study experiences, levels of stakeholder engagement and implications for sustainability of the program.

3.3.1 Participant Commitment

Participants’ commitment to ZMLA was not as high in the first phase as in the second phase. This was, in part, because ZMLA was not well known to MOH management teams, and it was not originally designed to be NIPA certified. To reduce phase I attrition through NIPA certification, qualitative findings suggest that ZMLA became better known and participants’ enthusiasm for and commitment to the course increased.

“In the initial stages when they didn’t know what the training entailed, there was a bit of resistance and some people couldn’t complete the course. Now everyone wants to get ZMLA training because they have discovered that you get the knowledge and a certificate that you can use elsewhere” Course implementer, Northern Province

Attrition from as much as 32% in the first phase was reduced to just 8% in the second phase of implementation. The reduction of dropout rates may also have been due to the reduced length of the

program by merging workshop and mentorship sessions into the same week rather than spacing sessions four weeks apart as was originally designed.

From all interviews conducted, it was apparent that ZMLA was popular among participants. One reason given across all cadres was that ZMLA was filling an important gap in leadership and management knowledge and skills among health workers. The course was said to increase self-confidence in leaders and provided them with practical tools to address everyday challenges.

The fact that the course was officially certified by NIPA, made it even more valuable for participants. They admitted that they could use the knowledge gained in their current role, but also to apply for promotion within their current organisation or elsewhere. The popularity of the course among health workers who had not undergone ZMLA training increased when NIPA started awarding diplomas. Participants who had dropped out of the course in phase one came back to complete the course in phase two when they realized that they would get a diploma at the end of the ZMLA course.

“Yes, we had a situation where some people would be given a certificate of participation because they missed out sessions and they wanted to upgrade themselves to a higher diploma, so they came to join the second phase” Course implementer

3.3.2 Content and Delivery of the Course

More than 2000 feedback responses from post training evaluation forms showed that over 95% of all respondents either agreed or strongly agreed that the training content was relevant to daily work. Similarly over 90% of respondents found the workshop delivery approach and materials to be of high quality. Most importantly, almost 99% of all respondents reported that they would recommend the course to a colleague (Table 11 and Note: *Indicates higher levels of non-response.

Table 12). Quantitative data analysis of feedback forms showed that the most appreciated aspect of the training was project management, human resource management and strategic information management. These findings were consistent with the management, leadership and workplace survey findings previously presented.

Table 11: Participant Perceptions of the Quality and Relevance of Workshops

Statement	% Who Agree or Strongly Agree	Total Number of Responses (n)
I would recommend this workshop to a colleague.	98.8%	2007
The knowledge and skills taught in the modules will be useful in my daily work.	97.9%	2012
The level of module content was appropriate.	97.4%	2017
The examples provided in modules were relevant and appropriate.	95.9%	2023
The workshop format was conducive to a positive learning experience.	95.2%	1991
The materials for the case study were appropriate and well-prepared	90.7%	1672*

Note: *Indicates higher levels of non-response.

Table 12: Participants Perceptions of the Quality and Relevance of Training Modules

Module	% Rating Quality as “Good” or “Very Good”	% Rating Relevance as “Good” or “Very Good”	Total Number of Respondents (n)
1. Problem Definition	94.1%	96.9.5%	459
2. Strategic Planning Frameworks	87.6%	95.0%	508
3. Project Management Fundamentals	98.1%	99.5%	413
4. HR Management	97.9%	98.4%	571
5. Finance Management	94.9%	96.2%	564
6. Strategic Information Management	96.7%	98.5%	391*

Note: *Two cohorts of feedback forms (~60) were misplaced in the field during implementation hence responses are lower.

Case Studies

Although only 4 out of 17 case study groups implemented their plans from the first phase of implementation, the majority of respondents felt that implementation of case studies was crucial in ensuring trainees actually translate ZMLA management tools and techniques into everyday practice. Case studies were seen as an opportunity to apply knowledge in real and practical settings. Most case studies were designed to address actual problems which needed solutions. Participants recognized that case studies were in line with the call for operational research which the Ministry of Health is advocating.

"I think for me.... it was very good. They taught us how to identify the problems, how to [come up with] objectives, activities and the GANTT chart. we don't do them every time, it's mostly clinical issues... Some of these things like how to do a problem statement, it was very good, also how to do [be] SMART, it was very good and well done. It also taught some of us some computer [skills] as I didn't know for example how to do the GANTT chart, but after the ZMLA I can do it nicely, but also the case study for me was very good, you easily identify a problem and come up with a study."

Qualitative interviews highlighted several factors that contributed to non- implementation of case studies in the first phase, this included conceptual weaknesses in the case study approach, composition of case study teams and miscommunication on the practicality and funding of such case studies.

"The mix of group members for case studies was crucial. In the first cohort we noticed that the mixing of Central, Provincial and district participants did not work well when it came to coordinating activities. In later trainings, case study group members were coming from the same district. We have since noticed better coordination and team work in implementing case studies" Course implementer

Subsequent phases of trainees were made aware in advance that their case studies would not be funded by ZMLA and were asked to look for ways and resources to implement their own case studies. Some phase II participants interviewed reported that they had managed to implement their case studies despite the limited time that had lapsed since completing their training. For example, key informants from Lundazi were among few participants who claimed that they had implemented case studies despite the shortened course duration in phase two.

"Here in Lundazi, we have done very well. All the ZMLA trainees have implemented their studies...We had to review our action plans again, so we could include some of the problems identified through our case studies." ZMLA trainee, Lundazi

3.3.3 Mentorship

While the intention of the mentorship strategy was good, it also had shortfalls and challenges. ZMLA provided training to all potential mentors. This was aimed at generating a pool of MOH mentors that would support the ZMLA trainees from within the Ministry of Health.

Long-term mentorship and follow up faced major challenges and affected ZMLA trainees from all phases. Some mentors only received partial training and did not grasp the ZMLA concepts to the same extent as those who attended all four Trainer of Mentor (ToM) sessions. Because a third of mentors seconded by the Directorate of Technical Support were high ranking, many of them did not have time to complete the course or mentor. It was therefore clear that about half of the mentors trained were not able or available to

mentor others. Subsequently, such mentors were not invited to provide mentorship, and a smaller more flexible team of mentors was eventually established. Before the core group of mentors could be established, the mentorship approach in phase I experienced some teething challenges.

Some mentors did very well and learned through active supervision, while others struggled. Twenty one (21) mentors who trained as mentors and had also completed the full ZMLA course as trainees felt better equipped to be mentors. Mentors who were not trained in ZMLA first felt that it would have been better for them to complete the course and receive similar qualifications as their students before becoming mentors.

Unlike in the second phase of implementation, mentors were not strictly assigned to particular training cohorts in the first phase. This meant that participant would receive advice from as many as three different mentors in the course of training. This resulted in reports of conflicting advice from different mentors given to participants as shared by one participant from Nyimba which contributed to mistrust and confusion during the mentorship process.

“There was this time when we had already done about 70% of the case study and this person (mentor) comes in and says this is not the way it should be done. So that was more counterproductive and so we had to start afresh defining the problem before coming up with solutions.” ZMLA trainee, Nyimba

As outlined in the subcontract between BRITE and ZISSP, 30% of management specialist time was to be allocated to mentorship and follow up of trainees. However, qualitative findings suggest that this was dependent on his or her individual commitment. Management specialists noted limited mentorship funding as a major obstacle to mentorship follow-ups, especially for trainees in areas far from provincial headquarters.

Ministry of Health mentors from the national level also complained that they felt that they had let down trainees as they also could not follow up groups that they were supposed to mentor. It was clear that trainees would have loved to see more of their mentors, both from provincial and national level, in their workplaces and during case study implementation. In the program design, one on one mentorships were envisioned to be conducted face to face by ZISSP Management Specialists. As shared by both MoH and ZISSP mentors, face to face mentorships were not feasible. Most contact between trainees and mentors was limited to phone calls and e-mails.

The absence of local mentorship was also associated with diminishing effects of ZMLA.

“The mentorship was a bit weak, there is need to improve in this area... it is a good idea but it has not worked well. I have not been in touch with my mentors after the group mentorship...you know we need guidance in the field” ZMLA trainee, Mansa

3.3.4 Engagement of Stakeholders

Apart from ordinary participants or ZMLA students, other key stakeholders (relevant to the health sector) who directly or indirectly contributed to the smooth implementation of ZMLA included representatives from Non-Governmental Organisations (NGOs), the church and traditional leaders. Their views during interviews were unanimous, for instance, they all indicated that ZMLA course had allowed them to work better with both ministries responsible for health (MoH and MCDMCH). For example, the study indicates that there was better coordination and synergy in Eastern province where the Catholic Church, a local traditional leader and MOH embarked on a joint intervention to improve cervical cancer screening. The chief used his position to educate the community while the church used church services to share information on the importance of cervical cancer screening. The two ministries (MOH and MCDMCH) carried out cervical cancer screening. They had since noticed improvement in cervical cancer screening in target communities.

“We had a problem of low coverage for cervical cancer screening. We sat down with our stakeholder from the Catholic Church and the local chief. Both of them were part of the ZMLA training. We divided roles whereby the church was telling members about the importance of cervical cancer screening and the chief did the same to his subjects. We have since observed an increase in the number of women coming for cervical cancer screening” ZMLA trainee, Chipata

Many MOH or MCDMCH staff who attended training sessions together with traditional leaders, NGO and church representatives appreciated and valued their contributions which were outside the public service but critical for the health sector. However, the main concern from these key stakeholders was that they were not usually consulted on the course timings and these often clashed with their programs. They also felt that the ZMLA program was more tailored to public health and medical interventions with no content targeted at the private sector. It was also noted that the number of stakeholders invited for trainings was low. This was attributed to the limited spaces which were given priority to MOH/MCDMCH staffs by course organizers.

The importance of buy in from top leadership

Our findings showed that provinces and districts where the top manager had undergone ZMLA training were more likely to practice and apply ZMLA principles. In places where the PMO and DMO had undergone ZMLA, efforts were made to send staff not trained in ZMLA to subsequent phases of trainings. Participants whose team leaders were not trained in ZMLA felt that their new skills were not fully utilized in their team as shared by one respondent:

“What pains is that I have gotten this extra skill but nobody here is able to recognize it...I wish our boss had done ZMLA course, he will appreciate my skills much more” ZMLA trainee, Mansa

3.3.5 Other Management and Leadership Courses

Most trainees (55 of 62) reported that they never attended other management courses besides the ZMLA. However, a few (generally older) trainees had attended courses operated by NIPA, PADESA, and follow on Zambia Prevention Care and Treatment program (ZPCT II) on leadership and management in the past. Those trainees noted the major differentiator of the ZMLA is that it is well adapted and tailored to the current Zambian health context. The other strength was that ZMLA targeted management teams rather than individuals. It was run in short modules and did not take health workers away from their workplace for too long. This was in contrast to the course which was run by NIPA and PADESA which targeted individual health workers and was a full-time course requiring health workers to leave their work stations.

“The PADESA and NIPA course was very long and was more theoretical. This was very different from ZMLA which is very practical and hands-on. It takes the form of adult learning with opportunity for mentorship and group learning” Course implementer

“I attended a ZPCT governance workshop for managers ... it was more on governance but for the ZMLA, we went straight into even how to do the frameworks properly....how to line up your objectives. We also learnt how to make up SMART objectives without having to crack your head throughout the night. There is just a way it flows.” ZMLA trainee, Nchelenge

3.3.6 Sustainability

This study looked at ways in which the ZMLA course could be made more sustainable. It was clear from the responses that most participants wanted ZMLA to continue in its current form and even extend it to other cadres at health facility and community levels. Unfortunately, the course was perceived as a free donor supported program. Over half of the respondents expected to be paid allowances for attending the course. Interestingly, a majority of respondents (65 of 70) admitted that the way the course was run was expensive

and unsustainable. Yet no discussions were openly held with participants or districts on what they could contribute to the cost of running the course.

It was suggested that costs could be cut by using government infrastructure rather than private lodges to deliver the program. However, respondents felt that the course must remain as practical and short as it is and be done in the districts to avoid taking health workers away from the workplaces for a long time.

Trainees also felt that the mentorship component should continue, even if the course was handed over to NIPA. They suggested institutionalization of ZMLA as was the case with PADESA and the NIPA health management course. NIPA was one institution that most respondents felt had the capacity to run such a course followed by the University of Zambia.

Willingness to pay

A total of 69 out of 70 respondents interviewed suggested that more staff were likely to pay for the ZMLA course if the program was made mandatory by MoH/MCDMCH or even the Health Professions Council before assuming management or leadership roles. In addition, ZISSP Management Specialists in the provinces indicated that they received frequent requests on ZMLA about how one could enroll, suggesting that ZMLA certification is in demand.

“It is possible to make individuals pay for ZMLA, but the catch is to make it mandatory for certain positions. This will force everyone to get the ZMLA qualification; it all depends on government commitment” ZMLA mentor, Mansa

It was suggested by almost all respondents who were participants that if the ZMLA course was made a mandatory for staff taking up leadership roles, this will be a motivation for those aspiring for leadership positions to pay for the course either through their institutions or personally. When asked, most (47 out 70) participants believed that the course could be supported through inclusion in local action plans to include ZMLA in their annual action plans with clear budget lines.

During interviews, the interviewee probed further and asked individual trainees how much they would be willing to pay for the ZMLA course as a tuition fee contribution. The amount suggested seemed to depend much on the health worker cadre. Medical doctors suggested the highest figures. Amounts suggested ranged from 1,500 to 30,000 ZMK for the whole course. NIPA students currently pay 3,500 to 7,000 ZMK for a level diploma course. An alternative perspective from some respondents was that the introduction of tuition fees and self-sponsorship should be done with caution. There is a risk that tuition fees could leave out those most in need of ZMLA training.

4 Conclusion

The management and leadership self-confidence survey results and case study scores show that ZMLA contributed to health workers perceptions of improved leadership and management skills. In addition, a significant proportion of ZMLA trainees reported that the ZMLA program had improved their job motivation levels. In terms of course content and knowledge retention, the evaluation results indicate that participants performed best in the area of creating relevant and sound monitoring and evaluation frameworks. Monitoring and evaluation was one of the most appreciated modules and was correctly applied in most case study project plans graded. Respondents also perceived positive changes in the resolution of Human Resource (HR) issues in their workplace. The greatest perceived improvements in the workplace were reported by participants whose senior managers were also trained in ZMLA.

However, about half of the teams trained had difficulties in developing model of care frameworks in supply chain management, planning for delegation and developing job descriptions. Despite participants appreciating and applying monitoring and evaluation concepts successfully, only half of all district level case study projects were implemented. Even participants from teams that managed to implement their case studies reported that they did not monitor their projects. Furthermore, the mentorship and follow up of case study projects was reported as weak. Due to evaluation study limitations, the impact of case studies on service delivery could not be assessed.

The current model of conducting training and mentorship workshops near trainee facilities and in combined sessions is practical and minimally disruptive for trainees and their employers. Most participants reported that they would recommend the training to colleagues and other cadres at health facility or community level. In summation, top leadership in the ministries responsible for health, participants, mentors, and trainers interviewed openly appreciated the program and reported that they would like ZMLA to continue.

5 Recommendations

In response to the conclusions presented above, the recommendations to ZMLA program implementers are presented below.

- It is recommended that the ministries responsible for health (MoH and MCDMCH) should compel health program managers and supervisors at all levels of the organisational structure to undergo the ZMLA training.
- The ministries responsible for health (MoH and MCDMCH) with support from partners should seek to support the institutionalization of ZMLA with local academic institutions such as the National Institute for Public Administration (NIPA) and University of Zambia. District institutions should budget for ZMLA tuition fees for managers in need of management and leadership skills through their annual action plans. In the long term, ZMLA should be included in clinical training courses. For clinicians with known ambitions of managing health institutions, ZMLA should be offered as an optional in-service training course at eligible training institutions across the country.
- Going forward, BRITE should design a more robust evaluation approach to effectively track the impact of ZMLA trainings. Experimental or quasi-experimental approaches such as clustering and randomization to intervention and control groups for instance could demonstrate attribution of ZMLA activities to changes in service delivery. Such knowledge would be needed to inform scale up of the program across the country.
- As BRITE is the originator of the curriculum, BRITE should revisit ZMLA content relating to the development of models of care in supply chain management, delegation and the development of health worker job descriptions. More time should be spent during training sessions to explain these concepts. Additionally, mentorship should emphasize more on the concepts that case study teams struggle to grasp and apply.
- Going forward, the ZMLA program should improve the follow-up and mentorship of participants after group mentorship sessions to support case study development.
- Although a key result area for ZMLA was to develop mentorship and coaching capacity in the ministries responsible for health, mentors should only be allowed to mentor colleagues after they themselves have completed the program.
- In order to translate theory into practice, NIPA should request that participants implement case study projects in order to graduate. Trainees should be encouraged to leverage off other health initiatives and programs in their districts to support their case studies.

Annex 1: Case Study Score Card

Training Location of Cohort: _____

Total Score: _____ /100

Project Title: _____

Participant ID: _____

Please score each case study based on the listed factors (in brackets) below to prove the level of application of taught ZMLA tools. A score of 0 means that factors are not evident and 5 factors are most present.

#	Scoring Factors To Consider By Content Taught In ZMLA	Score:	0	1	2	3	4	5	Score
	Strategic planning and problems tools have been applied to ID root causes (atomization diagram, PESTLE, McKinsey 7S, SWOT/internal and external, 5Ps)		☐	☐	☐	☐	☐	☐	
	Solutions identified and prioritized (Well numbered solutions, solutions result from problem analysis, feasibility assessment given resources – use of matrix or 80/20 or CEA)		☐	☐		☐		☐	
	Model of care illustrated (presence of flow diagram, well-articulated direct functions)		☐	☐				☐	
	Direct and Cross cutting functions listed (either in diagram or in a table) (Indirect objectives: Finance, HR, Governance, M&E, etc, Direct objectives :Address problems <i>from analysis/prioritisation</i>)		☐	☐		☐		☐	
	SMART Objectives developed (Specific, measureable, achievable, relevant and time bound. They must be directly as a result of findings in the problem analysis - penalise by 1 if not)		☐	☐	☐	☐	☐	☐	
	Work plan / Gantt Chart/ Critical Path Evident (Listed goal, objectives, activities, period of implementation, critical path must be evident in the shaded part of the gantt chart or done elsewhere)		☐	☐	☐	☐	☐	☐	
	Responsible People or Assigned Roles in Gantt chart relate to Organisational Structure?		☐					☐	
	Organisational Structure for the Project (Could be normal work organogram with relevant staff, or matric reporting structure, depending)		☐			☐		☐	

	Job description clearly defined for all key players in the organisational structure (job title, job summary, key responsible areas, key reporting lines, qualifications)	☐	☐	☐	☐	☐	☐	
	Meeting schedule developed (list of suggested dates)	☐					☐	
	Decisions rights matrix developed with all stakeholders considered	☐	☐	☐	☐	☐	☐	

#		0	1	2	3	4	5	Score
	Change management or Risk Analysis Evidence: Change management process considered.	☐					☐	
	Budget – all activities costed for: (clearly presented, all activities costed, unit costs listed, quantities listed, and cost effective – value for money, realistic and prioritized)	☐	☐	☐	☐	☐	☐	
	Subtotals for the budget used and allocated amounts realistic and able to achieve goal?	☐			☐		☐	
	M and E Framework: (Is the framework clearly presented?)	☐					☐	
	Inputs and Outputs are linked to the activities	☐				☐		
	Outcome and Impact Indicators linked to Objectives and Goal of the Project?	☐				☐		
	Reporting Frequency achievable	☐				☐		
	Data Sources Identified	☐				☐		
	Data Collection Methods or Tools clearly listed	☐				☐		
Total Score:								

Additional comments:

Annex 2: Participant Feedback Form

Name of Participant (optional)

Rating Scale				
1=Very Poor	2=Poor	3=Average	4=Good	5=Very Good

A. Module and Case Study Evaluation

This workshop was intended to enhance management and leadership knowledge and skills, and this form will let us know how well we achieved our goal. Please evaluate the modules and case study on *Quality* and *Relevance* according to the rating scale shown above by circling the number that corresponds to your opinion. Furthermore, we are very interested in your feedback, if you have additional comments, please speak with us.

Training Component	Quality	Relevance
Module 3 - Program and Project Management Fundamentals and Organisational Structure	1 2 3 4 5	1 2 3 4 5
Case Study	1 2 3 4 5	1 2 3 4 5

B. Presenter Evaluation

Please evaluate each presenter in the following areas by circling the number which indicates your level of satisfaction. Use the rating scale shown above

Presenter:	Knowledge/Expertise	Ability to explain key concepts	Ability to answer questions clearly
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

C. Content Evaluation

Please indicate your level of agreement with the following statements pertaining to the workshop content.

Rating Scale 1 = Strongly Disagree 2 = Disagree 3 = Neither Agree/Disagree 4 = Agree 5 = Strongly Agree

1. The level of the module content was appropriate.	1	2	3	4	5
2. The examples provided in modules were relevant and appropriate.	1	2	3	4	5
3. The knowledge and skills taught in the modules will be useful in my daily work.	1	2	3	4	5
4. The materials for the case study were appropriate and well-prepared.	1	2	3	4	5
5. The case study provided an opportunity to apply knowledge and skills covered in the modules.	1	2	3	4	5
6. The case study provided key insights that I can apply within my daily work.	1	2	3	4	5
7. The workshop format was conducive to a positive learning experience.	1	2	3	4	5
8. There was adequate time for discussion, questions and answers.	1	2	3	4	5
9. I would recommend this workshop to a colleague.	1	2	3	4	5

D. Additional Feedback

1. Please provide one example of something you will do differently as a result of this workshop.

2. What would you change about this workshop to make it more useful?

3. What was the most useful concept, skill, framework, or tool that you learned?

4. Any additional comments?

Annex 3: Leadership and Management Tool

PART I:

System level:

- ☐ National,
- ☐ Provincial,
- ☐ District,
- ☐ Facility
- ☐ Other (Specify)_____

Name of Organisation_____ (e.g. Mwinilunga DMO,
Solwezi PMO or FHI360)

Province Name:_____

District Name:_____

Highest education qualification:_____

Profession:_____

Current Job Title:_____

Number of years served in the current Job:_____ (Years)

Participant ID: _____ Date: _____

Pre-training ☐

Post-training ☐

PART II:

Instructions: Following is a list of different leadership and management tasks/activities. For each one, rate how confident you are in performing the task as of now. Rate your degree of confidence by recording a number from 0 to 10, using the scale given below. If you feel that a statement is not relevant to you and/or your job, you may write “N/A” next to the statement in place of a rating.

0 1 2 3 4 5 6 7 8 9 10

Cannot do at all Moderately certain can do Certain can do

How confident are you in your own ability to perform each of the following tasks?	Self-Rating (0-10, or N/A)
Provide constructive feedback on a regular basis, in a way that helps those I supervise improve their performance.	
Use non-monetary strategies (such as praise, public recognition, and reminding staff of the importance/value of their work) to motivate those I supervise.	
Identify staff development needs and work with them to plan appropriate trainings, mentoring opportunities, or other ways of addressing the needs.	
Chair productive and efficient meetings that begin and end as scheduled.	
Identify the most important “root” or underlying causes of specific challenges within my unit/department that affect the healthcare system (such as high maternal mortality, or ART non-adherence).	
Prioritize among possible solutions/interventions to address healthcare challenges, to identify and implement those that will have the highest impact with fewer resources.	
Engage and maintain effective communication with internal and external stakeholders (including other departments or levels within the MOH, community members/organisations, NGOs, and other ministries) when planning and implementing strategies to address healthcare challenges.	
Develop detailed work plans that specify timelines, milestones, and roles/responsibilities of specific people, to address specific challenges or achieve certain goals (such as increasing use of family planning services, improving access to EMCOR, etc.).	
Regularly check in on progress, and hold members of my organisation/unit accountable for following through on objectives and activities from our work plan or Action Plan.	
Ensure that projects I oversee are carried out within the allotted budget, time and resources.	
Promote teamwork and collaboration among staff and different units in my organisation.	

How confident are you in your own ability to perform each of the following tasks?	Self-Rating (0-10, or N/A)
Communicate well with staff, to ensure that they understand the overall picture (strategic vision) of our unit and are informed about any changes that may be introduced to our organisation.	
Follow up to facilitate prompt resolution of staff HR issues, such as promotion and training.	
Ensure that staffs reporting to me have up-to-date job descriptions, with which they are familiar, and understand reporting lines within our unit/department.	
Take appropriate corrective action to address staff performance problems as soon as I am aware of them.	
Identify and apply cost-effective approaches to maximize use of the organisation's resources.	
Create realistic program or project budgets based on historical data, current cost information, and other relevant information sources.	
Effectively interpret and use the data available to me (such as from HMIS, performance assessment reports, and other sources) to guide planning, decision-making, and quality improvement.	
Create reports, charts and graphs which succinctly and effectively communicate relevant data to stakeholders.	
Analyse the delivery model for health services to identify the major gaps and bottlenecks affecting the quality of care and health outcomes.	
Identify and implement necessary changes in delivery models for health services to address or correct gaps and bottlenecks affecting quality of care and health outcomes.	
Use lead times, inventories, and other supply logistics information to ensure that stock levels of critical supplies remain adequate at all times.	

PART III:

Instructions: For the next set of statements, please think about your current situation at work. Circle the number (from 1-5) that best describes how you feel, using the scale given below.

1 2 3 4 5
Strongly disagree Disagree Neither agree/ disagree Agree Strongly agree

I feel I have been adequately trained to meet the management and leadership challenges I encounter in my position.	1	2	3	4	5
I feel positive and up most of the time I am working.	1	2	3	4	5
I enjoy taking on new challenges that arise in my position.	1	2	3	4	5
I am optimistic about the future success of my organisation.	1	2	3	4	5
I am optimistic about my own future success with the organisation.	1	2	3	4	5
I feel more committed to a career with the organisation this year than I did a year ago.	1	2	3	4	5

Annex 4: Workplace Climate Tool

Workplace climate survey questioner

PART I:

System level:

☐ National, ☐ Provincial, ☐ District, ☐ Facility ☐ Other (Specify)_____

Name of Organisation_____ (e.g. Mwinilunga DMO,
Solwezi PMO or FHI360)

Province Name:_____

District Name:_____

Highest education qualification:_____

Profession:_____

Number of years served in the current workplace:_____ (Years)_____

Current Job Title:_____

Number of years served in the current Job:_____ (Years)

Have you been selected to participate in the Zambia Management and Leadership Academy (ZMLA)?

☐ Yes ☐ No ☐ Don't Know

Has your supervisor been selected to participate in the Zambia Management and Leadership Academy (ZMLA)?

☐ Yes ☐ No ☐ Don't Know

Gender ☐ Female ☐ Male

PART II:

Instructions:

For each statement below please circle the number that best corresponds to your response to the statement given.

In this office employees understand the organisational structure and reporting lines of their unit/department, and how their job functions relates to overall departmental objectives and goals

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
8 9 10

For most meetings called for in this office, agendas are circulated to all before the meeting.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

For most meetings called for in this office, minutes are circulated to all soon after the meeting, indicating follow-up items.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

The leadership here keeps staff well informed about what is going on with the organisation.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office, cooperation and teamwork between staff in different units is encouraged.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office, we are encouraged to use data to guide decision-making, priority-setting, and planning.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree											
In this office, we are encouraged to analyse problems carefully to understand root causes before deciding on solutions.											
Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree											
In this office formal individual performance appraisals are routinely conducted on an annual basis.											
Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree											
In this office supervisors provide constructive feedback to their assistants on a regular basis, to help improve job performance.											
Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree											
My contributions at work are acknowledged and appreciated.											
Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree											

My supervisor works with me to identify my training needs and ensure I get the training or mentorship I need to do my job effectively.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree											
---	--	--	--	--	--	--	--	--	--	--	--

At this office, when staffs attend trainings, effort is made to ensure that they apply what they have learned back at the job site.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office supervisors delegate challenging assignments to assistants, which helps them to develop their skills and expertise.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office when giving special assignments, supervisors clearly communicates expectations at the beginning and checks in on progress, without 'micromanaging.'

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office supervisors or unit leader regularly monitor progress and holds every staff accountable for following through on assigned tasks related to work plans.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office supervisors do everything in their power to help resolve HR issues (such as confirmation) in a timely manner.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office supervisors take appropriate corrective action when an employee is not performing well.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In this office supervisors maintains a high standard of ethics and accountability.

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

In general do you feel your work environment is better today than it was 9 months ago? Before yourself or workmates underwent the ZMLA training

Strongly Disagree 1 2 3 4 5 6 7 8 9 10 Strongly Agree

If any, please specify the positive changes you have observed in your work place in past 9 months associated to ZMLA training

What other improvement in your workplace climate do you wish to see that have not been implemented by management and work colleagues

Annex 5: Paired Samples Test (Mean Differences for Leadership and Management Tool)

Mean differences for leadership and management Self confidence				95% CI		
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	P value
Ability to manage and use information strategically	+1.450	1.664	0.132	1.189	1.710	0.000
Ability to manage finance	+1.263	1.383	0.108	1.049	1.477	0.000
Ability to manage human resources	+1.164	1.477	0.115	0.936	1.392	0.000
Ability to manage programs	+1.563	1.753	0.139	1.288	1.837	0.000
Ability to problem solve	+1.624	1.493	0.119	1.389	1.860	0.000
Ability to build teams and manage change	+1.363	1.485	0.116	1.134	1.592	0.000

Mean differences for leadership and management Self-confidence (Detailed Variable List)	Mean difference	Std. Deviation	Std. Error Mean	95% CI		P value
				Lower	Upper	
Provide constructive feedback on a regular basis, in a way that helps those I supervise improve their performance	+1.236	1.632	0.163	0.621	1.721	0.00
.Use non-monetary strategies (such as praise, public recognition, and reminding staff of the importance/value of their work) to motivate those I supervise.	+1.174	1.984	.159	0.859	1.489	.000
.Identify staff development needs and work with them to plan appropriate trainings, mentoring opportunities, or other ways of addressing the needs.	+1.556	2.246	.187	1.186	1.926	.000
Chair productive and efficient meetings that begin and end as scheduled.	+1.115	1.809	.149	0.821	1.409	.000
Identify the most important “root” or underlying causes of specific challenges within my unit/department that affect the healthcare system (such as high maternal mortality, or ART non-adherence). -	+1.526	1.884	.162	1.205	1.847	.000
Prioritize among possible solutions/interventions to address healthcare challenges, to identify and implement those that will have the highest impact with fewer resources.	+1.476	1.928	.159	1.162	1.790	.000
.Engage and maintain effective communication with internal and external stakeholders (including other departments or levels within the MOH, community members/organisations, NGOs, and other ministries) when planning and implementing strategies to address	+1.411	1.856	.154	1.107	1.715	.000
Develop detailed work plans that specify timelines, milestones, and roles/responsibilities of specific people, to address specific challenges or achieve certain goals (such as increasing use of family planning services, improving access to EMCOR, e	+1.713	2.131	.174	1.370	2.057	.000
.Regularly check in on progress, and hold members of my organisation/unit accountable for following through on objectives and activities from our work plan or Action Plan	+1.669	1.980	.160	1.354	1.984	.000
Ensure that projects I oversee are carried out within the allotted budget, time and resources.	+1.059	1.739	.141	0.781	1.338	.000
Promote teamwork and collaboration among staff and different units in my organisation.	+0.968	1.559	.125	0.721	1.215	.000
Communicate well with staff, to ensure that they understand the overall picture (strategic vision) of our unit and1 are informed about any changes that may be introduced to our organisation	+1.1935	1.7732	.1424	0.9122	1.4749	.000
.Follow up to facilitate prompt resolution of staff HR issues, such as promotion and training.	+1.318	2.008	.194	0.933	1.703	.000
.Ensure that staff reporting to me have up-to-date job descriptions, with which they are familiar, and understand reporting lines within our unit/department	+1.603	2.151	.188	1.231	1.975	.000
Take appropriate corrective action to address staff performance problems as soon as I am aware of them	+1.3676	1.7881	.1533	1.0644	1.6709	.000
.Identify and apply cost-effective approaches to maximize use of the organisation’s resources.	+1.135	1.628	.131	0.877	1.394	.000
.Create realistic program or project budgets based on historical data, current cost information, and other relevant information sources.	+1.190	1.939	.160	0.874	1.506	.000

.Effectively interpret and use the data available to me (such as from HMIS, performance assessment reports, and other sources) to guide planning, decision-making, and quality improvement.	+1.348	1.708	.137	1.077	1.619	.000
.Create reports, charts and graphs which succinctly and effectively communicate relevant data to stakeholders.	+1.565	2.117	.175	1.220	1..910	.000
Analyse the delivery model for health services to identify the major gaps and bottlenecks affecting the quality of care and health outcomes.	+1.875	1.950	.162	1.554	2.196	.000
Identify and implement necessary changes in delivery models for health services to address or correct gaps and bottlenecks affecting quality of care and health outcomes.	+1.730	2.024	.173	1.388	2.072	.000
.Use lead times, inventories, and other supply logistics information to ensure that stock levels of critical supplies remain adequate at all times.	+1.667	1.934	.170	1.330	2.004	.000
I feel I have been adequately trained to meet the management and leadership challenges I encounter in my position.	+1.486	1.232	.101	1.286	1.687	.000

Job Motivation						
I feel positive and up most of the time I am working.	+0.595	1.016	.083	0.430	0.760	.000
I enjoy taking on new challenges that arise in my position.	+0..401	.791	.065	0.272	0.530	.000
I am optimistic about the future success of my organisation.	+0.177	.897	.074	0.031	0.323	.018
I am optimistic about my own future success with the organisation. Organisation.	+0.306	.911	.075	0.158	0.455	.000
I feel more committed to a career with the organisation this year than I did a year ago.	+0.581	.962	.079	0.425	0..737	.000

Annex 6: Percentage of Trainees Feeling Adequately Trained in Management & Leadership (Crosstab and Chi-square Test)

Crosstab (Phase II)

			Pre/Post-		Total
			Pre-test	Post-test	
I feel I have been adequately trained to meet the management and leadership challenges I encounter in my position.	Disagree/Neutral	Count	89	3	92
		% within Pre/Post-	57.4%	1.9%	29.6%
	Agree	Count	66	153	219
		% within Pre/Post-	42.6%	98.1%	70.4%
Total		Count	155	156	311
		% within Pre/Post-	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.150E2 ^a	1	.000	.000	.000
Continuity Correction ^b	112.302	1	.000		
Likelihood Ratio	136.629	1	.000		
Fisher's Exact Test					
Linear-by-Linear Association	114.581	1	.000		
N of Valid Cases ^b	311				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 45.85.

b. Computed only for a 2x2 table

Crosstab (Phase I)

			Survey type		Total
			Pre-test	Post-test	
I feel I have been adequately trained to meet the management and leadership challenges I encounter in my position.	Disagree/Neutral	Count	102	4	106
		% within Survey type	37.5%	1.5%	19.4%
	Agree	Count	170	270	440
		% within Survey type	62.5%	98.5%	80.6%
Total		Count	272	274	546
		% within Survey type	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.133E2 ^a	1	.000	.000	.000
Continuity Correction ^b	111.033	1	.000		
Likelihood Ratio	135.803	1	.000		
Fisher's Exact Test					
Linear-by-Linear Association	113.118	1	.000		
N of Valid Cases ^b	546				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 52.81.

b. Computed only for a 2x2 table

Annex 7: MLA Survey Themes

Themes		Code
Ability to manage and use information strategically		1
Ability to manage finance		2
Ability to manage human resources		3
Ability to manage programs		4
Ability to problem solve		5
Ability to build teams and manage change		6
Code	Variable	Variable Description
1	Pre_Qst18	Effectively interpret and use the data available to me (such as from HMIS, performance assessment reports, and other sources) to guide planning, decision-making, and quality improvement.
1	Pre_Qst19	Create reports, charts and graphs which succinctly and effectively communicate relevant data to stakeholders.
2	Pre_Qst10	Ensure that projects I oversee are carried out within the allotted budget, time and resources.
2	Pre_Qst16	Identify and apply cost-effective approaches to maximize use of the organisation's resources.
2	Pre_Qst17	Create realistic program or project budgets based on historical data, current cost information, and other relevant information sources.
2	Pre_Qst22	Use lead times, inventories, and other supply logistics information to ensure that stock levels of critical supplies remain adequate at all times.
3	Pre_Qst1	Provide constructive feedback on a regular basis, in a way that helps those I supervise improve their performance.
3	Pre_Qst2	Use non-monetary strategies (such as praise, public recognition, and reminding staff of the importance/value of their work) to motivate those I supervise.
3	Pre_Qst3	Identify staff development needs and work with them to plan appropriate trainings, mentoring opportunities, or other ways of addressing the needs.
3	Pre_Qst11	Promote teamwork and collaboration among staff and different units in my organisation.
3	Pre_Qst13	Follow up to facilitate prompt resolution of staff HR issues, such as promotion and training.
3	Pre_Qst14	Ensure that staffs reporting to me have up-to-date job descriptions, with which they are familiar, and understand reporting lines within our unit/department.
3	Pre_Qst15	Take appropriate corrective action to address staff performance problems as soon as I am aware of them.
4	Pre_Qst7	Engage and maintain effective communication with internal and external stakeholders (including other departments or levels within the MOH, community members/organisations, NGOs, and other ministries) when planning and implementing strategies to address healthcare challenges.
4	Pre_Qst8	Develop detailed work plans that specify timelines, milestones, and roles/responsibilities of specific people, to address specific challenges or achieve certain goals (such as increasing use of family planning services, improving access to EMOc, etc.).
5	Pre_Qst5	Identify the most important "root" or underlying causes of specific challenges within my unit/department that affect the healthcare system (such as high maternal mortality, or ART non-adherence).
5	Pre_Qst6	Prioritize among possible solutions/interventions to address healthcare challenges, to identify and implement those that will have the highest impact Analyse resources.
5	Pre_Qst20	Analyse the delivery model for health services to identify the major gaps and bottlenecks affecting the quality of care and health outcomes.
5	Pre_Qst21	Identify and implement necessary changes in delivery models for health services to address or correct gaps and bottlenecks affecting quality of care and health outcomes.
6	Pre_Qst4	Chair productive and efficient meetings that begin and end as scheduled.
6	Pre_Qst9	Regularly check in on progress, and hold members of my organisation/unit accountable for following through on objectives and activities from our work plan or Action Plan.
6	Pre_Qst12	Communicate well with staff, to ensure that they understand the overall picture (strategic vision) of our unit and are informed about any changes that may be introduced to our organisation.

Annex 8: Phase II Work Climate Survey Mean Scores Before and After ZMLA Training

	Pre Training				Post Training				% Change
	N	Mean	Std. Deviation	+/- CI	N	Mean	Std. Deviation	+/- CI	
In this office employees understand the organisational structure and reporting lines of their unit/department, and how their job functions relates to overall departmental objectives and goals	73	7.56	2.40	0.56	58	8.02	2.17	0.57	6.03%
For most meetings called for in this office, agendas are circulated to all before the meeting.	73	7.18	2.89	0.68	58	7.45	2.51	0.66	3.76%
For most meetings called for in this office, minutes are circulated to all soon after the meeting, indicating follow-up items.	73	5.40	2.89	0.67	58	6.07	2.69	0.71	12.45%
The leadership here keeps staff well informed about what is going on with the organisation.	73	7.52	2.40	0.56	58	8.00	2.43	0.64	6.38%
In this office, cooperation and teamwork between staff in different units is encouraged.	73	8.26	2.23	0.52	58	8.14	2.25	0.59	-1.48%
In this office, we are encouraged to use data to guide decision-making, priority-setting, and planning.	73	7.58	2.72	0.64	58	8.31	2.31	0.61	9.70%
In this office, we are encouraged to analyse problems carefully to understand root causes before deciding on solutions.	73	7.48	2.46	0.57	58	8.10	2.24	0.59	8.34%
In this office formal individual performance appraisals are routinely conducted on an annual basis.	73	5.95	2.79	0.65	58	6.74	2.84	0.75	13.39%
In this office supervisors provide constructive feedback to their assistants on a regular basis, to help improve job performance.	73	6.75	2.56	0.60	58	7.36	2.31	0.61	9.01%
My contributions at work are acknowledged and appreciated.	73	7.67	2.44	0.57	58	7.88	2.30	0.61	2.71%
My supervisor works with me to identify my training needs and ensure I get the training or mentorship I need to do my job effectively.	73	6.97	2.91	0.68	58	7.14	2.68	0.71	2.37%
At this office, when staff attends trainings, effort is made to ensure that they apply what they have learned back at the job site.	73	7.16	2.48	0.58	58	7.59	2.22	0.58	5.89%
In this office supervisors delegate challenging assignments to assistants, which helps them to develop their skills and expertise.	73	7.29	2.57	0.60	58	7.69	2.02	0.53	5.52%
In this office when giving special assignments, supervisors clearly communicates expectations at the beginning and checks in on progress, without micromanaging.	73	6.99	2.41	0.56	58	7.17	2.54	0.67	2.66%
In this office supervisors or unit leader regularly monitor progress and holds every staff accountable for following through on assigned tasks related to workplans.	73	7.30	2.45	0.57	58	7.12	2.46	0.65	-2.47%
In this office supervisors do everything in their power to help resolve HR issues (such as confirmation) in a timely manner.	73	6.30	3.12	0.73	58	7.41	2.59	0.68	17.65%
In this office supervisors take appropriate corrective action when an employee is not performing well.	73	7.11	2.58	0.60	58	7.67	2.12	0.56	7.92%
In this office supervisors maintains a high standard of ethics and accountability.	73	7.97	2.32	0.54	58	7.72	2.29	0.60	-3.12%
Overall	73	7.14	2.59	0.60	58	7.53	2.39	0.63	5.57%

Annex 9 : Phase II Work Climate Survey Independent Samples Test

Independent Samples Test (Equal variances assumed)

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% CI	
	F	Sig.	t	df	P-value	Mean Difference	Std. Error Difference	Lower	Upper
Data use, Problem analysis and solving skills	1.150	0.285	1.711	129	0.089	0.680	0.397	-0.106	1.465
Teamwork and Coordination	0.521	0.472	0.457	129	0.648	0.167	0.364	-0.554	0.887
Management of meetings	2.285	0.133	1.143	129	0.255	0.471	0.412	-0.344	1.286
Communication Levels	0.663	0.417	1.130	129	0.260	0.479	0.424	-0.360	1.319
Performance Management of HR (Appraisal and Recognition of contributions)	0.196	0.659	1.286	129	0.201	0.502	0.390	-0.270	1.274
Supervision and feedback processes	0.040	0.842	1.020	129	0.310	0.397	0.390	-0.373	1.168
Development of HR (Delegation and Training to develop skills and enhance productivity)	3.246	0.074	0.868	129	0.387	0.330	0.380	-0.422	1.081
Resolution of HR Issues	0.168	0.683	1.609	129	0.110	0.796	0.495	-0.183	1.775
Ethics and Accountability	0.695	0.406	0.121	129	0.904	0.045	0.369	-0.685	0.775

Independent Samples Test (Equal variances assumed) detailed variable list	Levene's Test for Equality of Variances		t-test for Equality of Means					95% CI	
	F	Sig.	t	df	P-value	Mean Difference	Std. Error Difference	Lower	Upper
In this office employees understand the organisational structure and reporting lines of their unit/department, and how their job functions relates to overall departmental objectives and goals	1.631	0.204	1.126	129	0.262	0.4556	0.40473	-0.34516	1.25636
For most meetings called for in this office, agendas are circulated to all before the meeting.	1.413	0.237	0.562	129	0.575	0.27019	0.4806	-0.68069	1.22108
For most meetings called for in this office, minutes are circulated to all soon after the meeting, indicating follow-up items.	0.484	0.488	1.364	129	0.175	0.67171	0.49248	-0.30267	1.64608
The leadership here keeps staff well informed about what is going on with the organisation.	0.663	0.417	1.13	129	0.26	0.47945	0.42419	-0.35982	1.31872
In this office, cooperation and teamwork between staff in different units is encouraged.	0.296	0.587	-0.311	129	0.757	-0.12234	0.39391	-0.90171	0.65703
In this office, we are encouraged to use data to guide decision-making, priority-setting, and planning.	1.997	0.16	1.639	129	0.104	0.735	0.44839	-0.15214	1.62214
In this office, we are encouraged to analyse problems carefully to understand root causes before deciding on solutions.	0.995	0.32	1.5	129	0.136	0.624	0.41602	-0.19911	1.4471
In this office formal individual performance appraisals are routinely conducted on an annual basis.	0.168	0.683	1.609	129	0.11	0.79617	0.49483	-0.18286	1.77521
In this office supervisors provide constructive feedback to their assistants on a regular basis, to help improve job performance.	1.244	0.267	1.41	129	0.161	0.60864	0.43168	-0.24545	1.46274
My contributions at work are acknowledged and appreciated.	0.023	0.881	0.497	129	0.62	0.20808	0.41908	-0.62109	1.03724
My supervisor works with me to identify my training needs and ensure I get the	0.864	0.354	0.334	129	0.739	0.16533	0.49433	-0.81272	1.14338

training or mentorship I need to do my job effectively.									
At this office, when staff attend trainings, effort is made to ensure that they apply what they have learned back at the job site.	0.701	0.404	1.011	129	0.314	0.42182	0.41731	-0.40384	1.24749
In this office supervisors delegate challenging assignments to assistants, which helps them to develop their skills and expertise.	3.913	0.05	0.976	129	0.331	0.40198	0.4119	-0.41297	1.21693
In this office when giving special assignments, supervisors clearly communicates expectations at the beginning and checks in on progress, without 'micromanaging.'	0.336	0.563	0.429	129	0.669	0.18611	0.43398	-0.67253	1.04476
In this office supervisors or unit leader regularly monitor progress and holds every staff accountable for following through on assigned tasks related to workplans.	0.178	0.673	-0.419	129	0.676	-0.18068	0.43128	-1.03399	0.67263
In this office supervisors do everything in their power to help resolve HR issues (such as confirmation) in a timely manner.	4.949	0.028	2.182	129	0.031	1.11242	0.50976	0.10385	2.121
In this office supervisors take appropriate corrective action when an employee is not performing well.	1.895	0.171	1.34	129	0.183	0.56282	0.42012	-0.2684	1.39404
In this office supervisors maintains a high standard of ethics and accountability.	0.08	0.778	-0.612	129	0.542	-0.24846	0.40608	-1.0519	0.55497

Annex 10: Work Climate Survey Themes

Themes		Code
Data use, Problem analysis and solving skills		1
Teamwork and Coordination		2
Management of meetings		3
Communication Levels		4
Performance Management of		5
Supervision and feedback processes		6
Development of HR		7
Resolution of HR Issues		8
Ethics and Accountability		9
Code	Variable	Variable Description
1	Qst6	In this office, we are encouraged to use data to guide decision-making, priority-setting, and planning.
1	Qst7	In this office, we are encouraged to analyse problems carefully to understand root causes before deciding on solutions.
2	Qst1	In this office employees understand the organisational structure and reporting lines of their unit/department, and how their job functions relates to overall departmental objectives and goals
2	Qst5	In this office, cooperation and teamwork between staff in different units is encouraged.
3	Qst2	For most meetings called for in this office, agendas are circulated to all before the meeting.
3	Qst3	For most meetings called for in this office, minutes are circulated to all soon after the meeting, indicating follow-up items.
4	Qst4	The leadership here keeps staff well informed about what is going on with the organisation.
5	Qst8	In this office formal individual performance appraisals are routinely conducted on an annual basis.
5	Qst10	My contributions at work are acknowledged and appreciated.
6	Qst9	In this office supervisors provide constructive feedback to their assistants on a regular basis, to help improve job performance.
6	Qst14	In this office when giving special assignments, supervisors clearly communicates expectations at the beginning and checks in on progress, without 'micromanaging.'
7	Qst11	My supervisor works with me to identify my training needs and ensure I get the training or mentorship I need to do my job effectively.
7	Qst12	At this office, when staffs attend trainings, effort is made to ensure that they apply what they have learned back at the job site.
7	Qst13	In this office supervisors delegate challenging assignments to assistants, which helps them to develop their skills and expertise.
8	Qst16	In this office supervisors do everything in their power to help resolve HR issues (such as confirmation) in a timely manner.
9	Qst15	In this office supervisors or unit leader regularly monitor progress and holds every staff accountable for following through on assigned tasks related to work plans.
9	Qst17	In this office supervisors take appropriate corrective action when an employee is not performing well.
9	Qst18	In this office supervisors maintain a high standard of ethics and accountability.

Annex 11: Study Information Sheet

Title: Zambia Management and Leadership Academy (ZMLA) Performance Evaluation Study

Introduction: In line with the Government of Zambia's efforts to promote better health system management and in recognition of current skill gaps among current managers in the health sector workforce, Zambia Integrated Systems Strengthening Project (ZISSP) through the leadership of BroadReach Institute for Education and Training (BRITE) has been implementing the Zambia Management and Leadership Academy program since October 2011.

With this background, it's important to take a critical review of the program focusing on ZMLA participants and other Key MOH management staff and stakeholders.

Study Justification and Purpose of Study: It is currently unknown whether the ZMLA approach has had any effect on participant's management, leadership, motivation and general workplace climate in the public health sector. This evaluation study will help us understand whether there are any changes in the desired behavioural outcomes of the ZMLA approach. Furthermore, the evaluation exercise provides an opportunity to document implementation lessons for future program design and scale-up activities.

Study Procedures: You are being asked to take part in this evaluation study because you have participated in the ZMLA program or you are a manager in the MOH/MCDMCH or a key stakeholder. If you agree to be in the study, you will be asked questions that relate to key objectives of the ZMLA program.

Potential Risks and Discomforts: There are no physical risks involved in this study. Although some survey questions are about confidence that is ability to undertake Management & Leadership tasks and job motivation. Your views on these aspects will be kept confidential and will not be shared with either your supervisors or subordinates. You may refuse to answer any question or stop participating at any time.

Benefits: There are no direct anticipated benefits to study participants. However, it is believed in the long run the results of the evaluation will feed back into program design and improvements for the future which could benefit the health system and the general public

Confidentiality: Information collected on this survey will be reviewed by the study team and a summary will be shared with the Ministry of Health, including the District Health Office that oversees your health facility.

Voluntary participation: Participation in the evaluation study is entirely voluntary. It is your choice whether or not to take part in the study. If you choose not to participate, this will not have any bearing on your job or any work-related evaluations or reports. You may change your mind and stop participating at any time after signing the consent form.

This study has been reviewed and approved by the Ministry of Health/MCDMCH and University of Zambia Biomedical Research Ethics Committee whose task is to ensure that research participants are protected from harm. If you have any questions regarding this study please contact the following:

Dr.J.C Munthali, Chairperson, University of Zambia Biomedical Research Ethics Committee, Ridgeway Campus, Lusaka, Telephone: 260-1-256067, E-mail: unzarec@unza.zm or

Dr. Denis Mulenga, Deputy Director Technical Support Services, Ministry of Health, Ndeke House, Directorate of Technical Support Services, P.O. Box 30205 Lusaka, Zambia, Cell: 260-977-793830

Dr Wilbroad Mutale, the lead consultant for this evaluation study Cell 0967780284

Name of Researcher/person getting consent.....

Signature of Researcher/person getting consent.....

Date:...../...../.....

Annex 12: Informed Consent Form

Statement of Consent

I have read the study information sheet for “Zambia Management and Leadership Academy (ZMLA) Performance Evaluation Study,” or it has been read to me, and I understand the purpose of the study, procedures, and potential risks. I understand that my participation is voluntary, and I can withdraw from the study at any time. I have had the opportunity to ask questions and any questions I had, have been answered to my satisfaction.

I give my consent to participate in this study.

Name of study participant (print): _____

Signature (or thumb print): _____ Date: _____

Name of witness (print): _____

Signature: _____

Date: _____

Annex 13: ZMLA Participant IDI Guide

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:		
Key Informant ID:		Completed ZMLA :Yes /No

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us about your experience with the program, having gone through it, hence the interview.

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

Experience with the ZMLA program

We would like to ask about your experience with the ZMLA program

How did you find the ZMLA program?

After undergoing the ZMLA program do you feel adequately trained to meet your current and future management and leadership responsibilities? PROBE: What key positive qualities have you acquired from this training? If not, why not?

Does your supervisor support your training?

To what extent do you feel you have been encouraged by your supervisors to apply the knowledge that you gained.

To what extent do your colleagues and workmates encourage you to apply the knowledge you have acquired through ZMLA?

What would you say has changed in the way you were working before and after you attended the ZMLA courses?

Components of the ZMLA

What do you feel were the most important things you learned from the ZMLA course? PROBE for the following:

Which skills, tools, or concepts have you used in your work?

Which have been most helpful to you?

Which skills or concepts were difficult to apply? What made them difficult?

Were there any management or leadership topics or skills not addressed by ZMLA that you need training on? If so, what are they?

The ZMLA Program was divided into three parts, the learning sessions, the case study and the mentorship sessions.

Which of these three components did you find *most* useful and why?

Which of these three components did you find *least* useful and why?

What would you change about each of these sessions to make them better? (Probe for what changes would be made with reference to the learning sessions, case study and mentorship)

Your future with your current employer

I would like to get your views about your commitment to your career with your organisation (MOH/MCDMCH) now that you have completed the ZMLA program.

Do you intend to stay or leave your current employers in the near future?

Has your attending ZMLA affected your decision to stay or leave your organisation?

Mentorship and follow-up

Did you ever meet with your team and your mentor at your place of work? How did this compare to the mentorship sessions that happened immediately following the workshops? Which format did you find to be most useful? Why?

- Did you ever contact a mentor individually? Why or why not?

- How helpful was the interaction with your mentor?

ZMLA vs other management programs

Have you ever attended any other management course? If yes, which one/s

PROBE: Would you be kind to highlight the key differences with the ZMLA

- Based on your experience, what are the strengths of the program compared to other parallel capacity building programs in the MoH/MCDMCH?

Would you recommend the ZMLA program to a colleague? Why or why not?

Would you allow someone you supervise to attend? Why or why not?

Workplace and ZMLA

In your opinion what specific organisational challenges did the ZMLA training address in your workplace?

PROBE which specific processes did you establish to address organisational challenges?

How has the workplace environment changed since ZMLA training was implemented? i.e. in what ways has the program affected staff as individuals, their teams, and the organisation as a whole? PROBE: For overall changes noticed on the way things run in the workplace or most significant changes or results e.g. systematic approach to meetings and follow up actions, delegation processes, financial management practices, implementation of APAS, strategic information management practices, quality of reports etc.

Are there any deliberate efforts that were employed to share ZMLA skills with other staff members who did not participate in the training program? PROBE how this was done

Service delivery and ZMLA

Have you seen any changes arising as a result of the ZMLA program with regards to improvements in service delivery in the health sector where you operate?

Sustainability - Do you think the ZMLA program should continue after the current funding ends? What mechanisms do you think should be put in place make sure the program is sustainable?

Annex 14: Provincial Medical Officer and District Medical officer IDI

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:		Highest qualification
Attended ZMLA Yes/No		
Key Informant ID:		

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us your thoughts about the program, being the PMO/DMO.

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

Knowledge about the ZMLA program

Have you heard about the ZMLA program? If Yes, (If no explain)

Do you know anyone who has attended the ZMLA program in your Organisation?

What are your thoughts on how the ZMLA program is structured?

How adequately do you think the program prepares participants to handle their roles at work better within the health sector?

What are the main changes, if any, that you have observed as a result of the program? What, in your view, is the value addition that the ZMLA program offers?

What would you consider to be the main challenges with the ZMLA program as it is currently offered? What improvements would you propose?

How adequately do you think ZMLA addresses current challenges in management and leadership within the health sector?

Are there areas you feel should receive more attention?

How much has ZMLA involved stakeholders in its design and implementation? (Probe – Government, CSOs, donors)

How involved have other stakeholders been in ZMLA?

What would you say about the coordination amongst stakeholders?

Other than ZMLA course, what other management and leadership trainings are you aware of that help prepare health workers for roles in management and leadership? (PROBE: MOH/MCDMCH courses, Other courses e.g. MBA,) (IF YES ,GO TO 11, IF NO SKIP TO 12)

Do you think that the ZMLA program is different from others being offered? Could you please give us more details on the differences you have noticed?

Workplace and ZMLA

In your opinion what specific organisational challenges did the ZMLA training address in your workplace? PROBE which specific processes did you establish to address organisational challenges?

How has the workplace environment changed since ZMLA training was implemented? i.e. in what ways has the program affected staff as individuals, their teams, and the organisation as a whole? PROBE: For overall changes noticed on the way things run in the workplace or most significant changes or results e.g. systematic approach to meetings and follow up actions, delegation processes, financial management practices, implementation of APAS, strategic information management practices, quality of reports etc.

Are there any deliberate efforts that have been employed to share ZMLA skills with other staff members who did not participate in the training program? PROBE how this is being done.

Service delivery and ZMLA

Have you seen any changes arising as a result of the ZMLA program with regards to improvements in service delivery in the health sector where you operate?

Sustainability

Do you think the ZMLA program should continue after the current funding ends? How can it be made sustainable? What mechanisms do you think should be put in place?

Annex 15: Key stakeholder's IDI

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:		Highest qualification
Attended ZMLA Yes/No		
Key Informant ID:		

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us your thoughts about the program, being a key stakeholder

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

Have you heard about the ZMLA program? (If Yes, proceed with interview, if no explain about ZMLA and only proceed if respondent has some understanding about ZMLA)

Have you or any of your colleagues attended the ZMLA program? (PROBE: How many)

In your view has ZMLA helped those trained or not? (PROBE: How)

Has your Organisation seen any benefit from the ZMLA program?(PROBE: which ways the Organisation has benefited)

Is your Organisation working or collaborating with ZMLA program?(PROBE: how this is being done and the benefits of collaboration)

Is your Organisation running any other leadership/Management course/s: (EXPLORE: Type and length, certification)

If yes to 6, what would you say are the major differences between the course you run and ZMLA?

Would your Organisation be willing to work with ZMLA to extend the program beyond the current funding? (PROBE: How e.g cost sharing, curriculum sharing and resource sharing)

What challenges have you faced in working with ZMLA program?

What improvements would you like to see in the ZMLA program?

Annex 16: IDI Guide for Health facility managers hosting Case

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:		Highest qualification
Attended ZMLA Yes/No		
Key Informant ID:		

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us your thoughts about the program, being a local health facility manager.

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

Have you heard about the ZMLA program? (If NO EXPLAIN)

Have you attended the ZMLA Course?

This facility was used as a case study site for the ZMLA trainees. What problems were identified in this health facility? (Check with the list and PROBE for those not mentioned)

For each problem identified, what activities were planned and what activities were actually implemented to improve performance?

Have you noticed any improvements in the targeted areas? (for each intervention PROBE for changes in coverage and obtain any written evidence e.g graphs or figures)

If there were no improvements in some targeted areas PROBE for reasons? If some things were not implemented what were the reasons?

Did the trainee achieve their planned goals and coverage?

What were the challenges of implementing case studies in this site?

Annex 17: IDI Guide for Case study participant

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:		
Highest qualification		
Attended ZMLA Yes/No		
Key Informant ID:		

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us your thoughts about the program, being a ZMLA trainee.

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

How far have you gone with the case study?

What was the focus of the case study?

Do you have a soft copy or hard copy of the case report? (Get a copy if available)

What were your objectives? (LOOK at the report if available)

Have you implemented your case study? (PROBE extent of implementation and limitations)

What were your indicators and targets?

Which indicators and targets were achieved?

Can you attribute these improvements to the case study? (Why do you say so?)

What were the main challenges and limitations in implementing your case study?

What additional support would you have wished to get during the implementation of the case study?

How did the case report consolidate the theory learnt in the ZMLA course?

Did your mentors support you during your case study? (How?)

Annex 18: IDI Guide for Program implementers/MOH/MCDMCH

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:		
Highest qualification		
Key Informant ID:		

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us your thoughts about the program, being a ZMLA implementer.

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

How long have you been involved in the implementation of ZMLA?

What is your specific role?

Have you participated in the teaching of the Course?

How do you describe the overall participation in the course? (Diversity, gender and commitment)

How do you describe the reception of the course by various stakeholders (Participants, MOH/MCDMCH, partners and other NGOs, training institutions)

Are you happy with the way the course is structured and the contents?

What would you do differently if you were to redesign the course again?

What have been the major changes or modification to the course from the way it was originally designed?
What necessitated the changes?

What have been the major successes?

What have been the major challenges?

Do you think the course is achieving its objectives? If not why if YES How?

The course is divided into three parts, theory, mentorship and case study. Which component is better organized and which one is not (PROBE for reasons for good or bad performance)

What suggestion would you give for the course to be strengthened?

What suggestion do you have for the ZMLA course to be sustainable?

Annex 19: IDI guide for NIPA representative

Province:	District:	Organisation:
Date:	Sex:	Position:
Interviewer:	Highest qualification	
Key Informant ID:		

Introductory remarks

Thank you for agreeing to talk with us, and for your participation in this evaluation.

The purpose of this evaluation is to assess the Zambia Management and Leadership Academy (ZMLA) Program, its successes as well as the challenges it is facing and how these can be overcome. We believe that you are in a good position to tell us your thoughts about the program, being a key partner in the implementation of ZMLA.

We anticipate the interview will last about an hour or less and appreciate any information you can provide. Your answers to the questions we will ask are completely confidential and the information you give us will be reported without names. Your participation is voluntary and you can refuse to answer any question or all the questions with no penalty. Similarly, the nature of your responses positive or negative will not lead to any benefit or consequence. We appreciate your assistance in this matter.

We would like to record this discussion for data analysis purposes.

Do you have any questions?

When did NIPA start working with the ZMLA program?

Why did NIPA come on board?

How have you found the collaboration with BRITE/ZISSP? (Benefits, areas of improvements)

What is the role of NIPA on ZMLA?

What is the difference of ZMLA compared to other management courses offered by NIPA?

How do you rate the performance of those trained through the ZMLA Course? (PROBE: How many have graduated?

What are the major causes of failure to graduate?

What are the challenges in supporting ZMLA students? (PROBE: Logistics, marking, man power, certification process etc)

In your opinion, should the course be extended beyond the current funding or not?

What is the additional benefit of ZMLA?

How can the course be improved further? (PROBE: Structure, content, implementation, certification, etc.)

Annex 20: List of Anonymized Key Informants

S/N	PROVINCE	DISTRICT	POSITION
1	LUSAKA	CHONGWE	MENTOR
			HOSPITAL ADMINISTRATOR
			MEDICAL SUPRITENDENT
		LUSAKA	PRINCIPAL PLANNER
2	CENTRAL	KABWE	CLINICAL CARE SPECIALIST
			MANAGEMENT SPECIALIST
		KAPIRI	CLINICAL CARE OFFICER
			SKOWA COORDINATOR-STAKEHOLDER
			CASE STUDY-MPUNDE PARTICIPANT
			ENVIRONMENTAL HEALTH TECHNICIAN
3	EASTERN	CHIPATA	ACTING PROVINCIAL MEDICAL OFFICER
			STAKEHOLDER
			MANAGEMENT SPECIALIST
			PROVINCIAL NURSING OFFICER
		LUNDAZI	DISTRICT MEDICAL OFFICER
			ACCOUNTANT
		NYIMBA	ACTING DISTRICT MEDICAL OFFICER
			PLANNER
		LUANGWA	DISTRICT MEDICAL OFFICER
			IN-CHARGE KANSINSA(CASE STUDY SITE)
			DISTRICT HEALTH INFORMATION OFFICER
			CASE STUDY- PARTICIPANT
4	LUAPULA	MANSA	PROVINCIAL MEDICAL OFFICER
			PRINCIPAL PLANNER
			ACCOUNTANT
			ACTING DISTRICT MEDICAL OFFICER
			MANAGEMENT SPECIALIST
			PROVINCIAL PLANNER(MOF)-STAKEHOLDER
		NCHELENGE	DISTRICT MEDICAL OFFICER
			PUBLIC HEALTH OFFICER
5	NORTHERN	KASAMA	PROVINCIAL MEDICAL OFFICER
			FINANCE & ADMIN OFFICER ZPCTII-STAKEHOLDER
			ACTING NURSING OFFICER-HOSPITAL
			SENIOR ACCOUNTANT-PHO
			SENIOR NURSING OFFICER-HOSPITAL
			MANAGEMENT SPECIALIST
		MBALA	DISTRICT MEDICAL OFFICER
			FORMER IN-CHARGE CASE STUDY SITE
			CASE STUDY PARTICIPANT
6	MUCHINGA	MPIKA	PROVINCILA MEDIC AL OFFICER
7	COPPERBELT	NDOLA	ACTING PROVINCIAL MEDICAL OFFICER
			ASSITANT HUMAN RESOURCE OFFICER-PROVINCE
			MANAGEMENT SPECIALIST
		LUANSHYA	ASSITANT HUMAN RESOURCE OFFICER-PROVINCE-DISTRICT
			ASSISTANT HR-CASE STUDY
			DISTRICT MEDICAL OFFICER
			CASE STUDY PARTICIPANT

			HEALTH FACILITY MANAGER
8	NORTH-WESTERN		MANAGEMENT SPECIALIST
			DMO
			SENIOR HR-PHO
			PMO
9	WESTERN	MONGU	MANAGEMENT SPECIALIST
			PRINCIPAL DENTAL THERAPIST
			PRINCIPAL NURSING OFFICER
			FORMER PROVINCIAL MEDICAL OFFICER-MENTOR
		KALABO	PLANNER
			DISTRICT MEDICAL OFFICER
			HEALTH FACILITY MANAGER
10	SOUTHERN	LIVINGSTONE	PROVINCIAL HEALTH EDUCATION OFFICER
			MANAGEMENT SPECIALIST
			ACTING PROVINCIAL MEDICAL OFFICER
		KALOMO	HEALTH FACILITY MANAGER
	IMPLEMENTORS	HEAD QUARTERS	DEPUTY DIRECTOR TECHNICAL SERVICES
		NIPA	COURSE COORDINATOR
			COURSE DIRECTOR
		ZISSP	MANAGEMENT SPECIALIST TEAM LEADER
			QUALITY IMPROVEMENT TEAM LEADER
		BRITE	COUNTRY DIRECTOR
			SENIOR PROGRAM MANAGER

Annex 21: Nvivo Coding Framework for Qualitative Data

- A. Management skills**
- B. Specific skills or tools useful**
- C. Topics not covered**
- D. Changes noticed following ZMLA**
- E. Supportive environment/Any resistance**
- F. components useful**
- G. Difficult tools or concepts**
 - *Workshop recommendations*
 - *Case study recommendations*
 - *Mentorship recommendations*
- H. Recommendations general**
- I. ZMLA Management and leadership roles**
 - *Differences with ZMLA*
 - *Recommend program to colleague*
 - *Attended any other management*
 - *Allow Supervise to attend*
- J. APAS**
- K. Motivation and commitment**
- L. Services delivery and quality changes**
- M. ZMLA and current employment**
- N. Mentorship**
- O. ZMLA and Other management programs**
- P. Challenges**
- Q. Workplace and ZMLA: Changes noted:**
 - *Communication*
 - *Strategic information*
 - *Quality reports*
 - *Finance management*
 - *Delegation*
 - *APAS implementation*
 - *Meeting approaches*
- R. ZMLA sustainability**
 - *Willingness to pay for ZMLA*
 - *Suggestions: How can ZMLA made sustainable*
- S. Case study:**
 - *How far with the case study*
 - *Knows about ZMLA*
 - *Attended*
 - *Activities*
 - *Objectives*
 - *Targets and indicators*
 - *What problems or focus*
 - *Improvements*
 - *Reason no improvement*
 - *Funding*
 - *Planned goals achieved*
 - *Challenges*
- T. Other nodes**

Annex 22: Statement of Work

SCOPE OF WORK

BRITE seeks a suitably qualified consult or consulting team to perform an end of project impact evaluation of MLA in Zambia. MLA started in 2010 and will conclude all project implementation in July 2014. BRITE anticipates that the consultant will conduct the evaluation over a period of 60 days beginning June 16th 2014 at the latest.

PURPOSE

The evaluation findings will be shared with implementing partner organisations, the host government and other relevant national stakeholders by the last quarter of 2014 to maximize opportunities to leverage other donor resources to support scale up of proven health system strengthening interventions. Lessons learnt from the ZMLA districts will be communicated to the Zambian public health service to inform future leadership and management improvement efforts. The evaluation must have a sound methodological design, high quality documentation and presentation of findings by independent, experienced and objective evaluators.

OBJECTIVES OF THE EVALUATION

The final project impact evaluation of the Management and Leadership Academy (MLA), will seek to determine the extent of project performance, and provide critical information to guide future MLA project design and implementation. The evaluation is also intended for accountability and learning purposes, and will ascertain the extent to which the BroadReach Institute for Training and Education (BRITE) fulfilled its planned objectives after implementing MLA. More explicitly, the evaluation should:

- i. Describe the overall conduct of ZMLA program and identify lessons useful for future program scale-up activities and implementation.
- ii. Measure the extent to which the ZMLA program has contributed to improved management and leadership skills among program participants
- iii. Evaluate organisational benefits that resulted from ZMLA training
- iv. Evaluate the extent to which ZMLA training contributed to improved service delivery.

PLACE OF PERFORMANCE

The selected consultant may provide remote technical expertise on the evaluation design, data analysis on report compilation. However, preparatory meetings, data collection and data cleaning will take place in Zambia.

WORK REQUIREMENTS

As part of the documentation of the ZMLA Project, the consultant will be responsible for performing the following tasks over two months. Each phase requires sign off from BRITE before the consultant can continue to the next phase:

Kickoff:

- The consultant will manage meetings with respective stakeholders to plan for the evaluation and the relevant evaluation approach
- Upon concluding the work scoping, create and present detailed evaluation plan with clear timelines.

Research and Analysis Phase:

- Manage a data collection team and ensure data quality for analysis.
- Manage complex regression analysis to control for confounding factors.
- Calculate measure of statistical inference
- Document analytical steps through STATA/SAS coding

Reporting and Dissemination Phase:

- Write, edit and publish the final evaluation report
- Be available to disseminate information to partners and answer questions arising from the report.

QUALIFICATION REQUIREMENTS

The following skills and experience need to be represented in the consultant and/or in a consulting team.

- Advanced research experience and must either have a PHD level qualification in Public Health or Management or Public Administration or must be currently enrolled for one at a reputable academic institution.
- At least five years of experience leading research projects or evaluations.
- Advanced skills in qualitative and quantitative analysis.
- Over five years of experience in working in a developing country public health setting.
- Must have experience writing technical documents and/or have published article in high impact international journals.

EXPECTED OVERALL RESULTS AND OUTCOMES

This section sets forth results (outcomes of the successful consultant's performance) requirements, and performance standards (minimum standards that the Successful Consultant must meet) that must be met to BRITE's satisfaction. The Final Evaluation Report shall be evidence-based and respond to the Key questions and evaluation areas outlined below. The key questions listed below are not exhaustive. Consultants are strongly encouraged to propose additional or alternate questions, but the study should at a minimum answer the following:

EVALUATION QUESTIONS

Key evaluation question: What is MLA's contribution to improving organisational oversight and functionality to improve health service delivery in ZISSP target districts?

Specific Impact Evaluation Questions:

1. To what extent did MLA contribute to overall organisational management functionality?
 - What proportion of teams experienced changes in the organisational behaviours around: Meetings, planning, supervision, information management, time management, discipline and financial oversight?
 - What proportion of recruited organisational teams had improved action plans and budgets?
2. To what extent did MLA contribute to overall improvement in service delivery:

- What proportion of health teams showed improved timeliness of program implementation?
- What proportion of the teams that implemented case studies led to improved service delivery according to action plans?

Based on the broad evaluation question posed above, a number of questions have already been proposed by the monitoring and evaluation team based in Zambia. Table 1 below links the proposed research or evaluation objectives to a list (but not exhaustive) of questions that team has already started developing according to the MLA evaluation plan that should be reviewed and refined by the consultant.

Evaluation Objective	Evaluation Questions
i. To describe the overall conduct of ZMLA program and identify lessons useful for future program scale-up activities and implementation.	• Is the format, content, and delivery of training, mentorship, and case studies relevant to the trainees? • How does the programme compare (in terms of content, approach, etc) to other Management and Leadership training programmes? • What aspects of ZMLA were most valued by participants? • What aspects did not have the desired outcome, were not useful, or need to be otherwise strengthened? • How was the ZMLA program implemented in each phase, and was it implemented according to plan? (If not, what was changed?)
ii. To measure the extent to which the ZMLA program has contributed to improved management and leadership skills among program participants	• How has the programme affected participants' management and leadership knowledge and skills? • How has the programme affected participants' management and leadership confidence and job motivation? • How did participants' management practices change since ZMLA?
iii. To evaluate organisational benefits that resulted from ZMLA training	• How has the workplace environment changed since ZMLA training was implemented? i.e. in what ways has the programme affected staff as individuals, their teams, and the organisation as whole? • What organisational challenges did ZMLA training address? • What specific processes have individual participants and workplaces established to address persistent organisational challenges after undergoing the ZMLA training? • Is there noticeable improvement in the development and implementation of action plans, to address both organisational and service delivery challenges? • To what extent was content from the formal training shared with other staff members who did not directly participate in the programme?
iv. To evaluate the extent to which ZMLA training contributed to improved service delivery.	• To what extent have service delivery indicators at case study project sites improved (percentage)

EVALUATION DESIGN AND METHODS

The evaluation design and methods to be used must be explained in detail and be appropriate and of sufficient rigor to produce valid results.

The successful Consultant's evaluation team is expected to use available data from the baseline and subsequent annual organisational performance assessments, action plans and financial reports to compare the level of managerial practices and service delivery before and after the initiation of MLA. Routine health facility data reported through the national Health Management Information System (HMIS) presents an

opportunity to compare health outcomes before and after the implementation of project interventions in the various regions of ZMLA implementation.

The successful Consultant's evaluation team is expected to employ a variety of quantitative and qualitative data collection methods to gather the evidence required to adequately answer the evaluation questions.

The successful Consultant's evaluation team will also be expected to conduct a quantitative survey and focus group discussions with health workers working in MLA supported district health facilities to gain an understanding of their experiences with project interventions.

Limitations to the evaluation, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, observer bias, Hawthorne effect, etc.), must be disclosed in the evaluation report.

The successful Consultant's evaluation team will be expected to:

- Employ research techniques that ensure internal validity of study results (such as random sampling and triangulation).
- *Use statistical analysis to counter the effect of confounding factors where changes in service delivery are noted, such as regression analysis.*
- Utilize social science methods and tools that reduce the need for evaluator-specific judgments.
- Identify and collect data on variables corresponding to inputs, outputs, outcomes and impacts.
- Employ standardized recording, maintenance of records from the evaluation and perform data analysis with advanced statistical software to calculate statistical degrees of inference (e.g. focus group transcripts - NVIVO, data analysis and p-values - STATA).
- Produce evaluation findings that are based on facts, evidence and data. This precludes relying exclusively upon anecdotes, hearsay and unverified opinions. Findings should be specific, concise and supported by quantitative and/or qualitative information that is reliable, valid and generalizable (with degrees of inference).

EXPECTED TEAM COMPOSITION AND INDEPENDENCE

The successful Consultant, co- managed by BRITE Zambia, will take the lead on the evaluation and submit a work plan within two weeks of accepting the offer. The successful Consultant's evaluation team should be comprised of two or three key personnel who possess among them management expertise, monitoring and evaluation expertise, public health sector expertise and expertise in advanced statistical analysis. The successful Consultant's evaluation team must demonstrate familiarity with the strengthening management systems to improve health care delivery and the associated measurement process. At least one of the three key personnel should be a senior level individual with strong knowledge and experience of working in the African public health sector. The Successful Consultant must clearly define roles and responsibilities of different team members highlighting the overall team lead, evaluation methodology expert, management expert, etc.

The Consultant is expected to work closely with BRITE and MOH in setting up a team that will efficiently and objectively measure the quality of care levels in MLA supported districts in Zambia. This exercise will draw upon past experiences in assessing quality of care and use existing resources to whatever extent possible, while maintaining a high level of objectivity and independence.

REPORTS AND DELIVERABLES

The Successful Consultant shall submit reports, deliverables or outputs subject to the deadlines as laid out by the consultant in their own work plan. The Successful Consultant will also be responsible for submitting the following:

1. **Signed statements** attesting to a lack of conflict of interest or describing an existing or potential conflict of interest relative to the project being evaluated by each evaluation team member.
2. **Evaluation Design:** The consultant will review and improve upon the BRITE impact evaluation to associate the ZMLA activities to selected health service delivery indicators in each of the ZMLA target districts. The research design will build upon the draft evaluation plan that has been developed by BRITE and ABT Associates which will include a rigorous regression analysis to counter well understood confounding factors such as financing levels, local leadership changes and presence of other partners. The consultant will be required to review the data collection methodology and sampling procedures suggested by BRITE.
3. **Development of Research tools:** Based on the Evaluation objectives and proposed broad evaluation questions, the consultant will develop relevant interview guides or questionnaires to measure both ZMLA intended behavioural and health outcomes/impact.
4. **Report Outline/Data Analysis Plan:** based on evaluation questions and broad evaluation questions the consultant will from the onset provide an analysis plan and share STATA/SAS outputs and code with the BRITE monitoring and evaluation team for records and publishing purposes.
5. **Training of data collectors and supervision of field data collection:** with support from BRITE team the lead consultant will lead the process of training data collectors and assistant consultant in all data collection and methodological processes required for a successful implementation of the evaluation study. Furthermore, the consultant will lead all field data collection supervision activities to ensure maximum quality assurance to methodological adherence.
6. **Electronic Data sets and Detailed KIs interview transcripts:** All data and records from the evaluation must be submitted to BRITE in an easily readable and organized electronic format.
7. **Final Evaluation Report:** The final report will be provided to the BRITE/Zambia in electronic form within 15 business days following receipt of comments from BRITE. The evaluation report must address all evaluation questions included in the scope of work. It must represent a thoughtful, well-researched and well organized effort to address the evaluation purpose.

The final report will be provided to the BRITE/Zambia in electronic form within 15 business days following receipt of comments from BRITE. The evaluation report must address all evaluation questions included in the scope of work. It must represent a thoughtful, well-researched and well organized effort to address the evaluation purpose. Readers must have sufficient information about the body of evidence and how information was gathered to make a judgment as to its reliability, validity and generalizability. The final report should not exceed 30 pages (excluding appendices) and must include the following sections:

- **An executive summary:** 3-5 pages that summarizes the key points (project purpose and background, key evaluation questions, methods, findings, and recommendations)
- **Background information** on the project
- **Purpose of evaluation**
- **Evaluation team:** must be described with particular reference to the existence or lack thereof real or potential conflicts of interest relative to the project being evaluated

- **Evaluation methods:** must be explained in detail and limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.) must be disclosed in the report
- **Evaluation findings:** must be presented as analysed facts, evidence and data and not based on anecdotes, hearsay or the compilation of people's opinions. Findings must be specific, concise and supported by strong quantitative or qualitative evidence. When applicable, include statements regarding any significant unresolved differences of opinion on the part of funders, implementers and/or members of the evaluation team.
- **Recommendations:** need to be supported by a specific set of findings and must be action-oriented, practical and specific, with defined responsibility for the action
- **The final scope of work,** evaluation tools and sources of information must be properly identified and listed in annex

All data and records from the evaluation must be submitted to BRITE in an easily readable and organized electronic format along with the final report.

OVERARCHING ELEMENTS AND IMPLEMENTATION MODALITIES

Building Local Capacity: The Consultant shall, to the maximum extent possible, use Zambian staff, technical experts or consultants, and institutions in carrying out the evaluation of the MLA project under the resulting Task Order.

Geographical Coverage: The project has a critical focus on improving the quality health care managed by 18 district health team hospitals and Rural Health Centres (RHC) through the development of the case studies during training and mentorship.

Gender Considerations: Equity should be addressed with a focus on gender. The evaluation should provide more details on the effect and results of the project interventions on men, women, girls and boys.

Audience: The primary audiences for the evaluation report shall be the MERCK Foundation, USAID and the Government of Zambia, Development Partners, Implementing Partners and potential donors.

Any discrepancies involving completion of tasks or disagreement between BRITE and the chosen vendor will be referred to both parties for review and discussion.

ACCEPTANCE

Approved by:

Date: _____

<Approver's Name>

<Approver's Title>