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CASE STUDY: ZAMBIA INTEGRATED SYSTEMS STRENGTHENING PROGRAM (ZISSP)

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The Health Finance and Governance Project
USAID's Health Finance and Governance (HFG) project helps to improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team works with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. The five-year, $209 million global project is intended to increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG supports countries as they navigate the economic transitions needed to achieve universal health care.

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CASE STUDY: ZAMBIA INTEGRATED SYSTEMS STRENGTHENING PROGRAM (ZISSP)

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ACRONYMS

ACNM	American College of Nurse-Midwives:
BCC	Behavior change communication
BRITE	Broad Reach Institute for Training and Education
CFIR	Consolidated Framework for Implementation Research
DCMO	District Community Medical Offices
HFG	Health Finance and Governance Project
HR	Human Resources
HSS	Health system strengthening
IRB	Internal Review Board
LSTM	Liverpool School of Tropical Medicine
MCDMCH	Ministry of Community Development Mother and Child Health
MOH	Ministry of Health
NHC	Neighborhood Health Committees
NIPA	National Institute for Public Administration
NMCP	National Malaria Control Program
PMO	Provincial medical offices
PPAZ	Planned Parenthood Association of Zambia
QI TWG	Quality Improvement Technical Working Group
REP	Replicating Effective Programs
TAG	Technical Advisory Group
TWG	Technical Working Group
USAID	United States Agency for International Development
WHO	World Health Organization
ZISSP	Zambia Integrated Systems Strengthening Program

EXECUTIVE SUMMARY

USAID's Health Finance and Governance project (HFG) contributes to USAID's assistance to countries to delivery key health services and builds the evidence base around health systems strengthening (HSS). Under HFG's research portfolio a series of retrospective, qualitative case studies were undertaken to understand the dynamics of successful HSS interventions by focusing on how HSS projects were implemented. This report presents the results for one of the six cases: Zambia Integrated Systems Strengthening Program (ZISSP).

ZISSP was implemented in Zambia from July 2010 to December 2014. The United States Agency for International Development (USAID) funded the project through contract of $ 85,092,613 to contractor Abt Associates, Inc. in collaboration with Akros Inc., the American College of Nurse-Midwives, BroadReach Institute for Training and Education, Johns Hopkins Bloomberg School of Public Health−Center for Communication Programs, Liverpool School of Tropical Medicine, and Planned Parenthood Association of Zambia.

ZISSP worked closely with the Ministry of Health (MOH) and the Ministry of Community Development Mother and Child Health (MCDMCH) to increase the use of quality, high-impact health services through a health systems strengthening approach. ZISSP used a whole-systems approach to support the MOH and MCDMCH to improve access and utilization of health services in particular areas. The project was intended to address gaps in the Zambian health system related to problems in service implementation, resource coordination and management, human resource administration, community engagement, and utilization of health services. Enabling environment factors that influenced ZISSP's implementation included Zambian public workforce structure, other donor-led projects, and Zambia's recent history experiencing withdrawal of major donor funds relating to financial mismanagement. One relevant factor in the implementation setting was the realignment of the MOH to create the MCDMCH, which occurred by presidential decree in 2011.

ZISSP used a whole-system or diagonal approach to improve planning and management at each level of the health system and strengthen the specific program areas of HIV and AIDS, family planning, malaria, and maternal, newborn and child health and nutrition. At the national level, ZISSP worked through the Technical Working Groups (TWGs) as well as with six subcontractors in specific areas of capacity building. ZISSP used secondment of key staff and increased personnel to improve and decentralize training down to provincial and district levels. ZISSP specifically focused district-level interventions in 27 districts across ten provinces by working through District Community Medical Offices (DCMOs). Within target districts ZISSP used secondment, behavior change communication, provided small grants to community health organizations, and worked with the health center advisory committees to improve community involvement.

Important factors from ZISSP's implementation include funding (both availability of ZISSP funds and from other sources), high levels of MOH involvement in the early project stages, the project's broad and thin approach, and secondment of key staff at different levels of Zambia's health system.

ZISSP encountered three key challenges to its implementation. First, coordination of the many actors and activities was a substantial and ongoing obstacle. Secondly increased activity led to a tendency of particular program components or individuals to become overworked. Finally, ZISSP was challenged by the movement of staff both within the health system as well as attrition.

Currently there is a follow-on project to ZISSP, which focuses on five rather than ten provinces, and other projects have incorporated some of the strategies and developments included in ZISSP. Additionally, many of the organizations ZISSP supported and developed have been successfully handed back to control of local stakeholders.

Lessons learned during ZISSP's implementation included two major themes. Firstly, the whole-system or diagonal approach was perceived as a unique and strong characteristic of ZISSP's design because it enabled many stakeholders and partners to be informed and included in the coordination. The second theme that emerged was the importance of high levels of local ownership of the project's activities as crucial to their sustainability.

1. INTRODUCTION

USAID's Health Finance and Governance (HFG) project helps to improve health in developing countries by expanding people's access to health care. The project team works with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. HFG's research portfolio enhances the ability of USAID to assist countries in delivering priority health services while simultaneously contributing to the global pool of knowledge on health systems strengthening (HSS).[1]

Under this research portfolio, the "Understanding the Dynamics of Successful Health System Strengthening Interventions" study seeks to bring into better balance our focus on "what works" in HSS with "how HSS works" to improve the performance of future HSS efforts. Our aim is to examine the dynamics of HSS project implementation, not to examine the cases as models for HSS interventions. We are pursuing this goal by initially conducting a set of six qualitative, retrospective case studies of successful USAID-supported HSS interventions and then producing a cross-case analysis to draw common patterns across cases.

The aim of this study to address four key questions:

1. How were a range of successful HSS interventions implemented in different countries?
2. What factors facilitated and constrained the successful implementation and documented outcomes of the interventions?
3. What were important factors about implementation that emerged across the different cases?
4. What are the implications of this study for future of implementing HSS interventions?

We chose six cases to examine a small sample of successful HSS initiatives in different places under different conditions and with different features in an attempt to tease out some of the policy setting, adoption, and implementation factors and processes that matter. While we remain attentive to the range of complex factors that affect success, we seek to distinguish those factors that decision-makers and implementers can control or influence. In so doing, we hope to develop and provide recommendations for adapting and sustaining HSS reforms in low-income countries.

This report presents one of the six case studies – on the ZISSP project in Zambia. In Section 2, we describe the study methods. In Section 3, we present the contours of the context in which the intervention was implemented, basic information on the intervention, how it was designed, and its outcomes. In Section 4, we describe implementation process for the intervention, including implement groundwork, key features of implementation process, and how the intervention was sustained and disseminated. Finally, in Section 5, we present our synthesis of the primary factors that influenced the intervention's implementation and contributed to its success.

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[1] As defined by the World Health Organization, we define HSS interventions as those that implement "changes in policy and practice in a country's health system" and improve "one or more of the functions of the health system and that leads to better health through improvements in access, coverage, quality, or efficiency" (WHO 2011: 9). HSS interventions are horizontal approaches that can address the root causes of health system constraints and impact multiple issues, rather than vertical service- or disease-specific interventions like health system support programs (Travis et al. 2004: 903).

2. METHODS

The study, comprised of six case studies and cross-case analysis, was conducted in several phases, each of which is briefly described in turn. For a more detailed explanation of our case selection process and methods, please see the study design.[2]

2.1 Design and implementation

In the first phase of the study (October 2015-March 2016), we finalized the design and began implementation, which involved engaging USAID and selecting the case studies.

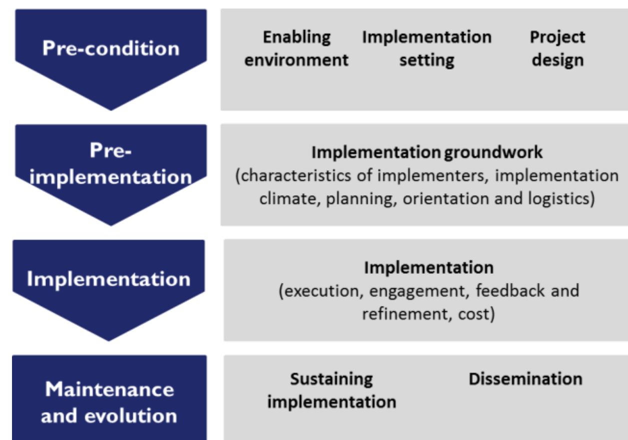
2.1.1 Design

The aim of this study was to address four key questions:

1. How were a range of successful HSS interventions implemented in different countries?
2. What factors facilitated and constrained the successful implementation and documented outcomes of the interventions?
3. What were important factors about implementation that emerged across the different cases?
4. What are the implications of this study for future of implementing HSS interventions?

To answer these questions, we designed a protocol to conduct retrospective, qualitative case studies. We used an implementation framework to guide the case studies. Our primary aim for applying the implementation framework was to determine which factors influence implementation that we needed to collect data on and consider during analysis. We combined two implementation frameworks to apply in this study – the Consolidated Framework for Implementation Research (CFIR) (Damschroder et al. 2009) and the Replicating Effective Programs (REP) framework (Kilbourne et al. 2007). Both CFIR and REP are based on implementation theories and empirical evidence of what affects the successful implementation of health interventions. We used CFIR to more broadly frame the intervention and we used REP as a framework that focuses on project

Figure 1: Outline of combined implementation framework



[2] Conrad, Abigail, Joseph Naimoli, Sweta Saxena, Daniela Rodriguez, Catherine Connor, and Lauren Rosapep, 2016. *Understanding the Dynamics of Successful Health System Strengthening Interventions: Study Design.* Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc.

implementation process. **Error! Reference source not found.** outlines the combined framework. See nnex A for detail.

As we assessed each implementation domain and factor, we also explored:

1. Decision-making processes associated with design and adoption of the intervention;
2. How the intervention was implemented, including how potential challenges or obstacles were addressed;
3. Expected and unexpected outcomes of the intervention, both positive and negative; and
4. Prospects for sustainability of the intervention, such as the degree to which the project activities have been institutionalized in the country.

Before we finalized the design, the team submitted the study design and data collection instruments to Abt's Internal Review Board (IRB) and JHSPH's IRB for review. Abt's and JHSPH's IRB exempted the study from review.

2.1.2 Implementation

To ensure that the case studies were of practical relevance, we set up a Technical Advisory Group (TAG) composed of experts and representatives from inside and outside USAID Bureau of Global Health to consult with on the study and provide expertise.

This case was selected for study from USAID's 2014 Global Call for Health System Strengthening Cases using a defined set of criteria and a systematic review and sampling process that we developed. The case was purposively selected from the available pool and the case is not representative or necessarily the most successful HSS project implemented in the region. Our objective in the case selection was to purposively select 6 cases from the 143 cases submitted to *USAID's 2014 Global Call for Health System Strengthening Cases* that are successful, robust examples of health system strengthening interventions.

The reviewers engaged in a multi-stage sampling process consisting of four sequential selection rounds that excluded cases that did not meet the specified criteria in each round using the identified available data and the predetermined review method. The 4 selection rounds were as follows:

1. **Round 1:** Reviewers considered only those interventions that were fully implemented before the start of the selection process.
2. **Round 2:** Reviewers accepted the submitter's self-reported definition of health systems strengthening, labeled the intervention "provisional," and sought a determination of an "effective" intervention.
3. **Round 3:** Reviewers applied criteria to determine whether a provisional, effective health system strengthening intervention could be confirmed as health system strengthening.
4. **Round 4:** Reviewers applied criteria to determine whether a confirmed, effective health system strengthening intervention was robust (see Figure 2).

Figure 2 ZISSP HSS Criteria

Round	Criteria	Inclusion criteria	How met criteria
1 (implementation period)	Implementation completed	Submission states implementation period was completed by 10/2015	2014

Round	Criteria	Inclusion criteria	How met criteria
2 (impact and evidence)	Effective intervention	One of 13 identified types of interventions referenced	Accountability and engagement interventions; Strengthening health services at the community level; Service integration; Health worker training to improve service delivery; Information technology supports
	Health systems outcome	One of 4 health systems outcomes referenced	Improved service provision/quality; Uptake of healthy behaviors
	Health impact	Health impact referenced	Reduced morbidity and mortality
	Both health system outcome and health impact	At least one health system outcome and health impact referenced	Yes
	Verification of health impact and health system outcome achieved	One type of documentation is referenced for at least one health impact or health system outcome	Project M&E data
3 (HSS)	Multiple primary disease targets	At least 2 diseases targeted referenced	Malaria, Diarrhea, HIV/AIDS, Bilharzia, Maternal and Child Health
4 (robust HSS)	Multiple health system functions and sub-systems targeted	At least 2 HSS WHO building blocks targeted and at least 2 sub-systems functions targeted	Building blocks: Governance, Human resources for health Sub-systems: Human resources for health, Information, Service delivery, Governance
	Verification that intervention was successful HSS intervention	Intervention had health system outcome, health impact and targeted multiple diseases and health system functions	Yes
	Category D for HSS intervention type	Based on typology of HSS we developed, case addresses at least 2 health system functions and at least 3 sub-systems	Yes

Round	Criteria	Inclusion criteria	How met criteria
	Category E for HSS intervention type (not inclusive of D)	Based on typology of HSS we developed, case addresses at least 2 health system functions and at least 4 sub-systems	Yes

2.2 Data collection and analysis

In the second phase, we conducted the case study research. We divided the case studies among our team members so that no team members conducted research on a project that their organization implemented. The case teams collected both primary and secondary data on retrospective (features 1-3 above) and prospective (feature 4 above) data that are described in more detail below. As applicable, we collected primary and/or secondary data on each implementation factor and domain.

For primary data collection, we conducted individual interviews with key informants who possessed in-depth knowledge of the history and workings of the HSS intervention. We followed a common semi-structured interview guide for the interviews, but adjusted the questions posed as applicable for the respondent and their role in the project (see Annex B for the interview guide). We documented each interview through verbatim notes and audio recordings. We interviewed 9 key informants for this case study. Informants included representatives of USAID's implementing partners who sponsored the intervention, relevant MOH officials, and USAID mission staff with knowledge of the intervention, as appropriate.

The research team imported the interview notes into NVivo 11, qualitative data analysis software package, for coding and analysis. Analysts applied a single codebook developed prior to beginning the coding process and refined by coding a small sample of interview notes from several cases. The codes were informed by *a priori* concepts based on the domains and factors from the combined CFIR and REP implementation frameworks. To accommodate unexpected or context-bound themes and concepts emerging from the data, the codebook included a 'family' for each case to allow for inductive coding as needed for each specific country or intervention. We applied this common codebook for the purposes of reliability, quality control, and comparison across interview respondents and eventually across case and country contexts.

Once coding was complete, the analysts conducted iterative, exploratory analysis in NVivo using text analysis techniques (e.g., repetition, similarities and differences, word frequency, word co-occurrence, semantic network analysis, etc.) to explore themes, patterns, outliers, and trends, and conflicts between and among data sources.

We reviewed secondary data capture different features of the intervention and contextualize the intervention. We conducted document review of the relevant published and unpublished documents about the intervention that we were able to obtain. To review the documentation on each case, we filled out a common document abstraction template (in an Excel spreadsheet) to systematically review the documents and synthesize salient data. Abstraction categories reflected domains from our combined CFIR and REP frameworks. We also conducted a focused literature review to identify the key contextual factors (e.g., socio-cultural, political, economic, etc.) relevant to the case and existing evidence about barriers to and success of health system strengthening and reform in the country. We used the literature and document reviews to build on and verify the interview data where possible and applicable (bearing in mind that written documentation represents the official record). We analyzed the

findings from the literature and document reviews in conjunction with analysis of the primary data. We uploaded the document abstraction forms in NVivo for coding and analysis with the interview data.

The research team ensured the reliability and validity (both external and internal) of our qualitative research in a several ways. We revised our semi-structured interview guide and record review forms based initial use. We used experienced researchers and held team meetings to ensure that all team members had a consistent and thorough understanding of the research goals and intent behind each question and probe. We further used consistent data documentation procedures and structured, systematic analysis techniques using qualitative analysis software (e.g., NVivo) to ensure reliability, quality control, and cross case comparisons. Further, we triangulated primary qualitative data with secondary data to improve the validity of findings from primary data. Finally, we conducted member checking by asking a key informant, the project's Chief of Party, to review and comment on the case narratives regarding coherence and validity. We also had a TAG member review each case narrative to provide further expert review. We then finalized the case narratives based on this feedback.

2.3 Cross-case analysis

In the third phase of the study, we analyzed this and the other five descriptive case study narratives from Phase 2 to help generate explanations for successful HSS interventions. The cross-narrative analysis of Phase 3 sought to build or strengthen the evidence base for the "how" and "why" of what works in HSS by determining which implementation domains and factors from the implementation framework influenced the success of the interventions. We looked for common and divergent factors that were present or absent across cases and contexts, and we tried to determine the relationships between the implementation factors and domains based on our findings. As an exploratory study, we hope these findings can provide some comment on the factors that may be associated with successful HSS implementation and inform future studies of HSS interventions.

3. FINDINGS

This case study discusses the Zambia Integrated Systems Strengthening Program (ZISSP), which was funded by USAID between July 2010 and December 2014. ZISSP worked to increase the use of quality, high-impact health services through a health systems strengthening approach.

In this Section, first we outline the relevant features of the context within which the intervention was implemented, including key features of the socio-economic context, political system, and health system. Second, we first describe the basic features of the intervention, including its primary goals, activities, design, and timeline. Third, we outline the main outcomes and impacts of the project. Fourth, we describe the implementation process, beginning with the implementation groundwork, implementation itself, and then how the project was sustained and disseminated.

3.1 Pre-conditions

3.1.1 Problem definition

In 2009, the Zambian health sector experienced a reduction in financial resources for government health programs due to issues with donor confidence in Ministry of Health (MOH) management of funds. This exacerbated the need for added inputs and ultimately affected program implementation at all the levels of the health care system. ZISSP was designed in 2010 to address multiple health challenges caused by weaknesses in health care system following the National Health Strategic Plan (2011-2015), which sought to provide the strategic framework for ensuring the efficient and effective organization, coordination and management of the health sector in Zambia. These included gaps in implementation of high-impact health services that are accessible, affordable and of acceptable quality; challenges in allocation and management of financial, human and technical resources in the health sector; a highly-centralized human resources (HR) management system; insufficient production and uneven distribution of HR; attrition; need for more effective engagement of and support for formal and community-based structures and their linkage to the planning process; need to promote full participation of all sectors of the population in health behaviors and utilization of health services; and large needs for in-service training to address the needs of new and evolving programs while pre-service curriculum revisions lagged behind.

Stakeholders at different levels of ZISSP and the Zambian health system described the problem ZISSP was addressing as lack of coordination, administrative capacity, and resources- especially HR. Some indicated this problem might have been related to a recent contraction in donor funds:

> *"ZISSP began after the collapse of the Global Fund's support after the audit findings about the government. While it wasn't designed to particularly address those issues, it was certainly affected by the large contraction in the available resources in the sector that began in 2009 and continued from 2010 through the life of the project." Zambia 01 (Implementer)*

> *"ZISSP was trying to improve the health of Zambia through strengthening the health systems at the national and sub-national levels. At also we were trying to see how we could improve the utilization of their services by communities." Zambia 06 (Implementer)*

3.1.2 Enabling environment

Zambia's health system is organized across national, provincial, district, and community levels. At the national level, the MOH is responsible for overall coordination and management in the health sector. In 2011, a reorganization of the health sector divided the MOH into two entities and placed the MOH in oversight of the tertiary hospitals, general hospitals, statutory boards and provincial medical offices (PMOs). The Ministry of Community Development, Mother and Child Health (MCDMCH), a newly established entity, became responsible for coordination and implementation of mother and child health services in Zambia. The MCDMCH oversees districts, health centers, health posts and community-level activities. The PMOs are responsible for coordination health service delivery within the provinces. District Community Medical Offices are responsible for coordinating health service delivery at district level. At the community level, Neighborhood Health Committees (NHCs) link communities to the health system.

The national administrative context in which ZISSP was implemented was a relevant factor, particularly with regards to HR. The 2011 restructuring of the MOH was related to problems with accountability (addressed below). Respondents from different areas of Zambia's health system as well as ZISSP indicated that interacting with the government workforce system had benefits as well as drawbacks:

> *"…the health sector has limited autonomy over its personnel because there is a broad civil services system and that is a source of hiring and firing authority. In some ways it's hard for any partner to work on Health Human Resources without having to work at the higher level with civil service." Zambia 01 (Implementer)*

Other donor-led development projects were factors in the environment ZISSP functioned within. During ZISSP, there were multiple other projects functioning in some or all of the same geographic and topical areas. Some respondents indicated that this added complexity to coordination of activities while others indicated the effect was positive where there was collaboration or at least communication amongst them. As other projects were indicated as helpful or conducive to ZISSP's progress, most respondents indicated conscious efforts to keep implementing partners and others aware of the activity. Likewise, there was consistency in the idea that when concurrent projects obstructed ZISSP's progress it was because of lack of coordination:

> *"…in the middle of the project Saving Mothers Giving Lives (SMGL) started and that was crazy because the CDC was on board, the State Department was on board (…) trying to coordinate the different implementing partners so that the community groups didn't just get bombarded by all sorts of different organizations, that was challenging." Zambia 07 (Subcontractor)*

> *"When we went into the provinces, we had the other partners, other staff coming from the other partners who were also coming to be trained in management and leadership and were paying by their own organization – Family Health International (FHI) was one. You find that when their staff came into those courses, they were paid by them. World Vision, when they brought their participants they were paid by them, but we provided the facilitators through that government institution because they were being paid by ZISSP." Zambia 03 (Subcontractor)*

Beyond the other projects operating at the same time as ZISSP, Zambia's history with other funding initiatives was indicated as a relevant factor. The Global Fund froze funding for Zambia because of concerns about accountability and corruption. This was specifically mentioned by several respondents as well in the USAID literature and is a relevant factor and piece of ZISSP's enabling environment.

3.1.3 Implementation setting

As a result of the Presidential Decree September 2011 which split the MOH , the coverage of the MCDMCH also included social protection and delivery of primary healthcare services in order to support national development. This reorganization was mentioned frequently as a relevant factor in ZISSP's implementation setting, in several cases alongside to issues with accountability and administrative capacity.

> *"From one central MOH into the MOH and Ministry of Community Development Mother and Child Health. That was a political decision which had a lot of impact on every project because the Ministries and the politicians had to figure out exactly how this was going to work, who had the mandate over what, and how the budget was going to work" Zambia 04 (Subcontractor)*

Some indicated that despite the challenges that came alongside the restructuring, the project functioned as well as it did because of strong efforts to coordinate and maintain accountability.

> *"During this time, at the national level, the Ministry of Health went through a lot of upheaval, the chain of command broke down – they lost resources to some extent and spent a lot of time fighting over those resources. Normally there's the Central Ministry to supervise the provinces and the provinces supervise the districts, but there was a diminished sense of responsibility. In most cases the provincial medical offices were good to them and it was reciprocal; ZISSP collaborated well with them and that supported the project's ability to deliver results." Zambia 01 (Implementer)*

Another relevant factor of the implementation setting was the structure of the government's regular strategic meetings. One respondent discussed this organizational characteristic that impacted the flow of information across different levels of the health system.

> *"Usually the government has strategic meetings throughout the year, annual planning meetings, etc... They happen at the district level, provincial level and ideally what is supposed to happen is the product from the district level feeds into the provincial level, which feeds into the center." Zambia 04 (Subcontractor)*

3.1.4 Project features and design

ZISSP was implemented between July 2010 and December 2014. The project worked closely with the MOH and the MCDMCH to increase the use of quality, high-impact health services through a health systems strengthening approach. ZISSP's implementation strategies aligned with the National Health Strategic Plan (2011-2015) of the Zambian health sector.

ZISSP organized program areas into four tasks:

- **Task 1:** Strengthen the ability of the MOH and MCDMCH at the national level to plan, manage, supervise and evaluate delivery of health services nationwide.
- **Task 2:** Improve management and technical skills of health providers and managers in provinces and districts in order to increase the quality and use of

Project Profile

Title: Zambia Integrated Systems Strengthening Program (ZISSP)

Period: July 2010 - December 2014

Funding: USAID

Budget: $ 88,092,613

Prime contractor: Abt Associates

Sub-contractors: Akros, ACNM, BRITE, LSTM, JHU CCP

Local implementers: Planned Parenthood Association of Zambia

Focus: strengthen systems for planning, management, and delivery of quality, high-impact health services at national, provincial, and district levels.

health services within target districts.

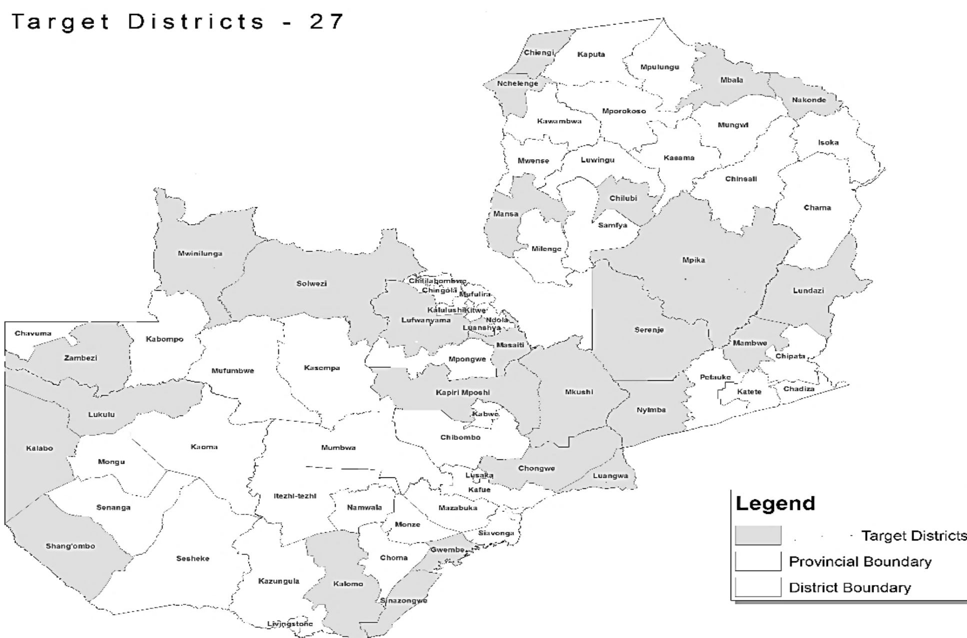
- **Task 3:** Improve community involvement in the provision and utilization of health services in targeted areas.
- **Task 4:** Ensure service delivery and other activities are effectively integrated at all appropriate levels in the health system through joint planning and in-kind activities with partners and appropriate public private partnerships.

ZISSP's diagonal approach contributed to outcomes across different levels of Zambia's health system. Tools and strategies were developed to improve the human resource data and retention at upper levels of health system. Both management and technical skills trainings were held in areas related to maternal, newborn and child health and nutrition. Community and health facility linkages to other levels were strengthened, and new education methods for nursing and midwifery were developed and implemented. New guidelines for quality improvement and clinical care mentorship were developed and as well as a decentralization strategy. Guidelines were revised for planning and management in the health sector, tools to improve data quality were developed, and an academy for management and leadership was created. Community volunteer groups like the Safe Motherhood Action Groups were scaled up, community linkages to the health planning process were strengthened, and a community program funded 18 community-health organizations. A detailed report of the outcomes of ZISSP is available in the official End of Project Report.

As of 13 December 2014, ZISSP spent a cumulative amount of US $84,984,449 against the total obligated funding of $84,984,449; 96.47 % of the total project estimated ceiling of $88,092,613. Several respondents discussed funding inadequacies. There was consensus about funding being inadequate in certain situations, but fewer consensuses about on whose behalf the inadequacies lay. One respondent mentioned the lack of available funds more broadly, and another specifically discussed the MOH's lack of

Figure 3: ZISSP target districts

financial support.



"In terms of funding, despite the support from the PMI through ZISSP and then the World Bank and the MOH – I think the funding wasn't adequate. That was a major challenge" Zambia 08 (USAID)

"Sometimes you agree with the Ministry what the partners are going to do, but tomorrow they come back and say 'we have no resources, what do you expect us to do?' That is the cry of the Ministry. In fact, you look at these beautiful plans being produced every year. You go on to see allocation of resources under the plan, but maybe you want to see some allocation of resources to the tune of even 80%. You should support 80% of these activities, but what you see from the Ministry is that maybe the support is 40-50%." Zambia 02 (Implementer)

USAID interacted with Zambia's MOH to establish some of the directions for the project to address. This process was a factor in Abt Associates' design process that also involved interaction with the MOH.

"The starting point really was consultative and maybe that is the natural evolution of all [USAID projects] like this one. The starting point was the client- USAID in this case, did obviously consult with the MOH to try and understand the priority areas that they could possibly fund…at the [USAID] proposal stage that meant that the kind of support was elaborated and outlined- The MOH In collaboration with the provinces and the districts" Zambia 06 (Implementer)

The project's design was led by Abt Associates who included systems-strengthening objectives. There was correspondence with subcontractors depending on the topic area (see box):

"During the design phase, it was the Abt team, it wasn't really the government. The team that was designing from this end agreed with the Abt team to introduce a new structure to look at the work of the management section, so that was how it was designed." Zambia 03 (Subcontractor)

Involvement of the MOH and other stakeholders at the initial project stages including planning and strategic development had a substantial impact on the project as indicated by both literature and most respondents.

"ZISSP's role was to be a convener who brought together these various implementing partners under government leadership, to help create agreement on a national guideline and system, to develop structure." Zambia 01 (Implementer)

ZISSP Implementing Organizations

- **Abt Associates**: Lead organization.
- **Akros Inc.**: Strengthening the enhanced surveillance capacity of the National Malaria Control Program (NMCP).
- **American College of Nurse-Midwives** (ACNM): Developing skills labs at midwifery training institutions with the General Nursing Council and providing technical assistance in safe motherhood.
- **Broad Reach Institute for Training and Education** (BRITE): Creating ZMLA with MOH and the National Institute for Public Administration (NIPA).
- **Johns Hopkins Bloomberg School of Public Health**–Center for Communication Programs (JHU–CCP): Strengthening behavior change communication (BCC) systems with particular focus on district and community stakeholder involvement in BCC.
- **Liverpool School of Tropical Medicine** (LSTM): Building entomological capacity of the NMCC for monitoring sentinel sites for malaria.
- **Planned Parenthood Association of Zambia** (PPAZ): Expanding MCDMCH and community capacity for ADH and family planning (FP) programs and service delivery.

ZISSP was designed to support Zambia's health system broadly, but with appropriate emphasis on the larger issues as the same respondent discussed:

> *"This project was designed broad and thin, very broad and thin. I'm not sure if everyone in the Ministry would have agreed with that, but now I am not sure the input they might have had. The major areas the project spoke to like human resources for health, everyone knows it is a giant problem in Zambia's health sector." Zambia 01 (Implementer)*

This involvement was related to be the foundation of the detailed and specific strategies as well as the more open areas of the project. Certain health issues required more preliminary analysis than others, which was another reason where collaboration with the MOH was valuable. Maintaining ZISSP staff presence at different levels of the health system, or secondment, was an important factor in the project's design:

> *"The way ZISSP approached it was to have an administrator and a technical person in each of the provinces to be able to manage the health system with primary focus in some of the provinces. What that helped was to have at least those regional levels have a better understanding of what it is to administer a health system." Zambia 09 (USAID)*

Table 1: Project timeline

Year	Event
2010	ZISSP Commencement
2011	MOC/MCDMCH Restructure
2011	National Health Strategic Plan (2011-2015)
2012	The decentralization of certain HR functions to the provincial and health facility levels, a change authorized by Cabinet in January 2012
2014	ZISSP Ends

3.2 Pre-implementation

3.2.1 Implementation groundwork

The broad goal of ZISSP was to strengthen Zambia's systems and skills for planning, management, and delivery of health services at national, provincial, and district levels. ZISSP seconded skilled clinical and managerial mentors to key positions at MOH and MCDMCH. Secondment was grounded in the principles of needs-based capacity building, targeted skills transfer, leadership development, and planned phase-out.

A ZISSP-supported 2010 gap analysis highlighted opportunities to strengthen specific components of the MOH HR system that could improve HR management across the central, provincial, and district health offices and within the hospitals and health facilities. At the start of ZISSP, the MOH had just completed the review of the Fourth National Health Strategic Plan and had identified specific interventions, guidelines and training manuals that required updating.

ZISSP collaborated with the MOH and other cooperating partners to form the national Quality Improvement Technical Working Group (QI TWG) to serve as a national-level forum where government representatives and stakeholders facilitating QI in various health programs could meet regularly to discuss QI program implementation and coordination. A review of implementation of QI

and clinical mentorship by the QI TWG in 2011 revealed several challenges coordination and materials/resources. MOH identified a need to increase access to data and other types of health information to guide the annual planning process. With increased emphasis on data use, the health system required approaches to prevent, recognize and address data errors so that planning would be guided by complete and accurate data. ZISSP began as Zambia was making major progress in its goal to eliminate Malaria, but had recently identified issues with insecticide resistance to insecticides recommended by WHO vector control, but at the same time Indoor Residual Spraying was expanding. The rapid scale-up of control measures, confirmation of insecticide resistance, and lack of resistance data in much of the country created a high potential for vector control failure.

Active involvement of communities in the health system is a key focus of Zambia's primary health care strategy. However, the ZISSP inception report and 2011 mapping exercise found that NHCs were not functional in most communities, community health priorities were frequently not incorporated into health center action plans, and only 30% of community plans received government funding. Coordination between health centers and community structures was weak in most districts. ZISSP specifically focused on district-level interventions in 27 districts which were chosen in consultation with MOH in 2010 using a four-stage selection approach that took the following criteria into consideration: League table ranking, human resources for health capacity, MOH ranking of the districts into A, B, C and D according to the Living Condition Monitoring Survey, and collaborating partner involvement.

A ZISSP inception report identified issues with the TWGs including varying levels of activity, communication, management and adequate focus on emerging health issues. ZISSP's financial and technical support to the TWGs allowed the MOH and MCDMCH to improve their activity and contribution to particular health areas.

Different stages of this project were indicated as having substantial input from different levels of the health system, and perhaps the most significant was the planning process. Since the project incorporated both information and activity from within and outside of the Zambian health system, the considerable emphasis on participation in planning helped both create comprehensive strategies as well as keeping stakeholders informed of the activity of the project.

> *"They had a bottom-up approach to work planning where the teams that were working at each level (ex. community and district level, management at province and district level, clinical care) all worked to define the activity and took input from the provincial medical officers and district medical officers where they worked. People at the Ministry of Health also contributed, that included a person for Health Human Resources, Maternal Health, Child Health and it worked the same way (with seeking input from others at the province and district level). Zambia has a well-articulated planning system, the results aren't always great, but there is a process. Me and my team were engaged during the government planning process and were able to see what priorities the government had that aligned with ZISSP priorities as specified in the contract. In that sense, government had an input on priorities at all levels." Zambia 01 (Implementer)*

Respondents interviewed came from different areas of the ZISSP consortium spanning different program areas. As such, their activities differed substantially depending on their area of focus. Some involved preliminary activities like performance assessments, surveillance, and strategic meetings, and were conducted with involvement or collaboration or by the Provincial Health Offices (PHOs) and other levels.

A relevant project characteristic was the incorporation of existing systems and data. This factor was also indicated by respondents with different focuses within the project depending on how useful or available existing information was. The common theme was that when there was available data or a system that

was in use as activities were being conducted and there was an effort to incorporate them. One respondent discussed the incorporation of existing measurement activities into their activities as subcontractors under ZISSP:

> *"When it comes to the interventions … we did the gap analysis, we allowed each member of the provinces to also do some form of gap analysis in that province, then we looked at all the things were coming, some seemed to be similar, so we came up with a work-plan to cover all those issues to be implemented in all the provinces and districts where it was possible for us to implement." Zambia 03 (Subcontractor)*

Another factor and implementing organization characteristic was the previous experience of key staff, particularly within the Zambian health system. Several respondents indicated the relevance of experience and familiarity with different dimensions of the implementation environment key staff had.

> *"What I would say is that leadership, there was a very good technical advisor there who was there almost until the last year of the project, the deputy chief of party was excellent, the community-based advisor was really good. At the end of the day, leadership is kind of irreplaceable in terms of being able to pull something off like that…That is the advantage of, and I understand why USAID does it, awarding incumbents because that familiarity and in-depth knowledge of the country makes all the difference in the world." Zambia 07 (Subcontractor)*

3.3 Implementation

ZISSP focused capacity building efforts within existing MOH and MCDMCH structures at the national and provincial levels to strengthen system-wide management and monitoring systems. ZISSP worked through MOH and MCDMCH TWGs, participatory fora for cooperation between the government and key stakeholders in specific technical areas. The TWGs support the MOH and MCDMCH to review, update and/or develop strategies, guidelines, curricula, and other key documents to support quality service delivery.

> *"ZISSP's role was to be a convener who brought together these various implementing partners under government leadership, to help create agreement on a national guideline and system, to develop structure… there were a lot of other areas that the Ministry wanted support in which were not included in the program design." Zambia 01 – Implementer*

ZISSP focused on capacity building within the TWGs to increase participation and collaboration at that level which influenced system-wide management, surveillance, and policy. ZISSP used seconded staff in specific areas including clinical mentorship, EmONC, and management, among others, to build MOH capacity for the transfer of technical and specialized skills. At the district, health facility and community levels, ZISSP worked within MCDMCH structures to improve quality and use of high-impact services within target districts.

> *"We the supported the Ministry to strengthen the policies, to strengthen the various guidelines, and at the national level supporting the relevant TWGs. We developed quite a number of the guidelines and training materials and eventually had disseminated to be used at the sub-national levels- medical facilities- health facility level. Our approach such that we seconded a number of staff in various program domains." Zambia 06 (Implementer)*

> *"[T]here was work all throughout the hierarchy. It went down to the community level, so we worked at central, provincial, district-facility and sub-facility levels. Surveillance [for malaria] stopped mostly at the district level, although in terms of our direct capacity building the work that the districts were taking on were happening at the sub-district level… other activities happened at the facility and community levels." Zambia 05 (Subcontractor)*

As part of their roles, seconded provincial specialists provided technical assistance during the preparation and review of annual district work plans, facilitated technical trainings and technical support supervision and mentorship, participated in Performance Assessment activities, and supported coordination and implementation of activities in line with MOH plans and priority areas. An additional person was seconded to the Eastern Province PMO to support provincial-level coordination and implementation. ZISSP worked through the DCMOs to plan, oversee, and monitor the implementation of health activities at the district level.

At the MOH level ZISSP helped strengthen data and systems by supporting evaluations of existing systems and developing new strategies where it was necessary. The evaluations provided the MOH with data indicating particular areas in need of improvement, which they addressed. ZISSP helped the MOH develop a specialized human resource information system, supported the roll out to provincial offices, and held trainings for the new system. ZISSP helped support a PMP (performance management package) implementation strategy and using government funds, the MOH trained trainers to cascade to provincial & district-level staff. ZISSP revised the existing Zambian Health Worker Retention Scheme (ZHWRS), and developed a sustainability strategy for it which was particularly important for rural-areas of Zambia.

A key factor regarding implementation in ZISSP included the alignment with MOH priorities and systems that were in place before ZISSP's beginning. This approach was echoed by stakeholders at the lower levels of the health system as well, as one indicated while discussing their experience working with the MOH:

> *"Implementing meant using existing Ministry staff- once the MOH agreed you didn't have problems (…) we assisted provinces in creating their own statistical bulletin so they could benchmark their own performance." Zambia 03 (Subcontractor)*

Other respondents discussed secondment from different perspectives. Some respondents indicated that seconding staff after the MOH had approved the strategy was what made it effective, and others commented that secondment helped particular program activities follow through to the final stages and transfer ownership back to the MOH:

> *"ZISSP, for example, seconded 5 staff to the malaria program and that was helpful. I think they were essentially offering technical support to the MOH. For example, we had the M&E [monitoring and evaluation] focus person, an IRS, someone who was looking at entomology and running the insectary; that was support from ZISSP." Zambia 08 (USAID)*

3.3.1 Actor Engagement

ZISSP received substantial support from MOH officials as well as other areas of the health system. USAID was indicated as particularly supportive, as was key project staff. It is important to note that in this context several respondents mentioned the previous experience in Zambia of key staff was a strength of the project. There was little or no indication of actors who impeded ZISSP, besides the observation that individuals and groups sometimes became overwhelmed at certain project stages. This was likely to do with their responsibilities growing substantially.

> *"Zambia generally has a good environment between its implementing partners, a lot more collaboration than in other countries. It's a very open door between projects and peers (…) there were … some people who created difficulty for the project, (…) more so busy doing other things and couldn't be tracked down to review documents." Zambia 01 (Implementer)*

3.3.2 Changes

ZISSP was able to adapt effectively, potentially due to the emphasis on participatory fora which helped facilitate vertical communication as well as the different project implementers engaging Zambian staff and volunteers as integral stakeholders. The respondents who discussed changes that may have impacted ZISSP suggested that ZISSP's design allowed it to adapt effectively.

> *"The methods are developed to achieve certain outcomes, so of course different tactics strategies are modified if the outcomes aren't coming. The general objectives remain the same. For example, when you are looking at facility-based active case infection you want to ensure that you follow up every house that's related to an index case and whether that means that you are using tablets to identify the database of index cases or paper forms is largely dependent on the uptake and the capacity of the people at the facilities you are working with. We would adapt those particular tactics to the capacity of the people we were working with, but the overall objectives did not change." Zambia 05 (Subcontractor)*

3.3.3 Challenges

Nearly every respondent mentioned challenges involving coordination of the different programs of ZISSP. Several respondents focused more on the logistical components as being challenging, while others specified that the people who were in charge of coordination were overworked. One respondent commented on the complexity of the environment:

> *"This is the problem in general that Zambia has many policies, guidelines, and strategies, but the mechanics (how do you move it from the Central → Province → District →Facility level), especially in the absence of partner support, it's a bit complicated because the fabric is well-knit together, especially between the Central and the provinces." Zambia 01 (Implementer)*

ZISSP and projects like it can pose a tremendous burden of coordination on structures, and ZISSP used secondment and other strategies to build capacity to handle the necessary coordination. Many felt as though the structure was inadequate to handle the coordination in different areas. Several respondents discussed the challenges related to increasing activities in a broader environment where stakeholders at different levels of the health system can become overwhelmed:

> *"The planning unit is the same unit that coordinates health care finance activities and there are also other partners who are providing support to the Ministry. At that point you are working with one or two people in that unit, so you are basically fighting for that same button." Zambia 03 (Subcontractor)*

HR mobility was an ongoing challenge for implementation. The common theme among this was the systemic movement and attrition of staff. It seems as though several strategies, particularly staff training, were not as effective because of staff movement. Several respondents commented that training programs encountering challenges related to the movement of staff and integrating trainings into a broader system:

> *"The government is a fluid place in a way and so as formal as it can be in terms of the process, people are moved around a lot. For some of our trainees, you start training them. For some of our trainees you start training them in one province and then the person gets transferred in the middle of the training, so there are a lot of things like that, which are happening and make it challenging to get everyone through the training process." Zambia 04 (Subcontractor)*

3.4 Maintenance and evolution

3.4.1 Sustaining implementation

Several respondents indicated that particular dimensions of ZISSP remain functional in Zambia. One indicated that the community-involvement strategies involved forming groups that are still function but to what extent is not clear. Another respondent indicated that other projects are continuing to work with some of ZISSP's activities:

> *"There's another project which has come through I think through PATH which is doing community activities which ZISSP was doing and SBH [Systems for Better Health Program - the follow-on project to ZISSP] has concentrated on strengthening systems at national, provincial, and district level. So some of the activities done by ZISSP is now being taken up by other projects. So most things have continued." Zambia 08 (USAID)*

Additionally, there is a follow-on project that began after ZISSP. The two differ at least in scope as the follow-on project focuses on only five districts instead of the ten in ZISSP:

> *"… under ZISSP we did support all the 10 provinces. And under the current project we are supporting only 5. Only 5, of course at national level- I think the work we are doing at the national level is affecting the whole country but at the provincial level we are only doing 5." Zambia 06 (Implementer)*

Much of ZISSP's approach was aimed at improvements that were transferrable and sustainable. Secondment was mentioned by several, but with different sentiments. Some felt that secondment was helpful to keeping activities sustainable. Others observed that gaps in funding after ZISSP came to a close left seconded staff members unemployed, and the contributions they had been making to the system may have stopped with their absence.

> *"[T]he seconded people were not as absorbed in the Ministry establishment. The Ministry already had a Clinical Care Specialist in its establishment and ZISSP provided a second one for each province […] The Ministry added a number of new positions (ex. human resources officers at the district level) that came into the establishment at the same time as ZISSP, so the positions that the positions ZISSP was funding didn't get carried over into the establishment (…) Most of them are unemployed; all Zambians." Zambia 01 (Implementer)*

3.5 Lessons learned

Two major themes emerged as lessons learned from ZISSP. Firstly, system-wide integration was perceived as a unique and strong characteristic of ZISSP. Within this, many of the respondents emphasized the benefits of having implementing partners work at different levels of the health system involved in the coordination. Other respondents specifically mentioned the importance of seeking input especially from the district and community levels as a mechanism to identify areas in need of support.

> *"I have learned that to strengthen systems, you just have to engage them at every level and it should be well coordinated at the national level, provincial level – we call them into the meetings, so that when it comes to implementation if you are all supporting the same activity, then you can agree what elements of the same activity each one can take care of." Zambia 03 (Subcontractor)*
>
> *I'm calling that an innovation (…) the impetus to the districts to tell them what to do- because the data is synthesized- what are their gaps and what are their existing systems (…). We are trying to find out exactly how the systems are working – where are you spending to achieve your results and such. The*

sooner you identify the challenges, identify the gaps and give the support it becomes very targeted. Zambia 06 (Implementer)

"(T)here's no question that in malaria transmission environments you have to have community level surveillance and active case detection in order to really stamp it out. Otherwise you risk resurgence past levels where it was previously peaking and that's enough of a moral urgency to warrant external intervention that might not otherwise be sustainable." Zambia 05 (Subcontractor)

Secondly, respondents indicated the importance of local stakeholder ownership over key project activities. Several respondents articulated that lack of ownership by local government and/or non-government actors puts sustainability of the project at risk.

"You can build the capacity, but if the internal structures aren't there to support, then a lot of that work doesn't have the sustainability that it should have. Zambia 04 (Subcontractor)"

"Again, I go back to sustainability and seeing in the long run, ZISSP and other programs have to take more initiative in getting local NGOs, especially local NGOs and governments to assume more responsibility, but for that you have to force the partners. It's not so much a ZISSP thing as much as a USAID thing to be able to force that issue" Zambia 09 (USAID)

4. DISCUSSION AND SYNTHESIS

In this section, we discuss our results and synthesize the key factors that led to the successful implementation of the project.

4.1 Synthesis

One strong theme across the facilitating factors of ZISSP was the integration with MOH and government structures and processes. This theme was mentioned in relation to several project phases including the early stages of different project areas, but also in terms of the transfer of ownership at the later stages. Some respondents suggested that integration with the MOH agenda was not only a factor for ZISSP's success, but it was perhaps the best approach. Another theme in the facilitating factors was the strong leadership of key project staff. Several respondents mentioned this. Some also mentioned the previous experience of staff in Zambia.

Another factor that facilitated the success of ZISSP was related to the secondment strategy. Secondment of staff in key areas allowed particular project areas across different levels of the health system to be integrated into the ZISSP project as a whole. Not only did this approach help the implementation of activities in key areas, but it helped at early project stages to identify particular areas in need of support.

Factors that impeded or hindered the progress of ZISSP included logistics of HR, the complexity of different systems with which ZISSP project components sought to integrate, and issues with the MOH taking ownership. Many respondents indicated that, broadly speaking, human resources for health are a significant problem in Zambia. Some of those went on to discuss the mechanisms that caused issues like attrition to occur particularly with the trainings ZISSP implemented, which is related to the second theme in impeding factors. Some ZISSP-implemented training programs in Zambia's health system involved an accreditation process, which was formally recognized by the rest of the health system. In some cases, the logistics of the training programs was more complicated and suffered from issues including partial-completion of trainings and high staff movement. Ownership of the different project areas of ZISSP was strong in some cases and not as much in others. While many components of ZISSP had smoother transfer of ownership, others were not. Where the respondent data suggested there was less local ownership taken, it was mentioned to have resulted in attrition and possibly a threat to sustainability of particular dimensions of the project.

4.2 Conclusion

ZISSP is an example of a HSS program that focused on structural components of a health system that required support in order to improve its functionality, including particular areas with specialized support. This approach benefitted from high levels of communication with the MOH at the early stages, which helped align priorities between the program and the Zambian government, and also benefitted sustainability. ZISSP was a particularly large program and used a variety of strategies to effect change at different levels of Zambia's health system and used venues to encourage collaboration and communication. ZISSP's whole-systems/diagonal approach was able to successfully improve delivery and increase use of health services in Zambia as well as improve on a large number of important health outcomes.

ANNEX A: COMBINED IMPLEMENTATION FRAMEWORK

Phase	Domain	Factor	Description	Unit of analysis
I Pre-condition	Enabling environment	Wider environment	Economic, political, social, and health system context within which intervention[3] is implemented	National/regional context
		External policies and incentives	Strategies to spread intervention – policy, regulations (not directly implemented by project but (pre)existing) Policies that constrained implementation Other donor led initiatives that complement intervention	National/regional context
	Implementation setting	Characteristics of organization	Structural characteristics of organization such as social architecture, age, maturity, and size of organization Culture of organization such as norms, values, basic assumptions of organization	Change target/larger host organization[4] (identify for each case; e.g. MOH)
		Implementation climate	Climate within organization, including relative priority of project, readiness for implementation, learning climate, and policies, procedures, and reward systems that inhibit or facilitate implementation	Change target/larger host organization (identify for each case; e.g. MOH)
	Project design	Intervention source	Stakeholder perception if intervention internally or externally developed	As applicable for each case (e.g. MOH, local partners, change target)
		Identification of effective intervention	Process for deciding intervention approach and activities Stakeholder perception of quality and validity of evidence that intervention will have desired effects Perceived relative advantage and complexity/perceived difficulty of intervention	As applicable for each case (e.g. MOH, local partners, change target)

[3] The total package of activities that is implemented by the project.
[4] Institution within which activities are being implemented; may be MOH or other local organization (will focus on larger organization like MOH rather than individual hospitals); depending on the case this organization may be more or less involved in the actual implementation.

		Adaptability	Degree to which intervention was adapted to local needs, including degree to which beneficiaries' needs were understood and design was adapted to meet their needs	Project implementers[5] (e.g. prime + subs)
		Draft package	Perceived quality of how intervention is presented	As applicable for each case (e.g. MOH, local partners, change target)
2 Pre-implementation	Implementation groundwork	Structural characteristics of implementing organization	Structural characteristics of implementing organization such as social architecture, age, maturity, and size of organization; culture of organization such as norms, values, basic assumptions of organization	Project implementers (e.g. prime + subs)
		Implementation climate	Climate within project including relative priority of project, readiness for implementation, learning climate, and policies, procedures, and reward systems that inhibit or facilitate implementation	Project implementers (e.g. prime + subs)
		Planning	Degree to which intervention is planned in advanced, quality of methods; refinement of draft package based on pilot testing, stakeholder feedback	Project activities
		Orientation and logistics	Quality of initial planning and execution of the project, including needs assessment, pilot testing, leadership engagement	Project activities[6]
3 Implementation	Implementation	Executing	Fidelity of implementation	Project activities
		Engaging	How the project attracted and involved appropriate individuals throughout project: opinion leaders, formally-appointed internal implementation leaders, champions, external change agents	Project activities
		Feedback and refinement	Qualitative and quantitative feedback about progress and quality of implementation Refinement of activities based on feedback	Project activities
		Cost	Costs of total intervention - planned and actual	Intervention

[5] Prime contractor and sub-contractors (may include local subs) who implement the project. This does not include the change target organization.
[6] Specific activities directly implemented by the project implementers. These may or may not align with other activities in the change target organizations. These individual activities make up the intervention as a whole.

4 Maintenance and evolution	Sustaining implementation	Organizational, financial changes	Changes made to sustain the intervention	Project implementers (e.g. prime + subs); Project activities
		Re-customize delivery as need arises	Adapting the intervention delivery as circumstances change	Project implementers (e.g. prime + subs)
	Dissemination	National dissemination	Preparing refined package, training, and TA program for national dissemination; was project nationally disseminated	Project implementers (e.g. prime + subs); Change target

ANNEX B: KEY INFORMANT INTERVIEW GUIDE

Instructions

First complete informed consent to conduct interview and ask permission to record.

Ask as many of the primary questions as is feasible given the time constraints and as are appropriate for the respondent given their role in the project. Ask probe questions as applicable. Prioritize the most important questions if you do not have sufficient time to ask all applicable questions.

Respondent's role

1. Can you tell me about your involvement with [PROJECT]?
    a. When were you involved with [PROJECT]?
2. Who were you working for during that time? (e.g. Implementing partner (specify); USAID Mission; USAID HQ; government counterpart; other—specify)
    a. What was your position or title with [PROJECT]?
    b. Did you change organizations or positions during your time on [PROJECT]?

Pre-condition

3. What problem(s) was the [PROJECT] trying to solve?
    a. Who felt this was an issue of concern? (e.g. MOH, US Mission, other stakeholders?)
    b. Why did they see it as a concern?

        PROBE: What evidence was this based on?

    c. Was there a country/government initiative or reform targeting this issue that the [PROJECT] was intended to support? Please describe briefly.
4. How did USAID decide to fund a project to address this problem? Who was involved in the decision?
    a. What evidence was used to understand the issue?

        PROBE: Evidence used by respondent or respondent's organization, other partners, local stakeholders, USG?

    b. What approaches or activities did USAID specify in the RFA/RFP? (*Skip if can answer from documentation*)

        PROBE: Did other stakeholders contribute to what was specified in the RFA/RFP?

    c. How did USAID decide what to include in the RFA/RFP? Did other stakeholders contribute?

5. How was this [PROJECT] selected to address [ISSUE]?
    a. Who was involved in the selection?
6. Can you briefly describe the [PROJECT's] approach and activities?
    a. Which do you think were the most important activities?
7. During the work planning process, how were the specific activities used in [PROJECT] selected?
    a. Who contributed to these decisions?

        PROBE: Prime or subcontractors, US Mission, MOH, hospitals, [PROJECT] participants, beneficiaries

    b. What other information influenced the selection of the [PROJECT] interventions? (e.g. government priorities, new USAID/USG initiative, existing policies/regulations, new financing, etc.)
    c. Were other interventions considered but not selected?
    d. How much consensus was there between stakeholders about the design of the interventions?
8. How were the intervention sites identified? (e.g. hospital, school of nursing, etc.)
    a. Who contributed to these decisions?
9. How were the activities designed to be appropriate for the local health system context?
    a. How were planned activities piloted?
    b. How were planned activities adapted to existing conditions during the [PROJECT]?

Pre-implementation

10. Were there any individuals or organizations who provided strong support for the [PROJECT]?
    a. How did they promote [PROJECT] implementation?

        PROBE: Did they promote implementation at individual sites or for particular activities?

    b. What are the reasons they supported the [PROJECT]? (e.g. specific to [PROJECT] or supportive to larger country initiative?)
11. Were there any individuals or organizations who delayed or impeded implementation of [PROJECT]?
    a. How did they impede [PROJECT] implementation?
    b. What are the main reasons they impeded it?
12. Can you tell me about the dynamics of the individuals and organizations working on [PROJECT]?
    a. How did these evolve over time?

Implementation

13. How were [PROJECT] activities implemented?

    a. Were all the activities implemented in all of the project sites? (*Skip if can answer from documentation*)

    b. Were activities implemented in phases? (*If yes*) What were the phases? (*Skip if can answer from documentation*)

    c. Did the [PROJECT] activities change over time? (*If yes*) Why? (*Skip if can answer from documentation*)

    d. Were changes documented? (*If yes*) How? (*Skip if can answer from documentation*)

    e. How did contextual factors affect implementation? (e.g. social, economic, political, technological, etc.)

14. Was there consensus among different partners and stakeholders about how the [PROJECT] was implemented?

15. Where did the resources for [PROJECT] implementation come from? (e.g. [PROJECT]/[PARTNER], USG, government, others) (*Skip if can answer from documentation*)

    a. Was there enough funding and other resources to support [PROJECT] implementation?

       PROBE: financial, technical, human, technological.

    b. (*If there was a shortage of resources*) How was the shortage addressed?

16. What challenges were faced during day-to-day [PROJECT] implementation?

    a. Were there any issues with policies or regulations?

    b. How did [PROJECT] address these challenges?

17. How were [PROJECT] activities monitored and/or evaluated? (*Skip if can answer from documentation*)

    a. Who was responsible for monitoring implementation progress? Was this part of standard implementing practices?

    b. Was an evaluation conducted? By whom? Who requested it? Who paid for it?

    c. How were findings from M&E incorporated into implementation?

    d. What was the response to M&E findings?

18. What dissemination activities were undertaken during [PROJECT]? (e.g. small-scale meetings at [PROJECT] sites, national workshops presenting findings, feedback sessions to USG, etc.) (*Skip if can answer from documentation*)

    a. How was feedback disseminated throughout [PROJECT]? (e.g. [PROJECT] participants, end-of-the-line beneficiaries and policymakers)

Maintenance and evolution

19. What was done during [PROJECT] to support continuation of activities after [PROJECT] ended?
    a. What role did [PARTNER] or others have in helping to sustain the activities?
    b. What role did others play in sustaining the activities? (e.g. US Mission, MOH, intervention sites, communities)
20. What is the current status of activities included in [PROJECT]?
    a. Who has taken responsibility for sustaining the interventions? (e.g. financial, organizational, technical responsibility)
    b. What are the long-term prospects of the interventions?
    c. What, if any, are the plans to scale-up/expand the interventions from [PROJECT]? (e.g. same country, other settings)

Reflections

21. What do you think were the impacts of [PROJECT]? (e.g. changes in health status, improved service delivery, increased quality of services.)
22. Were there any consequences from [PROJECT] that were unintended or unexpected?
23. What were some challenges to the overall implementation of [PROJECT]?
    a. How could have these been addressed during the implementation period?
    b. Do these challenges remain an issue today? Why?
24. What were the key factors that led to the success of [PROJECT]?
25. What are some lessons learned from implementing this intervention that you would take forward on other projects of this nature?
26. Is there anything else we have not discussed that you would like to share about the implementation of [PROJECT]?
27. Do you have any questions for us?

ANNEX C: BIBLIOGRAPHY

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