

Rethinking Health Care Financing Models. The Case of Zimbabwe's Health Sector

A Dissertation

presented to

The Development Finance Centre (DEFIC)

Graduate School of Business

University of Cape Town

In partial fulfilment
of the requirements for the
Master of Commerce in Development Finance Degree

by

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March 2017

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Abstract

The purpose of the current study was to assess how RBF performed in terms of efficiency, effectiveness, equity and governance in the Zimbabwean context. It outlines the evolution of health systems thinking and health funding models over time to show the history and changing landscape of health care financing and their actors. General consensus is there is need to focus on results of health care investments against a background of prodigious amounts of foreign aid with marginal or no improvements in health care delivery for decades of development assistance in developing countries. Health systems in developing countries are beset with burgeoning domestic and foreign debts as well as diminishing fiscal space that has more often put the primary health delivery system in developing nations in “comatose”. The research made use of both qualitative and quantitative dimensions. Findings indicate that the pre-RBF era was characterised by poor primary health outcomes, unsound governance and a lack of confidence in the public health delivery system. However, since RBF implementation, access to health care by marginalised groups has increased, with incentives and community participation liberalising health systems to greater efficiency as shown by slight increases in post-natal care visits in rural health care centres. A trade-off between achieving efficiency and equity was found especially when scaling up health programmes under the RBF initiative. Through embracing RBF, the primary health delivery system is poised for future development attributed to community buy-in and people-centric empowerment approaches.

Acknowledgements

My sincere gratitude goes to my supervisor Dr Mundia Kabinga, for the patience and guidance he offered me as a first-time researcher, CORDAID Zimbabwe office and the Ministry of Health and Child Welfare (MoHCW) for the cooperation and invaluable information, and secondary data they provided. Ultimately, I am greatly indebted to my family, in particular my son Makomborero and daughters, Maita and Matipa for the motivation and inspiration.

Dedication

To my grandmother with love, may her soul rest in peace.

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List of Abbreviations and Acronyms

CORDAID Catholic Organization for Relief and Development Aid

DAC Development Assistance Committee

GDP Gross Domestic Product

HIRTF Health Results Innovation Trust Fund

MDGs Millennium Development Goals

MoHCW Ministry of Health and Child Welfare

RBF Results Based Financing

SDGs Sustainable Development Goals

ESAP Economic Structural Adjustment Programme

Chapter 1: Introduction and Background

1.1 Background of the study

The way a health system is financed has a significant bearing on the performance of its key functions of stewardship, inputs creation, services provision and ultimately, the achievement of the health system goals (Kirigia, Carrin, Preker, Mwikisa, and Diara-Nama, 2006). Invariably, the goals of a functional health system include improved health service delivery and responsiveness to people's medical expectations. The major objectives of health financing are to make sure that funding for the health system is made available, ensure cost-effective interventions, set appropriate financial incentives for health care providers, and ensure that all individuals have access to effective public health and personal health care (Kirigia *et al.*, 2006; Fretheim *et al.*, 2014).

Developing economies are the major recipients of health care finance as they are more often beset with resource constraints. Faced with a multitude of social objectives, governments in developing countries, as the custodians of funds, lack the capacity to drive health related programs. Hence, less priority is assigned in the allocation of funds to the health care sector (Dimovska *et al.*, 2009). The report by Toonen *et al.* (2009) recognises that governments in developing countries realise that a strong health financing system is a priority, only that it is not regarded as a pre-requisite. The works of Emek (2015) outline that the best way to enhance the capacity of governments in health financing is to leave finance responsibilities to the private sector through the creation of public private partnerships. However, most developing country governments cannot envisage the possibility of delegating financial management to private players.

Various health financing models have been developed for ensuring the effectiveness of health care financing systems across the world (Murray and Frenk, 2000) for example, the standard health-financing model, Bamako Initiative, coordinated basket funding, decentralised government funding and recently, results based financing. These health-financing models were developed in the wake of the realisation that most developing countries are battling to improve the efficiency and effectiveness of their health systems in the face of constrained fiscal space. Two similar models are the standard health-funding model and the Bamako Initiative; whose

notable misassumptions are that countering resource constraints and the provision of incentives deliver anticipated results. The standard health-funding model is a pro-poor model developed to exempt vulnerable members of society from paying user fees. In essence, the standard health model emphasised the provision of incentives to improve and strengthen the efficiency of health systems (Quaye, 2007). The Bamako Initiative was introduced to counter resource constraints and practical implementation within health systems (Omololu, Okunola and Salami, 2012).

The Coordinated Basket Funding was developed with the need to pool resources from the donor community and entrust the funds under the custody of the central treasury, which was assigned with the dispensation to distribute the funds to areas of need. It has been criticised on its lack of sound checks and balances, accountability and fears of misappropriation and misallocation of funds, as country datasets are not reliable. Moreover, it yielded disappointing results since most governments in the developing countries have not been allocating the donor funds meant for health funding for intended purposes. In a study of health financing in Ghana, Nigeria and South Africa, Burke and Sridhar (2013) found out that the political nature of funding allocations in these countries was likely to result in misappropriation of funds and unreliable data sets.

The decentralised government funding has been born out of the need to minimise political clout in the allocation of health funds as well as empower local governments to play a leading role in health financing. A successful implementation of the decentralised government funding as a health care financing model was implemented in Tanzania under the banner of decentralisation by devolution of power. This mode of decentralisation subscribed to principles of transparency, participation and accountability (Nibbering and Swart, 2008). The Results Based Finance (RBF) is a recently proposed health financing framework championed by the World Bank for wholesale adoption in assessing the performance of the health sector in developing countries (O'Brien and Kabur, 2013). The works of Musgrove (2011) define the RBF as a form of funding for project implementation or service provision, where the principal, who provides funding pays the agent who implements the project or provides the service, upon achieving predefined results.

Grittner (2013) contends that the increased use of RBF as the preferred health-financing model in contemporary development aid management is part of international efforts to make aid more effective, and to link health care finance more closely to results in the health sector. It is pertinent to note that previous health financing approaches did not deliver the desired results

(Pereira and Villota, 2012). As a consequence, health coverage in developing countries remained insufficient and health outcomes lagged far behind targets set under the Millennium Development Goals (MDGs) particularly MDG goals 4 and 5 of reducing under five mortality by two thirds and maternal mortality by three quarters respectively (Lozano *et al.*, 2011; Sithole, 2013).

In addition, health financing paradigms such as the Bamako Initiative and the Standard Model were bogged by an imbalance of power between providers and clients that led to poor quality, poor curative and preventive services (Paganini, 2004). Governments were inclined not to lose their grip on health funds. Therefore, decentralised funding has been an elusive dream for many developing countries since the initiative tends to be unsatisfactory for a comprehensive assessment of health system performance with regards to the sustainability and equity of a health system (Arah *et al.*, 2003). Whereas, the coordinated government funding risked misappropriation of funds as alluded by (Burke and Sridhar, 2013).

As a developing economy, Zimbabwe has experimented with various health financing models since attaining political independence in 1980. In the formative years of independence, the young democracy embarked on an ambitious socialistic health-for-all drive. Following the prescription of the standard model, the poor and vulnerable were exempted from paying user fees when accessing health care services. Towards the late 1980's, as resources became scarce and pressure for economic reforms and structural adjustment became more pronounced, health related donor funds were pooled together and placed under the ambit of the Ministry of Health and Child welfare (Sithole, 2013). Due to a lack of proper checks and balances and poor monitoring and evaluation, these health funds were either misappropriated or misallocated. The donor community pressured and influenced the adoption of decentralised government funding as the preferred health-financing model, which saw the government giving autonomy to district and provincial health centres in the management of health care funds.

Prior to the implementation of RBF, the Zimbabwean health care sector faced a decade of declining health care provision characterised by poor health outcomes, scarcity and inept management of available health care resources (Acosta, 2011). These factors have militated against the ability of the Zimbabwean health care sector to achieve universal health service provision as enshrined under the dictates of Millennium Development Goals 4 and 5.

Nevertheless, the performance of health financing, especially aid funds have to be measured in terms of how they effectively help in achieving desirable health outcomes within health systems. Measures of health outcomes can be in terms of governance, sustainability, equity, effectiveness and efficiency. The combination of these measures gives a comprehensive outlook of the state of health outcomes.

While acknowledging the existence of the above health financing models for measuring the performance of health systems, the current study sought to evaluate the performance of the RBF model in a resource constrained context of a typical developing country such as Zimbabwe. Performance based financing was used as the conceptual framework, cognisant of the fact that other health financing models were not outcome focused, as they were pre-occupied with the input and programme processing stages.

1.2 Problem statement

The interest in performance-based financing as a conceptual issue in health systems financing emanates from the observation that although public expenditure on health, particularly development health assistance, has increased in recent years in low income countries, results have been slow (Fretheim *et al.*, 2014). Despite decades of development assistance and the proliferation of donors in the health arena, Zimbabwe's health service delivery system deteriorated. In 2013, Zimbabwe's national mortality ratio stood at 790 per 100 000 live births compared to 390 in the 1990s and the under-five mortality rate were 94 per 1000 00 live births up from 78 in the 1990s (Sithole, 2013). It appears that the endeavour by the Zimbabwean government to employ the aforementioned health financing models did not yield the desired results. It is within this context that the current study seeks to rethink health financing models particularly in a socio-economic dispensation characterised by severe economic crisis, persistent budget deficits and aid becoming a dominant part of health care financing instead of supplementing national health budgets.

1.3 Research objectives

- i. To examine how health systems thinking influences the achievement of health outcomes
- ii. To analyse the performance of RBF model in terms of sustainability, equity, allocative efficiency and effectiveness.

- iii. To identify preconditions that supports the operation of health financing models in Zimbabwe.

1.4 Research questions

Has RBF managed to achieve favourable results to be the preferred financing model post the MDGs era?

1.4.1 Sub-research questions

- i. How do health systems thinking influence the achievement of health outcomes?
- ii. How has the RBF model performed in terms of governance, allocative efficiency and effectiveness, sustainability, equity and inclusiveness within the Zimbabwean health care system?
- iii. Does Zimbabwe have preconditions that support the operation of the RBF model?

1.5 Justification of the study

The current study seeks to add to the existing theoretical framework of RBF by assessing its effectiveness as the emerging preferred health care financing model in resource constrained environments such as in Zimbabwe. In addition, the research is justified on its theoretical contributions on RBF implementation in developing nations and specifically on how a country's history can shape the health financing discourse, minimum conditions for effective aid delivery and performance of RBF in economically and politically fragile states. RBF is a relatively new phenomenon in health systems of developing countries such as Zimbabwe whose main objective is to strengthen health care provision at primary level. Therefore, there is need to understand some of the challenges that have militated against its effectiveness as an aid management tool, better understand minimum conditions in which it is likely to work so that Zimbabwe will seek institutional reform and capacity enhancement to facilitate sustainable health care financing and the health status of its citizens.

On the other hand, the current study can be justified on the basis of its methodological contributions since it seeks to fill the dearth in information on the assessment of RBF in a resource-limited environment. Further, a thorough investigation of RBF within the health sector in Zimbabwe will provide a nuanced understanding of outcome oriented funding and aid programmes. This will assist policy makers, development practitioners and health programming specialists to refine policy making with respect to performance-based financing.

Moreover, the current study can be justified on the basis of its practical contributions. Research tactics borne from the current study will be used as a launch pad for further research as the researcher acquires more research skills. In addition to that, the study will inculcate critical thinking through the mastery of the research process and the acquisition of time management skills that are essential in the contemporary business environment.

1.6 Assumptions of the study

- Zimbabwe is technically efficient and lacks allocative efficiency in achieving health care outcomes.
- Implementing Results Based Financing (or more financial resources) will automatically result in better health services, better health outcomes and improvement of health system processes (Grittner, 2013).
- There is equal opportunity of individuals in society and any difference is unacceptable and the state needs to intervene (Llavador and Roemer, 2001).
- Developing strategies to address inequity, requires understanding and deciding on how to handle underlying conditions (USAID, 2011) (and the same can be assumed under sustainability, governance and effectiveness, the economic framings in this study)
- Access to health services is a means of improving a population's health.
- Results based financing is the emerging preferred financing model by donors in the health sector.

1.7 Delimitations of the Study

The health sector in Zimbabwe is broad, encompassing both public and private health care providers. This study is mainly confined to the primary health care providers in the Zimbabwean public health sector as its main unit of analysis. Primary health care providers under review in the current study include the donor community with a bias towards health financing, not for profit organisations, central and local government controlled public health centres as well as the implementation partners under the auspices of the public, private partnerships.

Respondents to the study are limited to those health care personnel from the national up to district level. Access to all health care personnel might be limited as they are geographically dispersed across the wide breadth of Zimbabwe. As such, the researcher mainly focused on rural-

based health care personnel health as a special case group since RBF was piloted in rural areas in Zimbabwe.

Not all possible participants were interviewed in all health centres where RBF was piloted since its inception in 2010. This could potentially bias results of the study in favour of the few whose views, opinions and perceptions were incorporated in the study. Nevertheless, measures were taken to ensure that participants to the study were directly responsible in the administration of RBF related projects and activities. A related limitation is that qualitative research used in this study cannot yield generalizable findings as larger sample studies can provide. In order to counter this shortcoming, the current study was premised on depth and theory building on the concept of RBF in a resource-constrained environment such as in Zimbabwe. Further quantitative studies can enhance this understanding through a correlational study.

Focus of interview was limited to those with specific RBF knowledge. These people were mostly occupying positions of authority at various levels within the health delivery system. However, opinions of lower level staff could have presented an interesting perspective for similar future researches. The views of leaders in the health sector were taken to be representative of everyone in the sector.

The study is also self-funded, which have limited the researcher in extending to other sectors of the economy like education, other countries and rural health centres but could only rely on secondary information where it was available. Furthermore, it was difficult to access essential data, which is not readily available to the public owing to bureaucratic procedures associated when one wants to collect data from government ministries and officials in developing countries.

1.8 Thesis Outline

The research intends to complement knowledge on performance of RBF in resource-constrained environments and lay groundwork for achievement of other development interventions in future. In order to achieve this, the research focuses on the background that has inspired the current research leading to the statement of the problem. Research objectives, statements of hypotheses and research questions then follow. The significance of the study is then reviewed in relation to the study's theoretical, practical and methodological contributions. Delimitations and limitations of the study are taken into account in this section.

Chapter 2: Literature Review

2.0 Introduction

This chapter presents a review of pertinent and contemporary literature on the topic of health care financing models in a developing country context. In the process of reviewing literature efforts are made to identify inherent knowledge gaps between existing literature and the current research topic and establish a means through which the knowledge gap can be filled. Reliance is given to up-to-date secondary data sources in this section of the report so as to justify the relevance of the current research in the academic circles. Dominant theories that have not been modified and refined though from out-dated sources were also critically reviewed in this chapter. The chapter proceeds to outline the main schools of thought on the concept of health systems financing noting the points of convergence and divergence. These achievements are critically reviewed within the purview of the health outcomes under study. Efforts will be made to relate reviewed literature to the research objectives especially those that pertain to health outcomes. After this discussion, the following chapter will explore specific country experiences with various health financing models focusing on achievements, drawbacks and success factors in implementing RBF.

2.1 Evolution of Development Aid

The genesis of aid can be traced to the aftermath of World War Two (WWII) and the Cold War, where it was used as a diplomatic tool to foster political alliances and gain strategic advantages by the two rival superpowers, the USA and the now defunct Union of Soviet Socialist Republics of Russia (USSR) (Walters and Blake, 1992). It appears that this type of aid was regenerative as it assisted belligerent nations recover in the post war period. In peace times, aid is composed of grants and loans to developing countries from donor countries to promote political, developmental and welfare objectives in the recipient countries (Kanbur, 2003)

Apart from being used for political purposes aid is now deployed to achieve developmental goals in low-income countries (Hjertholm, White and White, 1998). Aid came to the developing countries under themes such as “*health for all*” and “*education for all*” as well as concerted efforts to reduce poverty and uplift the general livelihood of the general populace (Bonfrer, 2015). The pattern of health financing indicators reveals that overall health spending in sub-Saharan Africa is low, especially in comparison with other regions (Pascual Serrano, Vera

Pasamontes and Girón Moreno, 2016). Cognisant of these revelations, the current study seeks to rethink the health systems concept in line with resource constraint dilemma to achieve improved health outcomes as well as ascertain how RBF has performed as the emerging preferred funding model for health systems in developing countries.

Earlier forms of aid under the Marshall Plan were reparation payments and support for fight against communism which critics have argued were strategic for the US in preventing a backslide of its economy through creating market for US capital goods and a congenial environment for American investment (Hjertholm, White and White, 1998). It is noteworthy that the money provided by the USA was in the form of grants from which no repayment was expected. The Marshall Plan proved to be an effective strategy to promote development as it helped countries in Europe to reconstruct and expand their economic base in a relatively short period of time (Roberts *et al.*, 2002). The success of the Marshall Plan as the instrumental means to speed up development was replicated in the developing countries albeit in different and modified formats. Various modes of foreign aid delivery have evolved over the years, guided by the strategic interests of the donors and needs of the developing partners (Radelet, 2006; Mitchell, 2010). In the face of a multitude of foreign aid delivery modes, it is noteworthy to rethink and assess how RBF offers sustained results in a developing country context with the hope of improving health outcomes.

2.2 Debates Surrounding Aid

The use of aid to promote development in developing countries has courted a lot of controversy. Two main schools of thought with contrasting objectives have emerged; the welfarist school of thought and the dependency school of thought. The welfarist school of thought as propounded by Jeffrey Sachs, Joseph Stiglitz, Nicholas Stern and lately Bill Gates argues that foreign aid is necessary (Kaufmann, 2008). On the other extreme, the dependency school of thought with scholars such as Walter Rodney, Andre Gunder Frank, Dambisa Moyo, Julius Nyerere, Joseph Frankel, Amir Amin, Paul Prebisch and Thoetinos Dos Santo is critical of foreign aid (Radelet, 2006).

The welfarist school of thought believes that aid is a necessary tool that if utilised effectively can be used to extricate developing countries from the debilitating effects of poverty and spur economic growth. In this regard, Sachs and Ayittey (2009) argues that with the assistance of

foreign aid, most developing countries have been able to increase access to health services. Also, foreign aid has contributed to poverty reduction and economic growth in developing countries (Kaufmann, 2008). Generosity in foreign aid as propounded by the welfarists has been critically reviewed by the works of Sachs (2012) who however, contends that foreign aid related problems arise when conditions are attached or imposed by donors which tend to distort its effectiveness. In this regard, most health financing models are tied to a specific condition that results have to be evident for further financing to be advanced. Within the framing of the current study, it has to be seen whether setting conditions can reduce the conceptual appeal of health financing in terms of achieving health outcomes.

Sachs (2012) is of the opinion that to enhance the effectiveness of a health financing system, it is necessary to tie some conditions to development aid. Flagrant abuse and misappropriation of funds have necessitated the need to assign donor expectations to foreign aid (Burke and Sridhar, 2013). Most developing nations have weak governance systems for accountability of foreign aid, and as such, there has been a marked decrease in grants offered as donors seek to have an active participation in the health delivery process. The donor community is interested in a health-financing model that is more transparent. Consequently, the current study will relook into various health financing models with the hope of unlocking value to both the donors and the beneficiaries in terms of achieving health outcomes.

The main import of the dependency school of thought is that giving aid will create a dependency syndrome as recipients rely on donors to sustain them until eternity. Foreign aid perpetuates dominance of rich powerful countries over poor developing countries and in most cases, which were their former colonies (Engelbert and Tull, 2008). Foreign aid bad as it enlarges the state bureaucracy, perpetuates bad governance and enriches the few political elites (Easterly, 2008). Rodney (1972) concurs that conditions often attached to foreign aid are structured in such a way that the developing countries remain dependent on the rich donor countries.

Moyo (2010) agrees that there is little evidence that the benefits of foreign aid are serving the basic human needs such as health, education and nutrition. For decades into their independence, most African countries have not yielded tangible health related developmental results despite receiving massive foreign aid injections. Donors are currently looking for ways to scale up support while, at the same time, demonstrating the results they are achieving (Pearson, 2011).

What is clear from various debates across the entirety of the academic community on foreign aid, is that despite widespread condemnation of foreign aid by dependency theorists, more and more developing countries are making concerted efforts to attract foreign aid at whatever terms it is offered. In resource constrained environments that are synonymous with most developing countries, the misery of receiving conditional aid is much better than the misery of not receiving donor funds at all. This study intends to fill the gap in literature by showing the link between health care financing and the performance of health systems as shaped by the key debates on foreign aid in developing countries. This can be achieved through rethinking the operations of health systems within the dispensation of resource constraints and the need to achieve health outcomes.

2.3 Aid Management

Aid management refers to the systematic and rational techniques, principles and practices of raising, allocating and utilisation of aid so that it achieves set developmental objectives (OECD, 2012). Broadly conceptualised, aid management places emphasis on the institutions, systems and procedures as well as mechanisms by which aid utilisation is controlled. Aid management seeks to promote the effectiveness of development aid to achieve set goals. Within the context of aid management, the current study seeks to relook how the aid management process can improve health outcomes in a manner that conjures community participation.

Aid management has taken centre stage with respect to development in most developing countries and the world at large. The influential works of Buse and Walt (1996) put into perspective the ideology of aid management through health sector reform. The aims of health sector reform are widely held to include enhancing efficiency, effectiveness and equity within the sector. For these economic framings to be realised it is crucial to achieve coordination in aid management, since donors acting alone or at ideological odds with one another can frustrate or undermine the reform process (Buse and Walt, 1996).

The consequences of poor coordination in aid management have been linked to inefficiencies in service delivery through duplication of effort, exasperating geographic inequalities through the targeting of assistance to favoured areas and populations, confusion through, for example, the espousal of conflicting and changing donor policies, exacerbation of administrative inefficiencies as ministry staff devote excessive time to coping with heterogeneous and incompatible aid

administration requirements, displaced local priorities as donors' preferences prevail; and abrogation of recipient sovereignty over budgetary and policy processes (Buse and Walt, 1996).

On the other hand, Álvarez and Acharyan (2012b) focused on effectiveness of aid management, and highlights that one of the obvious way to evaluate the effectiveness of aid is through examining the welfare benefits that can be attributed of aid funding to recipient countries. The accusations that aid is not doing enough to alleviate poverty and promote development have cast aid management into the spotlight. Moyo (2010) argues that decades into the independence of most African countries despite massive foreign aid injections have yielded no tangible developmental results. Donors are currently looking for ways to scale up support while, at the same time, demonstrating the results they are achieving (Pearson, 2011). Within the purview of poverty eradication and aid scale-up initiatives, financiers have to operate within the confines of measurable economic framings of efficiency, effectiveness, equity, inclusiveness, good governance, accountability and sustainability of their efforts. The current study seeks to evaluate how these economic framings can be best achieved in a developing country context.

The emergence of RBF in recent years as a key aid management tool has aroused renewed interest world-wide in the area of aid management. It is still not clear whether the implementation of RBF is the panacea to aid management in the developing countries context. This study seeks to aid close this gap by assessing the effectiveness of RBF with specific focus on Zimbabwe as a typical developing country that adopted RBF framework in 2010. The case of Zimbabwe's public health is particularly strong given its persistent challenging environment in respect to governance, accountability and reduced public spending on health due to poor economic performance.

2.4 Health Systems Thinking

Health systems thinking refers to the philosophical underpinnings that shape and direct the aims and objectives of a health system within a given political context (Olmen, Van, Marchal, Damme, Van, Kegels, and Hill, 2012). Health systems are products of their time, emerging from specific discourses (Olmen *et al.*, 2012), health systems thinking has evolved over the years as articulated below.

The genesis of health systems thinking can be traced to the emergence of the Alma Ata Declaration. The main thrust of the Alma Ata Declaration was to link health to social action. The declaration was convened out of the realisation that health issues were no longer purely medical and technically focused. The major import of the Alma Ata Declaration was the development of an agenda that obliged nations to provide primary health care services to their populations (Olmen *et al.*, 2012). The Management Science for Health (2012) concur that the Alma Ata Declaration focused on primary health care as the optimal way to influence a healthy society. The deployment of health workers was instrumental in achieving the objectives of primary health care.

Under the dictates of Alma Ata Declaration, the World Health Organisation (WHO) played an influential role towards ensuring access to universal health care through making funds available. The health financing thrust under the Alma Ata Declaration was focused on output such as training of health staff (nurses and doctors) and building of health centres at community level. The involvement of the WHO as a health financing partner sped the adoption and subsequent promotion of community participation in health-related issues (Health, 2012). Community participation meant the involvement of people within communities in minimizing the impact of specific diseases such as malaria. The social action approach was successful in countries such as India, China, Guatemala, Bangladesh and Nicaragua (Kirigia *et al.*, 2006) .

The 1990s marked the emergence of austerity measures under the World Bank's structural adjustment programmes and the adoption of the New Public Management philosophy. These changes sparked shifts in health systems thinking as there was a marked decrease of government funding of social services in general and the health delivery system in particular in low income countries. Health system funding was increasingly placed in the hands of private players. McIntyre (2012) notes that, "in contexts where government is not fulfilling its responsibility for funding health services, community-based health insurance schemes may be a temporary second-best option for providing some financial protection."

The post 2000 period saw three major developments in the health arena that necessitated a paradigmatic shift in health systems thinking. To start with, there was a global change in the health systems actors' landscape (Olmen *et al.*, 2012). Private foundations and Global Health Initiatives emerged together with strategies such as the Millennium Development Goals.

Foundations such as the Melinda and Bill Gates foundation became major financiers of health systems in areas such as malaria control. In the United States, former President George Bush launched the Presidential Emergency Fund for AIDs Relief (PEPFAR) aimed at assisting low-income countries affected by the AIDS epidemic (World Health Organisation, 2009). Secondly, the WHO began to pay more attention to the performance of health systems. The thinking underlying increased focus on the performance of health systems was on improving health services and encouraging governments to ensure that their health systems are responsive to the expectations of the population (Meesen, Soucat, 2011). Thirdly, the complexity of the health systems was recognised in health system research. Researchers working on health systems advocated a departure from mechanical thinking that characterised the health systems to a more holistic approach that included multiple actors (Olmen *et al.*, 2012). The systems thinking approach promoted by Peter Senge drew attention to the complex nature of health systems, the interactions and feedback loops between blocks, role of the population and the unpredictable effects of change (World Health Organisation, 2009). The health systems' thinking is of essence in this study as it provides philosophical underpinnings and frameworks for analysing performance of health systems in relation to financing. The focus of the current study is on the influence that health systems' thinking has on health outcomes within a resource constrained Zimbabwean context.

2.5 Health Financing Models

2.5.1 The Standard Model

Amongst the objectives of the standard health-financing model is the need to make health services more efficient and equitable. In this regard, the goal was to introduce sector changes and use other incentive methods to ensure efficient delivery of health services by health care providers (Quaye, 2007). The primary initiative towards ensuring accessibility of health care was to scrap user fees. This has the intended goal of protecting society's most vulnerable.

The issue of user fees has generated debate amongst health financing professionals. The imposition of user fees is retrogressive to the health care delivery system since they pose the risk of inequality in access to the use of health care services (White *et al*, 2006). User fees are an inefficient, regressive, and unfair way to cover funding gaps in basic social sectors, since the most needed segments of the population get excluded from access to these services. (Multi

Donor Trust Fund, 2011). Proponents who are against the imposition of user fees premise their arguments on the basis that poorer segments of the community are kept away from health services since they cannot afford to pay user fees. From a practical perspective, in its quest to achieve equity in health delivery the Kenyan government introduced a policy directive that exempted the poor from paying for health services (Wang'ombe *et al.*, 2002).

In addition, designing and implementing such systems has proven to be difficult in developing countries that face under-funded health delivery systems (Akortsu, 2013). In relation to the current study, it appears that health systems thinking must develop a model that rationalises on the enforcement of user fees to those who are capable of paying them. A significant number of the Zimbabwean population are without health insurance due to the pre-dominantly informal structural make-up of the economy (Sithole, 2013).

2.5.2 The Bamako Initiative

The Bamako Initiative was sponsored by UNICEF and WHO and adopted by African ministers of health in 1987. The model was based on the realisation that the primary health care systems in many sub-Saharan African countries were beset by a critical lack of resources and practical implementation strategies (Ebrahim, 1993). The works of Olmen *et al.*, (2012) concur that health facilities in low income countries lacked resources and supplies to function effectively. The tenets of the Bamako Initiative bear a potential significant impact to the likely findings of the current study, since Zimbabwe is a highly indebted economy reeling under both local and foreign debt re-servicing obligations. This has made the allocation of resources especially towards health systems strengthening much weaker.

The Bamako Initiative was widely used in Tanzania through a community-financing program. Paganini (2004:1) emphasise that the “*Bamako Initiative was a pragmatic strategy to implement primary health care in the era of economic structural adjustment*” as influence by UNICEF and WHO. Quaye (2007) points out that the aim is of the Bamako Initiative was to revitalize the public sector health care delivery system by strengthening district management teams and capturing some of the resources the people themselves are spending on health. Olmen *et al.*, (2012:4) complements the above views by asserting that the Bamako Initiative was “*comprised of a package of interventions to increase access, sustainability and efficiency, the most prominent of which were drug revolving funds and community participation both in funding and*

decision-making.” The essence of the Bamako Initiative approach is that it recognises the importance of community involvement and health service decentralisation. In the same vein, RBF approach towards health systems funding seeks to establish quantitative and qualitative improvements in health systems through linking health funding to results.

Circumstances that gave way to the emergence of the Bamako Initiative were that many health facilities lacked the resources and supplies to function effectively (Ebrahim, 1993). Lack of requisite resources increases lean time of the health care system leading to poor outcomes in terms of equity, efficiency, responsiveness, effectiveness and sustainability. As a result of resource constraints, health workers sometimes merely prescribe drugs to be bought from private outlets, often unlicensed and unsupervised, while many patients lost confidence in the inefficient and under-resourced public health facilities, and were not even bothering to turn up when sick, to the inefficient public clinics (Paganini, 2004). The sudden launch of the Bamako Initiative was a strategic response to the critics of the Growth Monitoring, Oral Rehydration, Immunization, Family Planning, Female Education (or GOBIFF) approach (Paganini, 2004). The GOBIFF was a selective primary health care approach that was operationalized at large scale by the then director of UNICEF James Grant in 1979 (Olmen *et al.*, 2012). In the same context, the current study seeks to test the efficacy of RBF model in the primary health care system. The point of departure from GOBIFF is that the later was biased towards eliminating communicable diseases amongst vulnerable groups.

2.5.3 Decentralised government funding

Public funding of health care services includes all governmental sources of finance for health care services (Akortsu, 2013) financed through budgetary allocations (Ackon, 2003) from both direct and indirect tax revenues. Decentralisation can be defined as the delegation of powers, responsibilities and resources from higher to lower levels of government. A country may embark on decentralisation to democratise government, improve the effectiveness and efficiency of service delivery, create an enabling environment for local economic development, or a combination of any of these (Nibbering and Swart, 2008). Under the decentralised government funding system the Treasury and local authorities allocate a vote towards the financing of the health sector at national and local levels respectively. Successful decentralisation of health systems was done in Tanzania where the Government decentralised most functions through

Decentralisation by Devolution (Care, 2015). Under a decentralised government funding initiative, budgetary allocations are meant to ensure that citizens receive desirable basic health care. WHO (2005) recommend that the budget allocations at national and local level in relation to health funding should be pro-poor, observe the principles of fairness and responsiveness. It remains to be seen whether decentralised government funding can lead to improved health outcomes in terms of equity and sustainability since different health centres have varying needs that have a bearing on the identified health outcomes.

Many developing countries are now involved in some form of decentralisation in response to the gradually erosion of centralised states as well as recognition of the potential role of local government in availing basic social services, especially to poor people (Nibbering and Swart, 2008). The global imperative for democratisation and good governance has also fuelled societal demands for local democracy and accountability of local government. Decentralisation has the potential to link decision-making more closely to local priorities and bring processes of planning, implementation, monitoring and accountability closer to the population. From an RBF perspective it appears that democratisation of health systems can lead to better health outcomes as resources are ploughed closer to where action takes place.

In order to reinforce this assertion, Akortsu (2013) outlined that in Ghana almost fifty-one per cent of all health care spending is from public funds, whereas in South Africa this figure stands at forty-one per cent and it is only twenty-five per cent in Nigeria. The justification of government involvement in health care financing is that in countries where the majority of health care institutions are government owned, then the government has to play an influential role in allocating substantial resources to this effect. In the Zimbabwean context economic structural adjustment programmes have decreased the government's role in health financing. Therefore, the implementation of RBF has to be partner driven, as the government on its own is incapable to financing social services.

However, the problem in most low-income countries is that their governments have not been able to finance their health systems adequately due to factors such as shrinking revenues (Bonfrer, 2015), low prioritization of health and poorly performing economies. This has opened way for donor support, which is often accused of coming with stringent conditions. This study while understanding that aid might come with conditions seeks to assess how effective that aid is

in achieving desirable health outcomes as well as influencing the performance of the health system.

2.5.4 Coordinated basket funding

The most commonly used and applied mechanism is the coordinated basket funding. Under the coordinated basket funding approach donors provide aid to the recipient country to finance the health system (Murray and Fenkel, 2006). The coordinated basket funding approach allows multiple actors other than the state to fund the health system. Donor funds are managed by a central organ, usually the government through the Ministry of Health with the expectation that they will be used to bolster the budget vote allocated to health (Hansen and Tarp, 2000).

For decades' donors, have used this mode of financing the health sector in low- income countries such as Zimbabwe, Zambia, Malawi and many other African countries. However, this method of funding health has proved to be problematic in low- income countries. Evidence abounds that most governments in the developing countries have not been allocating the donor funds meant for health funding for intended purposes (Bangura, 1992). This has distorted the effectiveness of aid in the health sectors of low –income countries.

2.5.6 Results Based Financing

Results Based Financing Approaches, also commonly called Payment by Results are a form of financing that makes payments contingent on the verification of predetermined results (Sida, 2015). From the perspective of Meessen and Sekabaraga (2011) performance-based financing is a mechanism by which health providers are, at least partially, funded on the basis on their performance. The health financing approach takes a radically different slant to the health system through giving organizational units' substantial decision rights over their resources. A results based financing approach makes it possible to move the focus from activities and plans to the monitoring of results and learning about what actually works (Sida, 2015). Spors, Carbon and Specialist (2014) applied RBF tool to climate finance and established that the RBF tool is a useful financial tool manage the large flows of finance required to scale up mitigation activities and to increase flexibility to adjust plans in the light of unforeseen events/barriers through jointly agreed planning milestones. RBF appears to be a game changer in health financing in the Zimbabwean context where the government has been playing a leading role in health finance

during the first decade of independence, and then drastically cut spending on social services under the auspices of Economic Structural Adjustment Program.

Contrasted from decentralised government funding and coordinated basket funding approaches, which focus on outputs, RBF essentially links funding to results and outcomes (Meesen *et al*, 2011). Health system funding under RBF is supposed to bring about a qualitative and quantitative improvement in health care services in a way that ensures greater accountability and allocative efficiency. To improve efficiency in low income countries, there is need to significantly increase government spending and purchasing in the health sector (The World Bank, 2005). It is essential to identify the pattern of health spending in order to get a holistic appreciation of allocative efficiency in the health sector (Care, 2015). The works of Álvarez and Acharya (2012b) stress that a lack of predictability in receiving aid can hinder aid effectiveness.

The sustainability of RBF funding in developing countries seems secure as it is now recognised as part of a national health financing strategy (Bonfrer, 2015). While the RBF model is not a panacea that ensures aid effectiveness it provides a viable framework for managing health funding that is linked to health system performance. RBF has been successfully used in developing countries such as Rwanda, Burundi and DRC and was introduced in Zimbabwe in 2010.

Grittner (2013) contrasts the concept of performance- based financing with line item approach, which finances the health system through the provision of inputs such as drugs. The underlying philosophy behind performance-based financing is that health funding should be closely linked to outcomes. The interest in performance-based financing as a conceptual issue in health systems financing emanates from the observation that although public expenditure on development health assistance has increased in low income countries, results have been slow (Fretheim *et al.*, 2014). Meesen *et al.*, (2011) argue that the concept of performance-based financing from which RBF is derived aims among other things to improve efficiency, greater accountability and to bring comparable results to inputs invested in the health systems. Within this purview, it is essential to note that the performance based financing framework requires a moderate to unlimited supply of resources and a complex network of organizations to implement which may not be readily available in many developing countries.

2.6 Selected Economic Framings in Health Care Assessment

Within the purview of poverty eradication and aid scale-up initiatives, financiers have to operate within the confines of measurable economic framings of allocative, effectiveness, equity, inclusiveness, good governance, accountability and sustainability of their efforts. The current study seeks to evaluate how these economic framings can be best achieved in a developing country context.

Aid management in health care refers to the systematic and rational techniques, principles and practices of raising, allocating and utilisation of aid so that it achieves set developmental objectives (OECD, 2012). Broadly conceptualised, aid management places emphasis on institutions, systems and procedures as well as mechanisms by which aid utilisation is controlled. Aid management seeks to promote the effectiveness of development aid to achieve set goals. Within the context of aid management, the current study seeks to relook how the aid management process can improve health outcomes in a manner that conjures community participation.

Aid management has taken centre stage with respect to development in most developing countries and the world at large. The influential works of Buse and Walt (1996) put into perspective the ideology of aid management through health sector reform. The aims of health sector reform are widely held to include economic framings such as enhancing allocative efficiency, effectiveness and equity within the sector. For these economic framings to be realised it is crucial to achieve coordination in aid management, since donors acting alone or at ideological odds with one another can frustrate or undermine the reform process (Buse and Walt, 1996).

The consequences of poor coordination in aid management have been linked inefficiencies in service delivery through duplication of effort, exasperating geographic inequalities through the targeting of assistance to favoured areas and populations, confusion through, for example, the espousal of conflicting and changing donor policies, exacerbation of administrative inefficiencies as ministry staff devote excessive time to coping with heterogeneous and incompatible aid administration requirements, displaced local priorities as donors' preferences prevail; and abrogation of recipient sovereignty over budgetary and policy processes (Buse and Walt, 1996).

On the other hand, Álvarez and Acharyan (2012) focused on effectiveness of aid management, and highlights that one of the obvious way to evaluate the effectiveness of aid is through examining the welfare benefits that can be attributed of aid funding to recipient countries. The accusations that aid is not doing enough to alleviate poverty and promote development have cast aid management into the spotlight. An economic framing such as sustainability pertain to the ability of host countries to assume responsibility for programs and outcomes without adversely affecting the ability to maintain or continue program objectives or outcomes (Savedoff, 2011).

Sustainable projects are those with benefits that are likely to continue after donor funding has been withdrawn. Allocative and effectiveness measure how well an aid project uses resources in order to obtain desired results, benefiting most people at low cost, whether the right share of resources is being devoted to health care versus other goods in the economy. Governance is the ability of host countries to assume responsibility for programs outcomes without adversely affecting the ability to maintain or continue program objectives or outcomes. Equity and inclusiveness imply that everyone should have equal access to community resources and, opportunities, policy should be directed with impartiality, fairness and justice towards these ends and community partnership is key in setting development needs.

With respect to efficiency, performance-based financing is said to help in improving allocative and productive efficiency. Allocative efficiency is a result of enhanced stewardship of resources on the part of the recipients and ensuring resources are available to those who can yield better results to health investments on the part of the financiers. In terms of productive efficiency, health staff is motivated to utilize resources in a way that ensures desired results are achieved at minimum cost especially in remote areas where resource scarcity is a main issue that affects health services provision. Performance-based financing can promote technical efficiency within the health systems by increasing the productivity of health personnel (Basinga *et al.*, 2011). Since health personnel are rewarded on the basis of their performance, it therefore implies that they are likely to improve their way of doing things, hence achieving technical efficiency.

Performance-based financing provides a framework for verifying results and achievement of set targets within the health system which promotes accountability of health personnel to health funds providers, and through community participation, to the general public of health systems (Soeters and Griffiths, 2003). Improved accountability is an issue in health systems of low-

income countries where accountability to end-users is often low. Sustainability has also been linked to accountability through a transmission mechanism that realises that a health delivery system that lacks accountability may fail to be sustainable in the long run. A comparative analysis of the operation of economic framings as they apply to different health financing models is given below

Table 2.1: Health Financing Models and Economic Framings

| | Governance | Allocative Efficiency and Effectiveness | Sustainability | Equity and Inclusiveness |
|--------------------------|--|--|---|--|
| Standard Model | Move to scrap user fees on the poor | Inefficiency in the health system is due to poor quality of health care. High levels of corruption affects the effectiveness of the health system (Medhekar, 2014) | Critical shortage of essential medical supplies threatened the sustainability of the model. In Nigeria government expenditure on health as a percentage of total government expenditure was very low at 3.3% in 2002 (Awosusi, Folaranmi and Yates, 2015) | Policy directives to exempt the poor from paying (Quaye, 2007) |
| Bamako Initiative | Focus was on regular contact between health-care providers and communities. There was joint participation between management and the community in the funding of essential drugs | The most effective health interventions were priced below private sector charges and cross-subsidized through higher mark-up and higher co-payments on | Sub-Saharan countries that adopted the Bamako Initiative employed phased scaling up; several countries most notably Benin, Mali and Rwanda achieved significant | Bamako health centres implemented an integrated minimum- health-care package in order to meet basic community health needs (Ebrahim, 1993) |

| | | | | |
|---|--|---|---|---|
| | (Ebrahim, 1993). | lower priority interventions | results. | |
| Decentralized Government funding | Empowerment of district and provincial health centres in health decision making to make them more receptive to the needs of their communities. | Programmes have multiple information, accounting and reporting systems which compromise on technical efficiency. (Buse and Walt, 1996). | The health sector is generally underfinanced and is hugely dependent on donors (Ali, 2014). | Ability to reach marginalised communities. Government funding initiative where budgetary allocations are meant to ensure that citizens receive desirable basic health care. |
| Coordinated basket funding | There is poor governance of budgeted funds as there is a higher suspicion of misappropriation of committed public funds (Easterly, 2008). | Technical inefficiency is inherent since there is a services overlap (Buse and Walt, 1996). Health officials are obliged to meet successive times when one gathering would suffice. | The health sector is generally underfinanced by and is hugely dependent on donors (Ali, 2014). | Communication of guidelines and standards to all staff and partners in accessible formats. |
| Results Based Finance | Health institutions are given substantial decision rights over their resources | To improve allocative efficiency, there is need to significantly increase government spending and purchasing in the health sector | The sustainability of RBF funding in developing countries seems secure as it is now recognised as part of a national health financing strategy (Bonfrer, 2015). | Flexibility to adjust plans in the light of unforeseen events/barriers through jointly agreed milestones. |

2.7 Preconditions for Health care Financing Models

User fees are a precondition that sustains the health delivery system. User fees alternatively known as out-of-pocket health financing accounts for 60 per cent of all health care spending in

low income countries and only 20 per cent in high income countries (Schieber *et al.*, 2006). In Cambodia, high out of pocket spending and low levels of utilisation have impeded the expansion of coverage and improvement in health outcomes (Ensor *et al.*, 2017). The introduction of user fees in the African health delivery system was inspired by widespread downward pressure on public expenditure and dwindling aid flows during the late 1980s (Yates, 2006). Economic recession and structural adjustment programs enforced by the IMF led to the culmination of user fees in developing countries especially in Africa (Olmen *et al.*, 2012). The economic justifications for charging user fees are that they rationalise usage of health care services inasmuch as they primarily deter unnecessary service usage by households (Savedoff, 2011); health care providers retain them partially or totally (Quaye, 2007); they shift the responsibility of health care financing from the government to the public through a cost sharing mechanism that suits both donors and governments (Yates, 2006) and they act as a cost recovery mechanism to ease pressure on tax-based health financing.

In instances where user fees have been abolished; the challenge has been the development of an alternative health financing mechanism that does not strain the fiscal space. In 2006, Burundi put in place a systemic health financing through the combination of user fee exemptions for pregnant women and children under 5 and performance based financing. The systemic combination approach in Burundi appear to have worked since it created a formal channel for replacing revenue from user fee exemptions. An incentive scheme was put in place to counter staff demotivation associated with attending to huge volumes following the scraping of user fees (Musango *et al.*, 2013).

However, proponents of the pro-poor approach to health care access assert that many countries have put in place mechanisms to protect the poor and vulnerable by abolishing or reducing user fees (Musango *et al.*, 2013). The abolishment of user fees works effectively when there are system wide investments in health care. In March 2001, the Government of Uganda scraped user fees with the hope that there would be improvements in access and utilisation of health services especially among the poor, reduce out-of-pocket expenditure on health and eventually eradicate poverty. Efforts were made to increase funds allocated to primary health care. Unfortunately, close to 80% of these funds were spent on wages. Nevertheless, there was no noticeable improvements in health access among the poor (Musango *et al.*, 2013).

From this point of view, user fees play a role in ensuring sustainability of health care systems (Savedoff, 2011). However, effective private sector partnerships with some moderate control on prices can help to ensure the delivery of quality health services (Musango *et al.*, 2013).

In the wake of the challenges posed by out-of-pocket approach to health care finance, the notion of social insurance and private public partnerships was developed. Social health insurance pools both the health risk and the people on one hand and the contributions of individuals, households' enterprises and the government on the other hand (Akortsu, 2013). In the Zimbabwean context, a social health insurance was initiated in response to the HIV/AIDS pandemic and culminated in the introduction of the Aids Levy which is 3% of an individuals' tax payable and is mandatory (ZIMRA, 2013). Health financing through the development of social health insurance is generally recognised as a powerful method to achieve universal coverage with adequate financial resources for all against health care costs (Akortsu, 2013).

Private funding of health care is based on premiums paid by members. Monthly subscriptions paid by members depend on their risk exposure (Green, 2007). The success of private funding of health care is based on the opportunity to avoid huge out-of-pocket expenditure. Private health insurers pool health risks across space and time for a large number of policy holders who differ in their risk exposures (Johannessen *et al.*, 2014). Premiums paid by an individual are shared between the employee and the employer. In some instances, the employer wholly meets the health costs and insurance agents manage the premiums fund. Government may subsidize the cost of private health insurance using tax credits or tax relief. In Zimbabwe, private health insurance costs are tax deductible (ZIMRA, 2013). In many lower-and middle-income countries, private health insurance may be the only form of risk pooling available and it usually provides principal coverage to those in the formal sector, with private policies frequently subsidized by employers (Akortsu, 2013).

Despite private health funding being tax deductible, it is not all encompassing since it marginalises the poor. In essence, private funding of health care affects the accessibility of the same by the poor (Sithole, 2013). It only recognises the formal sector where there are formal arrangements between the employee and the employer to subscribe to a private funding of health care scheme. Unfortunately, the marginalised and vulnerable members of the society are more likely not formally employed since they depend on menial and non-formal modes of income

generation. As such this significant segment of the population is excluded from the private funding of health care scheme. To reinforce this assertion, Burke *et al.* (2013) notes that about 14% of South African citizens use private health insurance, the remainder rely on public sector health care which is free of charge to the unemployed, the poor and children.

Public private partnerships (PPP) are an alternative form of health finance, which is a prerequisite for a functioning health care system. Health partners such as multinationals, bilateral and multilateral donors provide budgetary support to recipient governments' treasury through earmarked funds for specific health projects (Akortsu, 2013). The criterion for PPP is that public services remain under the control of the public sector. Public private partnerships in health care finance are essential as they increase service technical efficiency, quality and accountability. These arrangements are seen as a way to encourage private players to invest in health care projects that lack public funding (Johannessen *et al.*, 2014). External assistance accounts for about seven percent of all health spending in developing countries and is not a significant source of health financing in developed countries (Schneider *et al.*, 2006).

Despite the conceptual appeal of external assistance, the down side of this approach is that in countries where health is not a priority, health finance is compromised and the gains of budgetary support earmarked for achieving health targets will not be met. In addition, the private sector is inspired by the profit motive, is risk averse and is less likely to invest in poor communities as they narrow their margins. Businesses are ill-prepared to service the low income market as they lack working experience with the poor clients (Johannessen *et al.*, 2014). Zimbabwe is one such country where health is not prioritised, where national budgets are concerned, it appears that the defence Ministry takes precedence over the health Ministry (Sithole, 2013). This is likely to compromise health outcomes.

The preceding health financing approaches are the dominant ones in most health care set-ups. Alternative health financing approaches are meant to complement the existing health financing approaches. Public health institutions usually raise finance by undertaking other activities that are not directly related to the provision of health care. These might include the operation of a cafeteria, gift shop, space or equipment rentals, parking fees and research grants (Akortsu, 2013). Most teaching hospitals usually finance their activities through research grants as well as funding from pharmaceutical companies to test new drugs and products (Lane and Nixon, 2001).

Advanced economies such as the USA make use of marketable investments as alternative sources of finance. These includes trade in mutual trusts, stocks and bonds on the stock exchange (Akortsu, 2013).

Nevertheless, different hospitals have different strategies were the use of alternative sources of health care financing is concerned. Some hospitals prefer to invest in the stock market that provide higher returns at higher risks while others invest in more conservative fixed rate of return investments such as bond and money market funds (Akortsu, 2013). Having looked at various health financing approaches that are available, it is imperative that the current study also focus attention on health financing models that underlie the health care financing approaches.

2.8 Country experiences

2.8.1 Key Success Factors for Results Based Financing Implementation in Rwanda

Rwanda is one of the countries in Africa considered to have successfully embarked and implemented the RBF framework on a nationwide scale within its health system (WHO, 2015). Every administrative unit from the village level to the ministries attest to a performance contract within its hierarchy (Renaud and Semasaka, 2014). The RBF was introduced to the Rwandan health system during 2001 and 2002 and it was up scaled to become a national programme in 2008. The successful implementation of the RBF in Rwanda was assessed through a well-documented and credible impact evaluation and it found impressive results on the volume and quality of health services (Sithole, 2013).

As a country emerging from a war experience, it was expedient to hold warring parties together for the common good, as such there was unwavering commitment towards the RBF initiative. Post war trauma can be asserted as one of the building blocks towards the remarkable success of the RBF initiative in Rwanda. The most critical factor that contributed to success of RBF in Rwanda was strong political will, full support and commitment by the Rwandan government (World Bank, 2010). The Government allowed the implementation of mechanisms that enabled transparency, accountability and responsiveness. In addition, there was close cooperation with the donor community who provided the bulk of the funds to finance the health system. This helped to reduce the mistrust and suspicion that is usually associated with government and donors in the management of funds (Basinga *et al*, 2011).

The Rwandan RBF programme had a positive impact on quality of health care (World Bank, 2014). Information on RBF was widely disseminated to all the stakeholders in the health system as some sense of ownership was developed. Target beneficiaries particularly those in the rural areas were encouraged to visit health institutions for health care. There was a widespread buy-in from the critical stakeholders who included the government, health care providers and the target beneficiaries (Basinga *et al*, 2011).

Differences in the implementation of the RBF between Rwanda and Zimbabwe is that in Rwanda there was zeal in social programs that could unite the nation since the country was emerging from a devastating war. Whereas the RBF was first introduced in Zimbabwe in 2010 three decades after gaining political and economic independence. The resounding and apparent perception in Zimbabwe is that the budgetary allotment towards the Defence Ministry versus the Health Ministry is too much for a peaceful country. As Paganini (2004) rightfully quips, “...*the government financial allocation to public health, in the best cases, is barely enough to pay the salary of the staff.*” Despite all the odds that were cast against it, Rwanda appears to operate a robust result based finance programme than Zimbabwe.

2.8.2 Key Success Factors for Results Based Financing Implementation in Burundi

Burundi like Rwanda is a country ravaged by war hence leading to massive brain drain of health personnel. Health indicators were also dismal with a child mortality of 176/1 000 and a maternal mortality ratio of 615/100 000 (World Bank, 2010). Against this background RBF was introduced in the Burundi health system. Similar to the Rwanda case, there was political commitment towards RBF. In 2006, the President of Burundi declared a policy of free health care for pregnant women and children less than five years of age and RBF pilot programmes were introduced in Bubanza and Cankuzo provinces by Cordaid with financing from the Dutch government and the European Union (EU). By 2009 RBF had spread the entirety of Burundi with support from NGOs such as Health Net International-TPO and the Swiss Development Cooperation (World Bank, 2010).

The implementation of the RBF was expedited by political will, financial and moral support rendered from the government and donor community (World Bank, 2010). There was also buy-in from all the relevant stakeholders, which include government, donors and the target

beneficiaries. This fostered a spirit of ownership and the will to succeed which is crucial to programmes such as RBF, which require widespread participation. The Rwanda and Burundi experiences show that political will, inclusiveness, transparency and government support are some of the critical conditions that must be in place to make RBF successful in the health system. Further, there should be buy-in from all the stakeholders as a way of engendering a strong sense of ownership.

2.9 Conceptual framework: Performance-based financing

This study utilises performance-based financing as its conceptual framework in assessing the effectiveness of RBF as the emerging preferred health care financing model, and as a mechanism by which health providers within a health system are funded on the basis of their performance (Meesen, Soucat, 2011). Grittner (2013) contrasts the concept of performance-based financing with line item approach, which finances the health system through the provision of inputs such as drugs. The underlying philosophy underpinning performance-based financing is that health funding should be closely linked to outcomes. Meesen *et al.*, (2011) argue that the concept of performance-based financing from which RBF is derived aims among other things, to improve efficiency, greater accountability and to bring comparable results to inputs invested in the health systems. Within this purview, it is essential to note that the performance based financing framework requires a moderate to unlimited supply of resources and a complex network of organizations to implement which may not be readily available in many developing countries.

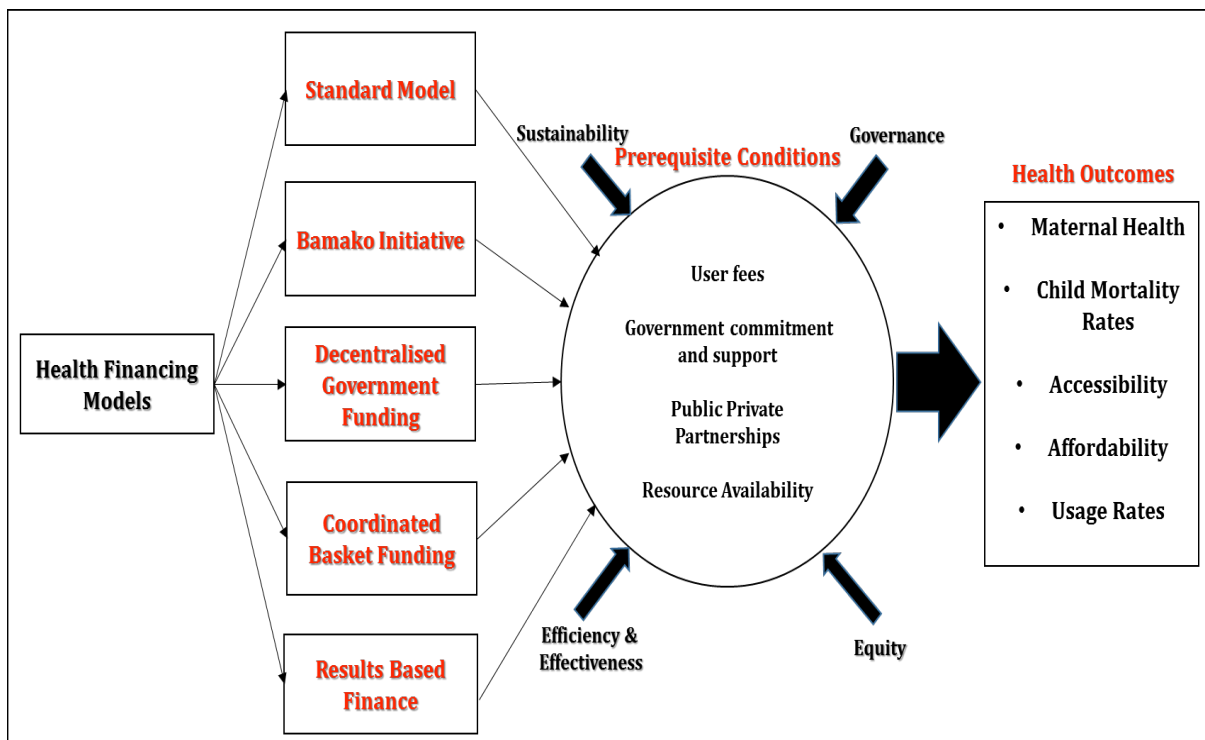
With respect to efficiency, performance-based financing is said to help in improving allocative and productive efficiency. Allocative efficiency is a result of enhanced stewardship of resources on the part of the recipients and ensuring resources are available to those who can yield better results to health investments on the part of the financiers. In terms of productive efficiency, health staff is motivated to utilize resources in a way that ensures desired results are achieved at minimum cost especially in remote areas where resource scarcity is a main issue that affects health services provision. Basinga *et al.*, (2011) also highlight the fact that performance-based financing can promote technical efficiency within the health systems by increasing the productivity of health personnel. Since health personnel are rewarded on the basis of their performance, it therefore implies that they are likely to improve their way of doing things, hence achieving technical efficiency. By increasing the income of health personnel performance-based

financing acts as a motivator, that reduces the flight of health personnel to the so-called *greener pastures* and also encourage them to work in remote areas.

Performance-based financing provides a framework for verifying results and achievement of set targets within the health system which promotes accountability of health personnel to health funds providers, and through community participation, to the general public of health systems (Soeters and Griffiths, 2003). Improved accountability is an issue in the health systems of low-income countries where accountability to end-users is often low. Sustainability has also been linked to accountability. The transmission mechanism is such that a health delivery system that lacks accountability may fail to be sustainable in the long run, as it lacks the necessary checks responsibility centres as well as appropriate checks and balance to give it the necessary balance that in requires to run for longer terms.

2.10 Summary of Literature Reviewed

Overall picture of the literature reviewed is summarised by the following conceptual diagram:



Conceptual diagram giving overview of literature reviewed in line with discussed concepts and research objectives

In the process of critically comparing health financing models, the researcher focused on trends in health systems thinking drawing insights from the era of the Alta Ama Declaration and its

emphasis on social action; austerity measures that came with the New Public Management philosophy and global change in health systems actors that saw the emergence of private financiers such as the Melinda and Bill Gates foundation. Literature also reviewed the departure from mechanical thinking of the health sector as a holistic interplay of a multiple actors to systems thinking perspective and its emphasis on results. Various health care financing models were reviewed. Amongst them is the Standard model with its emphasis on equity and allocative efficiency and the scraping user fees to promote accessibility by the vulnerable members of community. The Bamako Initiative was biased towards promoting community buy-in in health related matters as well as making resources available, decentralization of health delivery and scraping user fees. The decentralized government-funding model focused on empowering local authorities to manage the health delivery process within their specific environmental contexts. The Coordinated Basket Funding Model pools resources from multiple players in the health sector, with the central treasury managing the fund. However, this model is critiqued on the grounds of reported cases of misappropriation of committed health funds by governments. Finally, the Results Based Finance model is being preferred widely in developing countries like Burundi, Rwanda and as recently introduced in Zimbabwe. It emphasises health funding on the basis of performance. These health-financing models were reviewed and discussed within the context of economic framings such as governance, sustainability, accountability, efficiency and effectiveness as well as equity and inclusiveness. For health financing models to operate well within the purview of KPI's there some prerequisites. The identified preconditions included the charging of user fees to rationalize usage of health services, government support and commitment, the presence of PPP's as well as resource availability. In the final analysis, the operation of distinct health financing models within the context of KPI's and preconditions determines the extent to which each particular health-financing model can achieve specific health outcomes.

Chapter 3: Research Methodology

3.0 Research Approach and Strategy

This study intends to extend theory on health financing by applying the RBF notion in the Zimbabwean context, which is a country facing resource constraints. It is based on a broad theoretical framework of health care financing that has informed the research questions therefore

qualitative research was relevant in answering the how and why questions which are the primary focus. Qualitative data emphasize the use of words rather than quantification therefore it produces findings not arrived at by means of statistical procedures or other means of quantification (Anderson and Arsenault, 2001)

A qualitative inductive study was used to further develop theory through analysing the functionality of health financing models within a dispensation of resource constraints. An inductive approach was utilised to enable analysis of huge volumes of textual data from transcribed interviews and identify underlying themes from raw data that emerges from semi-structured interviews. However, inductive qualitative analysis has been often criticised for its lack of robustness in comparison to other analytical methods for theory development. Nevertheless, an inductive approach is commonly recognised as fit for purpose, easy and a straightforward approach to qualitative data analysis.

Since RBF implementation in the health sector in Zimbabwe is an on-going program, 2015 was used as the upper limit on quantitative data collection using documents review, beliefs and perceptions in the health sector were collected up-to the current date of data collection.

3.1 Research Design

This study adopted an inductive research approach to explore the effectiveness of health care financing in Zimbabwe using a semi-structured protocol to explore health systems thinking and how best health systems can be funded in a developing country context facing resource constraints. From similar country experiences in Rwanda and Burundi, lessons learnt on how RBF has ensured attainment of favourable health outcomes was used as a yardstick for detailed contextual analysis of health care financing in Zimbabwe with particular reference to the RBF program. Key factors for successful RBF implementation as learnt from Rwanda and Burundi were pivotal in assessing whether Zimbabwe has minimum conditions to support the operational framework of RBF.

Qualitatively, in-depth interviews provided the detailed analysis of how health systems thinking influence the achievement of health outcomes and explored from respondents' experiences how the operational environment of health care financing could be improved for sustained results in health welfare of Zimbabwe. Peculiar insights specific to the Zimbabwean context on the

application of the RBF were gained to promote health systems strengthening and achieve desirable health outcomes.

Quantitative data was gathered largely through surveys and documents review and was meant to measure gains made towards the achievement of health outcomes before and post RBF implementation in Zimbabwe. It targeted the second research objective, *‘to analyse how the RBF model is performing in terms of governance, sustainability, equity and allocative efficiency within the health system in Zimbabwe’*. As such the study used analytical methods to ascertain this progress through the use of percentiles and trends analysis in achieving health outcomes such as child and infant mortality rates, maternal mortality and basic vaccination coverage. Qualitative data complemented quantitative dimensions to unlock gains made towards the achievement of health outcomes and the evolution of the Zimbabwean health system. As such qualitative interview transcripts were meant to partially resolve the first research sub-question, *“how health systems thinking influenced the achievement of health outcomes”* as well as to predominantly resolve the third sub-research question, *“Does Zimbabwe have the prerequisites that support the operation of the RBF model”*

The unit of analysis in this study was composed of the Zimbabwean public health system and units of observation were the primary health service providers mostly in remote rural set-ups where RBF was piloted in 2010.

3.2 Sampling

The main research objective of the current study was to evaluate how RBF is performing in the Zimbabwean context to be the preferred health financing model post the MDGs era. This model was to be tested within a dispensation of limited resource availability. The target population was made up of health personnel and donor agency representatives at district, health centre and provincial level in areas of RBF implementation.

For qualitative methods of data collection, the target population was composed of individuals in management with influence on policy and determining the implementation framework of RBF in Zimbabwe both from the donor community and MoHCW especially those whose primary area of focus was rural health care. Interview respondents were initially selected on availability and voluntary inclusion in the study and snowballing was used to include possible target respondents,

especially those 65 years and above, who may have retired, but had significant insights on health care financing and health systems thinking in Zimbabwe probably dating before independence in 1980. Medical officers, Health Administrators, officials from Cordaid, officials from the Ministry of Health and Child Welfare and representatives from the donor community with special interest in health were also interviewed, for a comprehensive understanding of RBF implementation in Zimbabwe, how the financing model works and limitations in implementation to harvest full results from the program.

It was imperative that the study makes use of a purposive sampling approach to obtain quantitative data because the researcher had to target respondents who were likely informative and had capacity to respond, as questionnaire respondents were limited to access to email and proximity to Harare. The target population was made up of health personnel and donor agency representatives at district, health centre and provincial level in areas of RBF implementation.

The samples were extracted from 18 rural districts in which RBF was first piloted in 2010. These 18 districts are well dispersed across 8 provinces in Zimbabwe excluding the Harare and Bulawayo Metropolitan Provinces. They are illustrated in the Zimbabwean map below.

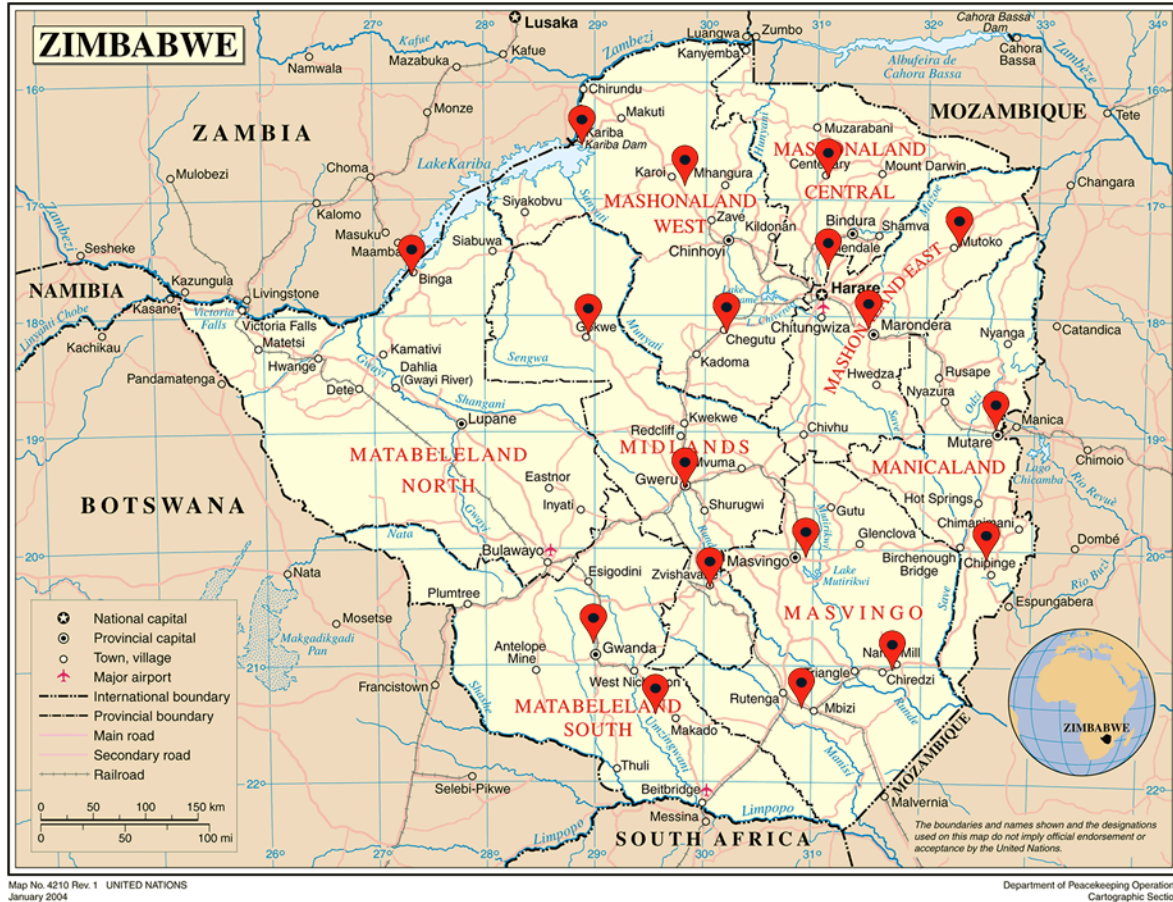


Figure 3.1: RBF Sampling Districts

Within these eighteen districts, respondents were chosen on the basis that they had either, a direct interface with the RBF program or had direct decision making authority with regard to RBF implementation. The intention was to extract the most relevant account of RBF implementation, how it is influencing positive health outcomes as well as uncover preconditions that promote effective health financing in the Zimbabwean context.

3.3 Data Collection

This study utilised the semi-structured interviews with a list of themes to match themes in the questionnaire. Semi-structured interviews meant to explore ideas, beliefs, perceptions and opinions of respondents with respect to evolution of health systems thinking, history and performance of preceding health financing models before RBF and performance of RBF against governance, sustainability, equity, allocative efficiency and effectiveness. The use of semi-

structured interviews enabled the researcher to probe for detail, triangulate data collected through questionnaires and seek clarification of the content of questionnaire results.

It was imperative to minimise respondent bias, and as such the researcher interviewed at least ten respondents that were composed of nursing officers, medical officers, health administrators, policy makers, and members of the donor community. This enabled the researcher to encompass a broad perspective with regards to coverage of research questions. Interview questions were rephrased for clarity through a pre-testing with selected health personnel, which gave the researcher an opportunity to probe and explore themes under study further, resulting in the collection of rich and detailed data.

Moreover, since RBF in Zimbabwe is a new phenomenon, semi structured interviews led to the exploration of areas and ideas not previously imagined by the researcher. In-depth interviews were held with high-ranking officials from Zimbabwe's Ministry of Health and Child Care and representatives from the donors' community in partnering to implement RBF since they possess experience and knowledge in health systems financing spanning many years. In-depth interviews were supposed to answer the question on how RBF has been implemented, how health systems thinking and health care financing in Zimbabwe had evolved and whether it can be the preferred health service-funding model to institute health service reform in Zimbabwe. Participants' responses revealed the level of appreciation of the Zimbabwean health delivery system, how it operates, its challenges and propositions on how the environment can be made more receptive of aid.

The researcher identified key informants who were interviewed under the semi structured interview sessions based on level of authority either in the donor community or public health system structures (*assuming higher authority came from experience*) and depth of knowledge sought from the study. An invitation to participate in the interview was sent out to target respondents, and a written consent was acquired before commencement of the interview. Interviews were not recorded since respondents were concerned about their anonymity considering the political fragility of donor funding to governments, bureaucracy in seeking clearance and inaccessibility of government officials as some of the respondents noted. As such the interviewer took notes during the interview. Additional information was collected from RBF program specific documents and internal records.

Questionnaires were designed in line with the research objectives of the study and with matching themes to interview schedules. Participation in the survey utilised implied consent to participate. Clearance was sought and granted by the Ministry of Health and Child Welfare as well as the Medicine Research Council of Zimbabwe for permission to access the target respondents in the target areas and a list of respondents with their respective email addresses was compiled.

The study evaluated the implementation of the RBF framework using documents analysis to gather baseline data, and comparing pre-and post-RBF implementation time periods. Limited funding and time resources implied that the researcher relied more on the availability of good quality secondary data that was utilised to form a good benchmark for analysis. The year 2010 was selected as the baseline year for the current study. Taking cognisance of the fact that RBF implementation in Zimbabwe is an on-going program, data was collected to the current date of responding to interviews and secondary data used 2015 as the upper limit. The baseline analysis benchmark used similar indicators used in the survey questionnaire to measure development results and data gaps were complimented with in-depth interviews.

3.4 Data Analysis

Data collected through document analysis and interviews were analysed using a thematic analysis approach to qualitatively analyse, identify and report recurring patterns emerging from people's experiences (Braun and Clarke, 2006). Interview data was collected in written format and the data analysis entailed a word-for-word transcription of interviews. Constructs and patterns were taken note of in each individual case for case validity and also in relation to existing literature. In the process of analysing interview findings, a tabular format was utilised whereby similar themes were grouped and analysed in order to distil the common themes emerging from the data. The table included the findings, the details of the response as well as representative quotes that encompassed a direct link to research questions and were comprehensive in capturing all the information from other respondents.

The main purpose was to look for broader patterns in data and this was achieved through a rigorous process of data familiarisation, coding, theme development and revision. The main themes distilled from respondents were meant to analyse how health care financing has performed in terms of governance, sustainability, equity, effectiveness and allocative efficiency, as well as to examine how health systems thinking influenced the achievement of health

outcomes. The main advantage of thematic analysis in this study was that it was simple, took less time and was theoretically flexible because the researcher intended to collect people's views, experiences, belief and perceptions on a particular phenomenon facilitating the researcher to organise and describe given data in richer and informative detail.

The researcher followed a deductive approach to thematic analysis, because there were research questions, which already identify the main themes, which were used to group the data, and also, this approach was feasible within the time and resources available. Some of the themes that have been proposed in this study included governance, sustainability, effectiveness, allocative efficiency and equity of RBF implementation in Zimbabwe, whether it has achieved desired health outcomes and how effective it has been as a fairly new health care financing model in the Zimbabwean context.

The Statistical Package for Social Sciences (SPSS) was used to analyse responses from the questionnaire pertaining to how health systems thinking influenced the achievement of health outcomes as well as to analyse how health care financing had performed in terms of governance, sustainability, equity, effectiveness and allocative efficiency of RBF. Data were analysed into graphs, charts, cross tabulations and descriptive statistics to shows patterns and trends in data collected.

According USAID (2012), when development interventions are carried out efficiently, effectively and equitably, responsive and sustainable health services lead to positive health outcomes. The proposed themes under study to evaluate RBF implementation in Zimbabwe are therefore governance, sustainability, allocative efficiency and effectiveness and equity and inclusiveness whose selection is primarily based on the OECD Development Effectiveness Criteria. Key performance indicators under each theme have been identified based on availability of data, ease of access and relevance to provide adequate data to evaluate RBF against the identified themes.

Key performance indicators for governance included share of positions that are vacant, stock out rates for essential drugs, share of budgeted funds that are executed and share of health facilities that receive supervisory visits in accordance with national guidelines. Allocative efficiency and effectiveness were assessed through the percentage of government health budget allocated to

primary care, the percentage of government expenditure directed to primary care and personnel expenditure as a total of recurrent health expenditure. KPI's for sustainability included the government health expenditure as a percentage of GDP. The percentage of health expenditure financed by donors, the total per capita expenditure on health as well as sources of financing for health and their relative shares of total expenditure. Finally, equity and inclusiveness was measured through community engagement in setting health priorities, access to primary health centres, involvement of marginalised and excluded people and communication of guidelines and standards to all staff and partners in accessible formats.

3.5 Validity

This study observed the rules of research validity and is mainly guided by construct validity, of which the construct here is the initial concept, notion, question or hypothesis that determines which data is to be gathered and how it is to be gathered. Validity was mainly determined by asking a series of questions in the pre-testing phase to determine whether questions asked were valid, measuring what they were intended to measure, appropriate for the target population and whether they were comprehensive enough to collect all the information needed to address the purpose and goals of the study.

In the study, the researcher improved face validity by ensuring that lead questions in the questionnaire did not influence respondents to answer in a specific way. Designing a similar questionnaire that was administered to all respondents ensured concurrent validity. A single blinded technique was utilised in order to improve internal validity. This entailed that participants were deliberately interviewed separately so that the views of the dominant members could not influence the views of others. In other words, internal validity enabled the participants not to behave in a certain way that they might have thought to be expected of them.

Saunders *et al.*, (2009) notes, to ensure internal validity, 'researchers look for other relevant evidence that supports the answers found in the questionnaire'. Interviews complemented findings from the questionnaire to ensure internal validity. However, external validity was limited in this mixed method approach as it was not intended to produce a theory which is generalizable to all populations but is with specific reference to the Zimbabwean context.

3.6 Reliability

Threats to reliability can emerge from participant error or bias. To increase reliability in the current study, the researcher made use of a mechanical way of tests and re-tests on the questionnaire to ensure that the research instrument reduced errors in measurement and yielded consistent findings. In trying to derive consistent findings, all the respondents were given a similar questionnaire to complete on their own, some of the questions were standard structured questions where respondents simply ticked a response that closely suits their perceptions for uniformity. Triangulating the two data collection instruments, though the combination of the interview and the questionnaire enabled the study to counter weaknesses of either data collection method. Moreover, a pilot study was done to ensure the reliability of research results since identified ambiguities and weaknesses were corrected in the pre-testing phase. Over and above this, an internal consistency method through the Cronbach's Coefficient was used to ensure the reliability of research findings. The Cronbach's Alpha measurement of internal consistency was extracted through the Statistical Package for Social Science (SPSS) version 23. A reliability coefficient of 0.7 and above was considered acceptable as it showed that various questions in the questionnaire are highly consistent in trying to resolve the research objectives of the study.

3.7 Ethics

The researcher ensured that the respondents had the right to self-determination. Participants were debriefed and given adequate information regarding the research; this enabled them to develop the power of free choice enabling them to consent voluntarily to participate in the research or decline participation. As such the research sought verbal permission from would-be participants; the purpose of the study was explained to participants and the researcher read the statement introducing to the topic under study before getting their consent to participate. Participants were informed of their rights to withdraw from the study any time. Written consent was sought and granted by the University of Cape Town as well as from the MRCZ.

Also, the researcher ensured that participants enjoyed the right to confidentiality. The researcher read the statement of confidentiality before the start of interviews, data collected was used for academic purposes only and all information was treated in strictest confidence where interviews transcripts and questionnaires were destroyed after data collection and analysis. In guaranteeing the right to privacy, the researcher maintained privacy on participants' feelings, beliefs or attitudes arose from this study by ensuring that raw data was protected from unauthorized

persons, not shared and no names were linked to the data. To this end the researcher pledged to respect the views of the respondents. Any information derived from the respondents was held in the strictest confidence and pseudonyms were used to protect the respondents in the final write-up of the study. The data was used purely for academic purposes.

Chapter 4: Data Presentation, Analysis and Discussion of Findings

4.0 Introduction

This chapter includes data presentation, analysis and discussion of research findings on the topic of rethinking health care financing models in the Zimbabwean health sector. Information presented in this chapter has been streamlined to respond to research questions as set in the first chapter. Demographic data is illustrated mainly through the use of cross tabulations and frequency tables. All quantitative responses have been processed for internal reliability through the Cronbach's Alpha statistical technique in order to ascertain the extent of variation in the questions posed to respondents. Basically, the quantitative dimension was meant to partially resolve the first research sub-question in conjunction with the qualitative dimension. Following the dictates of the quantitative dimension, the study utilised analytical methods through the use of percentiles and trends analysis to ascertain progress towards achieving health outcomes such as child and infant mortality rates, maternal mortality and basic vaccination coverage. On the other hand, the qualitative dimension was predominantly used to resolve the second and third sub-research objectives. The key limitation of this study is researcher bias and narrowly focusing on RBF. Future research may assess RBF against competing health frameworks or across sectors to determine if it is the panacea to health financing in Zimbabwe and where it can be best used to achieve maximum results.

It is imperative to note the operational context of RBF as emerging issues from the data collected both quantitatively and qualitatively. Zimbabwe has been plagued by close to two decades of economic decline, massive migration of intellectuals across sectors to the diaspora, which have crippled local industry and service provision broadly. The country is poorly ranked in terms of corruption (12th most corrupt country and 11th in Africa in 2016 according to Transparency International) and ease of doing business (161/190 on World Bank's Ease of Doing Business 2017 Index) and this have created a bridge of mistrust between the Zimbabwean government and the donor community, hence the need to partner with CORDAID to handle all payments and

acquisition of resources under the RBF program. It is also noteworthy to mention the disconnect between Zimbabwe and the donor community post 2000, after the IMF and World sanctions in 2002, and how this exacerbated poor service delivery and economic performance of the country. The introduction of RBF was one of the major milestones of donor efforts to rebuild and reform the health sector, amid donor reengagement processes and the global outcry on aid effectiveness, encompassing the Paris Declaration principles on aid effectiveness.

The Zimbabwean public system suffers from a surfeit of bureaucracy in accessing information and public documents, which limits access, and analysis of secondary data and most importantly, inhibits drawing lessons from past experiences for future development. The researcher faced several problems in accessing respondents due to lack of trust and transparency within authorities in the sector, bureaucracy in gaining permission to carry out the study, lack of clear structures and ambiguity in authority and general fear to grant access to information which is supposed to be public anyway. There is generally lack of commitment as some senior officials noted, to adequately finance health programs like RBF. Commitment should be shown in increasing budget allocation to health for sustained health sector outcomes and not commitment to spend donor funds only.

4.1 Questionnaire Response and Analysis

This study utilised questionnaires and interviews as the main data collection instruments. Questionnaires were self-administered, either through emails or personally by the researcher in order to enhance the response rate from respondents across the 18 districts in which RBF was being implemented from 2010. A total of thirty-five completed questionnaires were collected from the sixty anticipated responses. The response rate from paper questionnaires was better compared to emailed questionnaires which took long to get responses and several follow up emails had to be sent. The highest response rate came from nursing officers probably because they are the front-line officers who maintain the point of contact with recipients of the health delivery system. These front-line officers were easy to get access to since minimal protocol was demanded hence the high response rate. The donor community had a response rate of eighty percent since they were RBF implementing partners. Health administrators and Policy Makers had a lower response rate due to the protocols required to get access to them.

4.2 Research Findings

4.2.1 Is RBF the panacea for health financing in Zimbabwe?

In order to determine whether RBF is producing favourable results, it was imperative to focus on the pre-and post RBF periods. Findings are shown in the Table 4.1 below.

Table 4.2: Pre-and Post-Results Based Finance thinking

| Pre-RBF thinking | Detail | Representative Quote |
|---|--|---|
| The government adopted a socialistic free-health-for-all approach upon gaining independence | The dominant health system thinking in Zimbabwean, prior to the implementation of RBF was based on socialistic principles, the government was the major player in health funding before the IMF intervened with the establishment of ESAP. | <i>“At independence, the government pledged free health access for the first ten years since the political climate was favouring socialistic principles (Standard Model approach to health care finance). However, due to the economic downturn in the 1990s, government was given preconditions for receiving assistance from IMF under ESAP, which encouraged reduction of government expenditure on health. This led to a funding gap, which led to the introduction of user fees Bamako approach to health care financing). This also led to the mushrooming of various medical aid societies and private practice in the medical sector. (Decentralised Government Funding Model).” (Policy Maker 1)</i> |
| | This culminated in the enforcement of user fees following the dictates of the Bamako Initiative to access health care services. | |
| | The government played a minimal role in health care provision as capitalism in health provision was gaining | <i>We inherited a National Health Service system from Britain where people pay taxes and the government fund health. Development partners were there but government was taking care of health care</i> |

| | <p>traction. The deregulation of the market saw private sector providers playing a significant role in the health system.</p> | <p><i>(Coordinated Basket Funding Model).</i></p> <p><i>In the 1990s came ESAP, with reforms such as privatisations and introduction of user fees, contracting out of services and introduction of the private sector.” (Health Administrator 2).</i></p> <p><i>“For the post-colonial era, key objective has been to make sure that issues of equity are addressed, government had to adopt a free health to all approach to correct colonial inequities such as around access to health. (Health Administrator 1)</i></p> |
|--|---|--|
| Post-RBF thinking | Detail | Representative Quote |
| <p>Strengthening of the health delivery system, through supplementing health budgetary allocations with the view to improve health outcomes.</p> | <p>The implementation of the RBF was prompted particularly by the need to strengthen the health delivery system. The idea was initiated by the World Bank</p> | <p><i>“The need to strengthen the health delivery system created an impetus for the implementation of RBF. The government has however been implementing results based management in various sectors including health, education amongst others.” (Policy Maker 1).</i></p> <p><i>“RBF was proposed by the World Bank, to respond to specific needs in high priority areas of maternal and child health care. There were high maternal and child mortality rates at primary health level. The government could not fund primary health care adequately, with a limited fiscus, which saw budget allocations, but with</i></p> |

| | | |
|--|--|---|
| | | <i>disbursement challenges. Implementation is different from other programs elsewhere; it was designed to fit into ministry of health priorities. (Medical Officer 2).</i> |
| There was an over reliance on the role of the government in the health delivery system | Health KPI's such as child and infant mortality rate were declining owing to the government's failure to keep up with population growth. Basic drugs were out of reach in many health centres. | <p><i>"Prior to the implementation of the RBF some key performance health indicators such as the child and infant mortality rate were in the red. Though the government played a pivotal role in health delivery, exponential population growth made health coverage across the country a challenge. (Policy Maker 2).</i></p> <p><i>Apparently, the health system was falling apart, with health centres not having access to basic drugs and medication." (Health Administrator 1).</i></p> |

Source: Primary Data

Basically, interviews transcripts above show an appreciation of the core tenets of a health delivery system amongst leadership in health. This is reinforced by an in-depth appreciation of the evolutionary foundations of health financing models in the Zimbabwean health delivery system in line with the health systems thinking philosophy. The pre-RBF era was characterised by lack of confidence in the public health delivery system coupled with poor health outcomes. The government played a central role in the health delivery system through its populist mantra during the first decade upon attaining independence. The absence of a methodological monitoring and evaluation mechanism made it a challenge to ascertain the efficacy of the government's role as the chief financier of health system in the country.

The main points distilled from the pre-RBF interviews transcripts above outline that, the Zimbabwean health delivery system went through a phased approach in the application of different health financing models. As the country was emerging from the colonial period, the first decade from independence was devoted to reinforcing the socialistic promises of the struggle to provide free-education and free-health for all. Hence, there was benevolence on the part of the Government as it was duty bound to provide social services inclusive of health care at highly subsidized rates following the dictates of the Standard Model. Though the Government went on an aggressive drive to build health centres across the country the major setback was a high doctor-patient ratio. There was a critical shortage of trained and qualified medical doctors; the country heavily relied on its bilateral relations with Cuba, which supplied expatriate doctors. Though medical institutions were available, accessibility to medical personnel and hence health service provision was poor.

At the turn of the second decade post independent Zimbabwe, poor economic performance led the country to adopt more capitalistic approaches to health financing. The health financing paradigm shift was influenced by the Bretton Woods institutions, which advocated for cuts in social service expenditure. This culminated in the formulation of the Economic Structural Adjustment Programme (ESAP). As such, the health financing approach advocated for the introduction of user fees (Bamako Initiative), a decrease in the central Government stronghold on health services provision (Decentralised Government Funding Model) and a clarion call for the donor community and the private sector to jointly invest in the health delivery system (Coordinated Basket Funding).

The turn of the new millennium saw a drastic deterioration in economic variables in Zimbabwe, and for the decade that followed to 2010 all health delivery gains made over 2 decades from 1980 were lost. The drought and near famine of the 2001-2002 saw a significant rise in infant mortality due to malnutrition, the inflation and exchange rate rise of the 2003-2004 saw the dispensaries at public health institutions becoming virtually empty as the government failed to capacitate them in line with the requirements of the Standard Model of health financing. The collapse of the economic fundamentals between the 2007-2008 periods was the last straw that broke the horses back where health delivery in Zimbabwe is concerned. Medical personnel

deserted their workstations as they either spent time on cash queues at banks or seeking for greener pastures in the diaspora. Inflationary pressures also meant that the public was not able to pay for medical attention. The politically hostile environment of 2008 election period was littered with regime change propaganda; hence the efforts of the donor community to assist in the health delivery process were frustrated. At the turn of 2010, it was inherent to rethink health-financing models in the wake of the apparent failure of the aforementioned health financing models and the need to meet the global development agenda on health outcomes.

The health systems thinking ideology of the post RBF period was characterised by the urge to strengthen the health delivery system, through supplementing health budgetary allocations with the view to improve health outcomes in respect of child and maternal health care. The RBF framework was launched and partially implemented in Zimbabwe in 2010 in 18 districts as illustrated in the previous chapter. The RBF test run saw some drastic improvements in health outcomes such as a decline in maternal and child mortality rates at primary health level (*see Figure 4.1*). The implementation of the RBF was able to expedite the availability, accessibility and utilisation of quality health services at health centre and district level (Sithole, 2013). Remote areas were targeted through innovative health delivery services such as mobile clinics and the recruitment of community health care workers and volunteers. Gains from RBF over the past six years that the programme has been operational in Zimbabwe reinforce the assertion that RBF is producing favourable results.

The RBF came in to provide subsidies directly linked to services offered at primary health care level. Prior to the implementation of the RBF public health providers were not obliged to guarantee results for the funds that they received. Energy was devoted to securing funds and justifying inputs rather than improving the efficiency and quality of the health delivery systems (Sithole, 2013). This is where the RBF came in as a game changer in the financing of the health delivery system. RBF started with results, such as the number of children immunised, decreasing maternal mortality and infant mortality and giving health care providers the dispensation to determine how to achieve these results.

4.2.2 Performance of RBF against selected Economic framings

4.2.2.1 Governance of Zimbabwe Health System

The dimension on the governance of health systems is meant to focus attention on how primary health care institutions are being run in the wake of the RBF approach. In order to uncover the governance issues in the primary health care system a number of questions were posed to respondents and findings are categorised below. The governance of the Zimbabwean primary health care system encompasses health promotion, preventive, curative and rehabilitation activities. It has an intact referral system from the primary health care facilities to tertiary health facilities.

Table 4.3: Presence of qualified personnel in Zimbabwe's health system

| Post-RBF | Detail | Representative Quote |
|------------|--|---|
| Governance | The inclusion of an implementing partner and the successful embracement of the Private Public Partnerships have acted as a good governance mechanism to introduce checks and balances. The adoption of PPP has improved service delivery as health personnel are found in all health centres across the country. | <p><i>"The successful embracement of the Private Public Partnerships in the implementation of the RBF initiative in Zimbabwe has made it possible for qualified and adequate personnel to be located at each level in Zimbabwe's health system."</i> (Policy Maker 3)</p> <p><i>All provinces and districts in Zimbabwe are adequately represented were minimum staff compliment is concerned.</i> (Medical Officers 2)</p> <p><i>"The inclusion of an implementing partner acts as a good governance mechanism to introduce checks and balances to ensure that the health delivery system is operating well by ensuring that all health care centres are properly staffed."</i> (Medical Officer 1).</p> |
| Post- RBF | Detail | Representative Quote |
| | RBF incentives maintain a stable, competent and | <i>The role of incentives in RBF is to increase staff motivation hence improve the efficiency of</i> |

| | | |
|---------------------------------|---|---|
| Equity and Inclusiveness | motivated staff compliment. | <p><i>governance and delivery of primary health care.</i></p> <p>(Medical Officer 2)</p> <p><i>RBF incentives are managed at health centre level through the use of remuneration grading scales that are used to reward health care personnel according to their specific areas of responsibility.</i></p> <p>(Medical Officer 1).</p> |
| | The community who are the recipients of health care need to have their voices heard for efficient health care service delivery. | <p><i>There has been a marked increase in community participation in the health sector.</i> (Medical Officer 1)</p> <p><i>We derive our RBF results from the community; hence it is paramount that we consistently consult to get their cooperation and understanding of RBF goals.</i> (Health Administrator 1)</p> <p><i>We conduct periodic community engagement through partnerships and social participation with the ultimate goal to involve the marginalised and excluded members of the community.</i> (Medical Officer 2).</p> |
| Post-RBF | Detail | Representative Quote |
| Sustainability | What are the long-term effects of operating an incentive system? | <p><i>In the long run, RBF incentives are most likely to benefit and assist in retaining health care personnel in remote and rural areas.</i> (Medical Officer Mashonaland 2)</p> <p><i>The issue of RBF incentives has to be tackled with caution since they are likely to create unsustainable expectations in perpetuity on the part of the recipients; who are currently catered for through the Salaries Services Bureau Payroll.</i></p> <p>(Health Administrator 2)</p> <p><i>In the event that RBF incentives are withdrawn</i></p> |

| | | |
|--|--|---|
| | | <i>health care personnel might be disgruntled as they feel that it has become more of an entitlement.</i> (Policy Maker 3). |
|--|--|---|

Source: Primary Data

On the basis of governance of health delivery systems in Zimbabwe, the following themes were distilled from interviews. Respondents were of the opinion that there are qualified and adequate personnel at each level. The governance structures in the Zimbabwean health system cascades top down from the Minister of Health and Child Care to Medical Officers at each respective health centre. Proper checks and balances seem to be in place when it comes to the chain of command. Perhaps the major limitation of the RBF governance structure can be traced back to the formative stages of the RBF. A tedious process followed the signing of the Memorandum of Understanding to give effect to the operation of the RBF in Zimbabwe. Legal requirements were considered to be too cumbersome hence creating room for corruption, fraud and bribery. The same has been reported on the implementation of the RBF in Uganda as characterised by retrogressive policies that ultimately generated poor results (Davidson, 2009).

Nevertheless, the RBF framework has reinforced the efficient performance of the Zimbabwean health system in terms of governance, as resource mobilisation is actioned at a local level. These findings are in contrast to findings by Sachs (2012) who established that most developing nations have been found to have weak governance systems for accountability of foreign aid since there are characterised with flagrant abuse and misappropriation of funds.

4.2.2.2 Allocative Efficiency and Effectiveness after introduction of RBF.

The direct impact of RBF implementation was realised through the enhanced stewardship of resources on the part of the recipients. Resources were allocated to areas that were capable of yielding the optimum return on investments in terms of health outcomes. The implementation of RBF as an extension of the Health Transition Fund in 2010 has managed to improve both allocative efficiency and effectiveness in primary health care. Government, with the support of cooperating partners made significant strides in health service delivery in line with the National Health Strategy (Zimbabwe National Budget Statement, 2012). Findings on the future prospects

of the Zimbabwean Primary Health delivery after the introduction of the RBF initiative is illustrated in Figure 4.1 below.

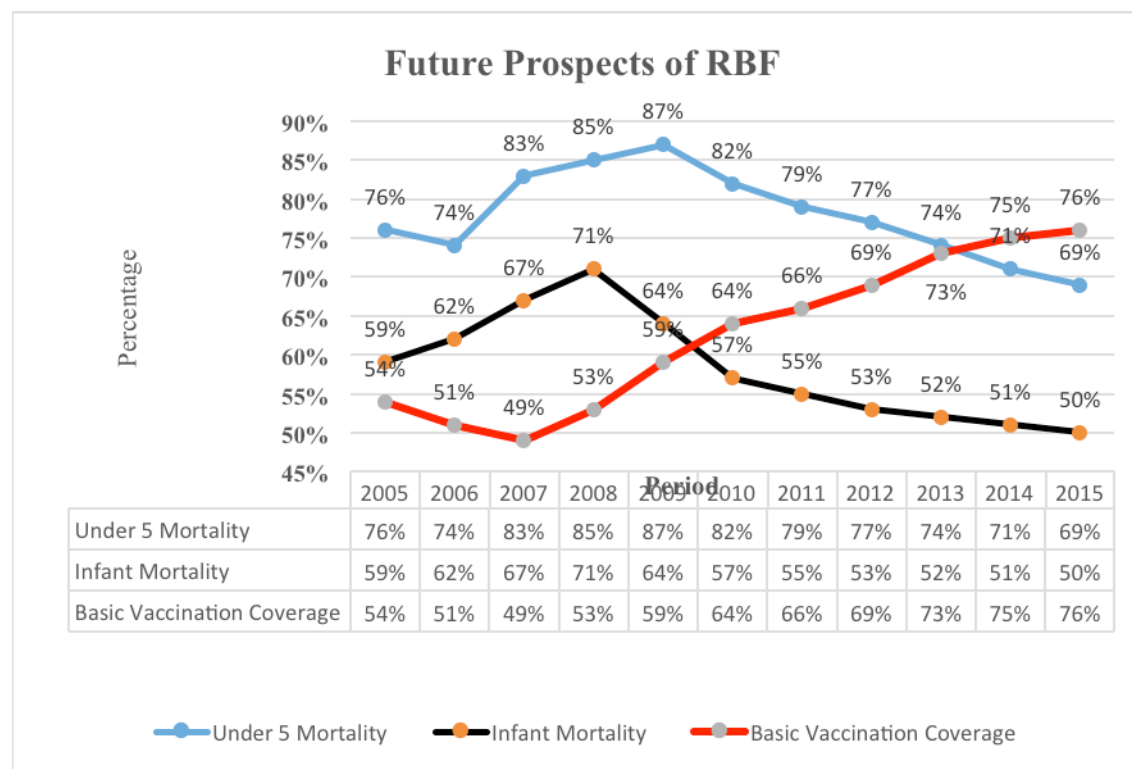


Figure 4.1: Future Prospects of RBF

Source: Adapted from the Zimbabwe Demographic and Health Survey (2015)

Figure 4.1 reveals that following the implementation of RBF in 2010; trends in primary health care outcomes have shown a marked improvement over the 5-year period under review. Under five infant mortality declined from a high of 82% in 2010 when RBF was initiated to a low of 69% in 2015. Infant mortality declined from 57% to 50% during the same period. On the other hand, basic vaccination rose markedly from 64% in 2010 to 76% in 2015. It was highlighted that there has been a tremendous increase in access to obstetrics, newborn care and full immunisation coverage. For the 5-year period before 2010, basic vaccination coverage declined 5% from 2005-2007, and increased by 15% from 2007 to 2010 prior to the RBF intervention. Similarly, infant and under 5 mortality showed improvements from 2008 and 2009 respectively which may partly be attributed to the increment in vaccination coverage. Prior to the implementation of RBF,

improving maternal and child health has always been a key objective of the MoHCW despite the existence of a poor performing public health care system characterised by low levels of physical access, lack of adequate incentives for health workers and weak monitoring and evaluation mechanisms. Of note, the 2008-2009 period marks the recovery of the Zimbabwean economy post the 2008 controversial elections, which led to the Government of National Unity. This resulted in significant support from the donor community in provision of human resources, essential medicines and medical supplies as ODA started to increase in 2008. A major health financing intervention was the Health Transition fund, which is believed to be sole cause for improvement in health indicators from 2009 (Salama *et al.*, 2014).

In the quest to achieve allocative efficiency and effectiveness community needs were being aligned as per RBF expectations. These findings reinforce the efficacy of the RBF programme as a health-financing model where key roles are delegated to local clinics and communities who are the key players in the program. This is different from other health financing models where the head office is the key planner and implementer of various health financing programmes. In a study of the key success factors in the implementation of the RBF in Rwanda, Basinga *et al* (2011) established that, *“close cooperation with the donor community who provided the bulk of the funds to finance the health system, helped to reduce the mistrust and suspicion that is usually associated with centralised government and donors in the management of funds.”* Through using this approach, decisions are made closer to the arena of action hence they are in a better position to respond to the needs of the community. Community based health care centres are empowered to design their own plans and procure medicines and equipment on their own.

4.2.2.3 Accessibility of health institutions by target beneficiaries

Table 4.4: Accessibility of health institutions by in terms of cost

| Finding | Detail | Representative Quote |
|---|---|--|
| A monthly grant was offered to 1 500 primary health centres and 94% of user fees were repealed in rural | What has been the impact of the implementation of the RBF programme on health access costs? | <i>“The implementation of the RBF framework has managed to launch a monthly grant offered to almost 1 500 primary health centres in Zimbabwe.”</i> (Medical Officer) <i>“Through this grant 94% of user fees were</i> |

| | | |
|--|---|--|
| primary health care centres. Each district hospital manned by at least one qualified medical doctor who can perform a caesarean section. | | <p><i>repealed in rural primary health care centres, user fees were also scraped for about 83% of urban families accessing primary health care particularly pregnant women and children below the age of five.” (Donor 1)</i></p> <p><i>“Each district hospital is manned by at least one junior medical doctor who can perform a caesarean section. This reduces transfer costs on the part of patients resorting to Provincial and National Hospitals” (Medical Officer 3)</i></p> |
| The main thrust of the RBF has been subsidised health care through scraping user fees to access primary health care. | What has been the main thrust of the RBF programme in terms of health access costs? | <p><i>The RBF strengthened the health system through improving national capacity for health financing across all health service delivery levels.” (Medical Officer 1)</i></p> <p><i>Emphasis is on the peripheral primary health care. It was established that in all 18 districts in which the RBF has been successfully launched, there is full coverage at primary health care centres through subsidies that absolve the payment of user fees.” (Medical Officer 2)</i></p> |

Source: Primary Data

Despite the scraping of user fees at rural health centres, patients referred to higher-level health centres still have to pay user fees to access advanced health care. It appears that RBF has not been effective to offer full coverage to access higher-level health care, as RBF funds are insufficient to cover running costs. From an economic perspective, these user fees are meant to rationalise usage of health care services by households inasmuch as they primarily deter unnecessary service usage by householders (Quaye, 2007). Notwithstanding, the wavering of user fees accessibility is being hindered by dilapidated physical infrastructure and an ill prepared, ill-equipped health system devoid of basic drugs that fails to perform basic procedures at local

level. Lack of expertise is another issue militating against access to primary health care. Chronic brain drain led to shortages of midwifery and doctors and dampened the uptake of RBF. The presence of qualified staff was an essential precondition for the launch of the health-financing model. To counter this anomaly, junior doctors with minimal operating experience were deployed to lead district hospitals.

4.2.2.4 Equity and Inclusiveness in Zimbabwe's Health System after Introduction of RBF

Equity is an essential dimension in the public health delivery process as it entails the availability and accessibility of health facilities by all members of the population. It was essential to review equity and inclusiveness within the context of the current study because one of the fundamental objectives of any health system is accessible health care to all. Data on equity and inclusiveness of the Zimbabwean health delivery system was collected through the use of the questionnaire and findings were corroborated with establishments from interviews. Findings are illustrated in Figure 4.2 below:

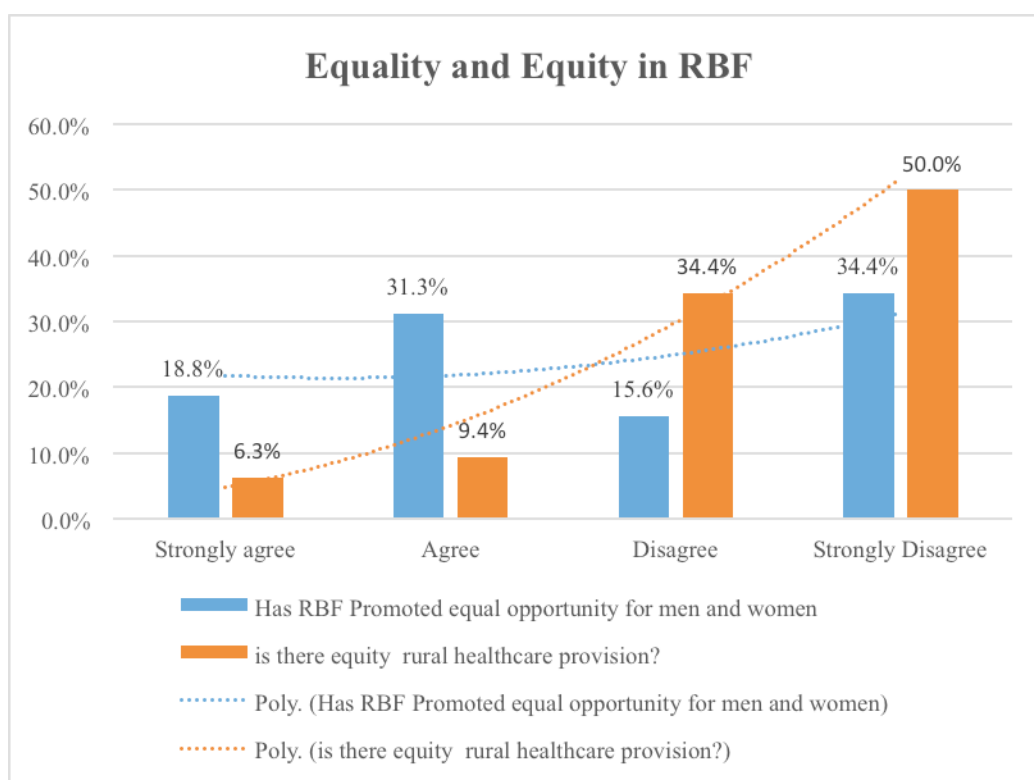


Figure 4.2: Equity and Equity in RBF

Source: Primary Data

Findings from the study predominantly established that most respondents disagreed that the Zimbabwean health delivery system was neither promoting equal opportunity for both men and women nor was it providing equitable distribution of health care provision in rural areas. Cross cultural and religious beliefs had an effect on the equity of health care services under RBF. Some religions do not allow their followers to access health care from formal health institutions rather they emphasize on spiritual healing. Such spiritual churches are predominantly located in poor and remote areas where they command a larger following. Though health care centres are open to all cross-cultural groups, the failure to tap into the influential religious circle affects equal access and inclusivity of health care services amongst all groups. Qualitative findings on Equity and Inclusiveness in Zimbabwe's Health System are shown in table 4.7 below.

Table 4.5: Equity and Inclusiveness in Zimbabwe's Health System

| Finding | Detail | Representative Quote |
|--|--|---|
| Trained medical staff is shunning remote health centres due to low and poor remuneration packages and the reluctance by the treasury to lift the recruitment freeze on health personnel. | What are your views on the equity and inclusiveness of health care access between rural areas and urban areas after the implementation of the RBF Programme? | <p><i>"In terms of the inclusiveness of the RBF, other countries, governments have assumed leadership of the program and have increased budget support for the health sector to scale up equity and inclusiveness of RBF."</i> (Health administrator 1)</p> <p><i>"The mass exodus of trained and qualified health personnel to greener pastures and the reluctance of the government to lift the recruitment freeze on health personnel lead to inequity in health delivery between rural and urban health centres, as the remaining trained medical staff shunned remote health centres."</i> (Health administrator 2).</p> <p><i>"Health personnel who are fortunate to be employed in public sector health care centres are faced with low and poor remuneration packages. Those on remote areas bear the brunt of sub-standard accommodation</i></p> |

| | | |
|--|--|---|
| | | <p><i>facilities and inadequately equipped medical facilities.” (Medical Officer 1).</i></p> <p><i>“Equitable access to primary health is not only attributed to the failure of health care providers alone, but also to the receivers themselves. In some communities’ people prefer to resort to alternative health care systems such as spiritual healing and traditional healing methods.” (Medical Officer 2).</i></p> |
|--|--|---|

Source: Primary Data

In light of the above findings, it can be asserted that due to dwindling government expenditure and budgetary allocations to the health care sector, health personnel are discouraged from operating in remote areas, hence minimising access to optimal health to the rural population. The mass exodus of trained and qualified health personnel to greener pastures and the reluctance of the government to lift the recruitment freeze on health personnel lead to inequity in health delivery between rural and urban health centres, as the remaining trained medical staff shunned remote health centres in preference for the private sector. In addition to this, there are some remote inaccessible rural areas where patients have to walk long distances to access health services. Though there are mobile clinics the visits are far and wide apart leading to patients abandoning some visits to health care centres leading to continued home deliveries, thereby reducing the effectiveness of maternal and infant mortality as well as immunisation programmes. These findings are in contravention of the WHO (2000) policy framework that advocated for unrestricted distribution of health facilities and health care access by the indigent members of the community.

Despite these transitory setbacks, since the implementation of the RBF programme there has been considerable progress towards universal health access through decentralisation of decision-making and exemption of the indigent from payment. These moves appear to uphold the key tenets as enunciated by the Bamako Initiative. Notwithstanding, this the non-availability of doctors and the high distance to health facilities remain a major deterrent to reaping full benefits of the RBF program.

4.2.2.5 Future Prospects of Results Based Finance

Future prospects of the RBF initiative are based on ways to scale-up the RBF programme for continuity and future relevance. Declining mortality rates and increases in basic vaccination coverage are seen as precursors of a sound primary health delivery system.

Table 4.6: Future prospects of RBF Programme

| Finding | Detail | Representative Quote |
|--|--|--|
| RBF capital investments have the ability to enhance the sustainability of existing health care facilities. | What are your views on the prospects of the RBF? | <i>“In the wake of recurrent national and foreign debts that the economy is servicing, the inclusion of the RBF model of health financing has long term impact on the sustainability of the primary health delivery system.”</i> (Health Administrator 1) |
| | How can the sustainability of the RBF programme be reinforced? | <p><i>“Higher level negotiations are underway to ensure that health care service providers have their salary increments linked to performance as measured by the RBF framework”.</i> (Health Administrator 2)</p> <p><i>“Donor organisations supporting the RBF programme assume the responsibility of financing the salary increments for health care providers whilst the central government takes care of the basic salaries.”</i> (Policy Maker 1)</p> <p><i>“Instead of pre-occupying the RBF program as a revenue expenditure based initiative, sustainability of RBF programs can be guaranteed if great strides can be achieved when RBF funds are employed into capital projects.”</i> (Policy Maker 2)</p> |

Source: Primary Data

Deliberations from interviews also outlined that RBF capital investments have the ability to enhance the functionality of existing health care facilities and go a long way in making existing facilities better. In all health care centres under review, great strides have been made towards ensuring the future continuity of the RBF program. Apart from utilising RBF funds to capacitate the operational capacity of health care centres through offering incentives to health care personnel and ensuring that basic drugs are available, RBF has gone a step further to strategically position health care centres for future roles through capital consumption programs under the auspices of infrastructural development, care and maintenance. Such initiatives have seen health care centres under the RBF program acquiring new and improved equipment and facilities that expand the breadth of services that they offer.

Nevertheless, issues of community involvement in health-related issues as enunciated by the health systems thinking philosophy have resulted in informed choice amongst the community on health matters that concern them. In line with the community participation philosophy, this study established that community participation in health matters is a long-term health system strengthening intervention strategy that helps to maximise health well-being for the nation, ensure health equity and strengthen health outcomes. This assertion is reinforced by the increase in health coverage by twelve percentage points over the five-year period. In essence accessibility of vaccination increased from around two-thirds to three-quarters of the child population, is a milestone even if the remaining 25% is yet to be covered adequately.

4.3 Relevance of Economic Framings on Collected Data on RBF

Performance indicators for RBF were classified in four categories namely, governance, financial sustainability, allocative efficiency and effectiveness and equity and inclusiveness. Following the implementation of RBF in 2010, there have been some notable developments in the Zimbabwean primary health delivery system. For instance, some maternity homes were constructed in Matabeleland North Province in Binga District to enhance equity and inclusiveness since Binga is one of the most remote and poorest of Zimbabwean rural community. In addition to this, waiting mother's shelters, pit latrines, sheds at meeting points were also erected. These measures compliment the provision of essential medical consumables and inputs. These measures were put in place to empower local health centres to achieve pre-determined results (Governance) so that

they would be able to, provide quality health care services over the long run (Sustainability), provide of health services that match community needs through community participation in decision making (Allocative efficiency), in a manner that makes health services available to all members of the community (equity and inclusiveness). Current research findings on the relevance of a set performance indicators on collecting data on RBF is illustrated in Table 4.7 below.

Table 4.7: Relevance of a set performance indicators on collecting data on RBF

| Finding | Detail | Representative Quote |
|--|---|--|
| The proportion of budgetary expenditure on health care is an essential performance indicator RBF | Relevance of a set performance indicators on collecting data on RBF | <p><i>Government health expenditure as a percentage of GDP, the percentage of health expenditure financed by donors, total per-capita expenditure on health and sources of financing for health and their relative shares of total expenditure are essential set performance indicators for financial sustainability of an RBF health financing system. (Donor 1)</i></p> <p><i>The percentage of government health budget expenditure allocated directed to primary health care and personnel expenditure, as a percentage of total recurrent health expenditure is a valuable set performance indicator for allocative efficiency and effectiveness of an RBF health financing system. (Donor 2)</i></p> <p><i>The financial sustainability of an RBF health financing model in the wake of donor fatigue and receding government expenditure on the health care sector rested on the implementation of joint Private Public Partnerships that are premised on coordinating the core competencies of</i></p> |

| | | |
|--|--|--|
| | | <i>various players in delivering the best primary health care. (Medical Officer 3)</i> |
|--|--|--|

Source: Primary Data

The main themes distilled from the above interview responses point out that there is a general consensus amongst the respondents that the RBF model has managed to strengthen the Zimbabwean health system through the provision of financial resources that enable health care institutions to procure essential medicines. Owing to budgetary constraints the government had to rope in an implementing partner to complement investments in the primary health care delivery system. Zimbabwe is a signatory to the Abuja Declaration of 2000 on Health, which requires that the Health Budget must be 15% of total expenditure. Nevertheless, with respect to health, budgetary performance fell below the threshold of 15% due to scarcity of funds (Zimbabwe National Budgetary Statement, 2012). This had the effect of compromising the speed at which Zimbabwe could attain the MDG 4 and 5 targets.

4.4 Motivation for Implementing the RBF policy framework

The ultimate goal of adopting the RBF program was to recover and strengthen the health delivery system that had crumbled amid a debilitating economic and political environment characterised by a malfunctioning health system in terms of drugs, equipment and labour shortage. Findings from the study are illustrated in Table 4.9 below.

Table 4.8: Motivation for Implementing the RBF policy framework

| Finding | Detail | Representative Quote |
|--|---|--|
| What prompted RBF implementation and how the intervention was designed within the context of Zimbabwe? | A well-documented RBF policy framework acts as a reference point inasmuch as it is a legacy document. | <i>The need to strengthen the health delivery system created an impetus for the implementation of RBF. The government has however been implementing RBM in various sectors including health. (Donor 1)</i> <i>Owing to budgetary constraints the government had to rope in an implementing partner to safeguard the primary health care system (Medical</i> |

| | | |
|--|--|--|
| | | Officer 2) |
| | Which unintended or perverse effects did RBF generate in the Zimbabwe's health sector? | <p><i>"There have been issues pertaining to transparency and perceptions by the community that health care workers are receiving huge sums of money at the expense of community development and there have been divisions among health care workers between those who were receiving incentives and those who are not. (Medical Officer 1)</i></p> <p><i>"A bad culture of expectation may be difficult to correct once incentives are withdrawn" (Medical Officer 2)</i></p> |
| | What challenges did you encounter in implementing the RBF framework? | <p><i>"There is a lack of consistency in the frequency of internal monitoring mechanisms since people assigned to do internal monitoring are inundated with other duties." (Health Administrator 1)</i></p> <p><i>"RBF designers did not take into account the unique socio-political context under which the programme was being implemented in Zimbabwe." (Medical Officer 2)</i></p> <p><i>"There are restrictions imposed by the implementing partners and government. RBF programme is not flexible enough to actively respond to realities on the ground. (Health Administrator 2)</i></p> |

Source: Primary Data

Key points distilled from the study stress that for the five-year period that RBF has been implemented in Zimbabwe there has been significant progress in documenting the achievements

made by the health-financing model. It can be noted that internal monitoring mechanisms within the primary public health institutions is inherently weak. There is a lack of consistency in the frequency of internal monitoring mechanisms due to the employment freeze as people assigned to do internal monitoring are inundated with other duties. It appears that RBF designers did not take into account the unique socio-political context under which the programme was being implemented in Zimbabwe based on the primary data collected from interviews. The emphasis on the achievement of set targets brought about a level of rigidity in the roll out of the RBF programme in a manner that made it inflexible to contextual realities.

In essence, in the pre-RBF health provider institutions were not obliged to guarantee that health services would be provided and this position was challenged with the adoption of RBF. Though significant progress has been noted in improving health outcomes as depicted by the decline in mortality rates; these are still high and do not come close to MGDs targets by 2015. Challenges in remarkably decreasing mortality rates can be attributed to the existence of legal frameworks and red tape in the roll out of RBF programmes, deteriorating infrastructure, lack of expertise in the health sector, inaccessibility of some remote health centres and religious and cultural beliefs that militate against the implementation of the RBF.

4.5 Trends in place of delivery and childhood vaccinations

The essence of RBF is shown by its ability to deliver positive health outcomes. Two main health outcomes selected for the purposes of this analysis include health facilities deliveries and basic vaccination coverage, which are precursors of sound infant and child health, the core tenet of the RBF framework. Findings are illustrated in Figure 4.1 below.

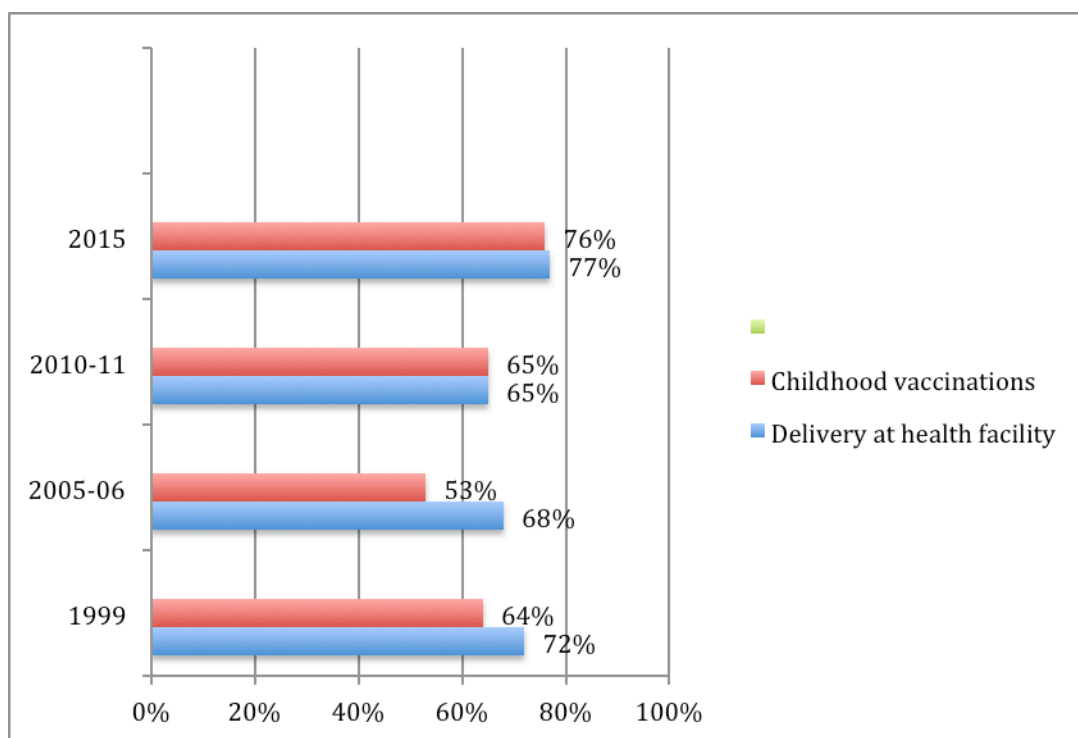


Figure 4.3: Trends in place of delivery and childhood vaccinations

Source: Adapted from the Zimbabwe Demographic and Health Survey (2015) and (2010-11)

From the Figure 4.3 shows that there was a 12% increase in deliveries at health facilities between 2010 and 2015 in contrast with the 4% decline between 2005-06 and 2010. This can be partly attributed to RBF implementation in selected districts across the country. However, childhood vaccinations have shown an upward trend since 2005 and incremental contribution of the RBF program may be difficult to ascertain nationally. The Zimbabwean government has efforts under the auspices of the MoHCW to train Village Health Workers to mobilise and educate the public especially pregnant women and nursing mothers on safe pregnancy and child health care with the hope of improving Health facility deliveries and childhood vaccinations. Following these efforts, an increasing number of women now give birth under medical supervision even though there are pockets of resistance from some religious groups. In order to spread the RBF philosophy to the grassroots, communities have been urged to form community-based organisations whose primary role is to mobilise and educate the public on health-related issues. The MoHCW has played an active role in mobilising funds for training and holding workshops from CORDAID the chief implementing partner in the RBF Initiative and other NGO's such as UNICEF. To strengthen the

referral system, US\$3million was allocated to the health sector for the procurement of ambulances and service vehicles (Zimbabwe National Budgetary Statement, 2012). The achievements generated by a strong referral system resulted in an improved Zimbabwe's ranking out of which it is in the top 10 in Africa with regards to reduction in child mortality. Zimbabwe has the largest reduction in child mortality in Africa for the period 2000 to 2011 (Zimbabwe National Budgetary Statement, 2014).

4.5.1 Trends in Primary Health care Outcomes

In order to outline the essence of the Results Based Finance as the preferred primary health-financing model it is imperative to re-look at the performance of the primary health sector prior to embracing the RBF framework. In order to achieve this, a comparison is made between Zimbabwe and rest of Sub-Saharan Africa in the attainment of Immunisation Coverage for Diphtheria Pertussis Tetanus (DPT). DPT has significant implications for infant health in primary health care. Findings are illustrated in Table 4.2 below.

Table 4.9: Comparative Pre-RBF Trends in the Immunisation Coverage for DPT

| Time Period | | 1986 | 1994 | 1999 |
|--|---------------------------|------|------|------|
| Immunisation Coverage For Diphtheria Pertussis Tetanus | Zimbabwe | 75% | 80% | 81% |
| | Sub-Saharan Africa | 32% | 51% | 48% |

Source: Adapted from the Sithole (2013)

Findings illustrated in Table 4.2 show that comparatively, Zimbabwe had higher coverage for the Immunisation of DPT as opposed to the average for the rest of the Sub-Saharan Africa. This can be attributed to the significant investments by the Zimbabwean Government which were seen as a panacea to a two-tier health system imposed by the colonial regime that discriminated between the rich and poor, blacks and whites, rural and urban dwellers. Upon gaining independence, the Zimbabwean increased its health expenditure by 80% of the pre-independence levels and ensured that the rate of child immunisation almost tripled between 1980 and 1988. However, the economic decline from the year 2000 led to a drastic decline in health outcomes owing to reduced spending on health. Resultantly there was a marked decline in health coverage by almost 40%, an increase in chronic malnutrition. The imposition of user fees compounded child

mortality rate as 1 in every 11 children died before their fifth birthday (MoHCW, 2012). Table 4.3 below illustrates the situation obtaining after the adoption of RBF in 2010.

4.6 Chapter Summary

This chapter gave a critical analysis of health systems thinking with regards to health care financing models within the Zimbabwean health sector. This research established a number of revelations with regards to the influence that health systems thinking has towards the achievement of health outcomes. In order to properly unlock health systems thinking, it was considered essential to focus on both the pre-RBF and post-RBF periods.

The pre-RBF era was characterised by poor health outcomes and a lack of confidence in the public health delivery system. The pre-RBF period in independent Zimbabwe can be traced back to 1980 when the country gained its independence. During the first decade, the government adopted a social-populist free-health-for-all approach. The government was the dominant financier of health and the predominant thinking was that the social services could best be provided through the provision of subsidies and centralisation of the loci of control. Nevertheless, the absence of a methodological monitoring and evaluation mechanism made it a challenge to ascertain the efficacy of the government's role as the chief financier of health system in the country.

The government's benevolence towards the provision of highly subsidised social services was compromised by the launch of the economic blue print under the auspices of the Economic Structural Adjustment Programme (ESAP) in the early 1990's. This marked the tipping point on the government's dominant role in social services as the dictates of ESAP entailed a drastic cut in government expenditure on social services. Hence, the enactment of demand-side interventions through the imposition user fees marked a paradigm shift in health systems thinking where health-financing models are concerned. The cut in government expenditure was characterised by the removal of subsidies on social services and accompanying massive retrenchments in the public-sector measures that were believed to improve efficiency in the delivery of social services. However, this move resulted in a lack of confidence in the public health delivery system as people shunned the public health delivery system in preference to alternative sources of healing such as "faith healing" and "traditional healing". Owing to limited fiscal space brought about by ESAP reforms coupled with health budgetary allocations that had

inherent disbursement challenges, there was a resultant drastic deterioration in some key health performance indicators such as the child and infant mortality rate as the Government failed to adequately fund primary health care. Basically, pre-RBF thinking was characterised by government stronghold in the provision of social services.

Post-RBF thinking was motivated by the need to strengthen the health delivery system and supplement health budgetary allocations with the view to improve health outcomes. There was an urgent realisation and need to resuscitate the appalling health delivery system through a participatory approach that does not strain the fiscal space. The partial implementation of RBF in 2010 especially in remote areas filled the void created by a receding government expenditure on social services. There was the strengthening the health delivery system through the provision of supplementary health budgetary allocations from implementing partners with the view to improve health outcomes particularly in respect of child and maternal health care. Private partners took an active role in the distribution of health finance outside government in order to improve transparency. The World Bank initiated RBF thinking in order to respond to specific needs in high priority areas of maternal health and child health care. Basically, the post-RBF thinking was characterised by government letting go of its stronghold in the provision of social services and inviting independent partners to play an active role in the provision and financing of social services. In light of this, through an active community involvement and participation in health matters there has been a growing confidence in the public sector in the provision of primary health care services since public health centres are the major beneficiaries of RBF funding.

This study established that community participation in health matter is a long-term health system strengthening intervention strategy that helps to maximise health well-being for the nation, ensure health equity and strengthen health outcomes. As a result of the adoption of a holistic approach to health systems thinking, trends in the use of modern methods of contraception as typical primary health outcomes showed a marked improvement in usage between the years 2010 to 2015. Moreover, the inclusion of an implementing partner and the successful embracement of the Private Public Partnerships have acted as a good governance mechanism to introduce checks and balances in RBF implementation and control. RBF incentives were found to be essential for

the retention and motivation of health personnel. However, word of caution was that they might create a perception of entitlement if they are continued in the long run. The succeeding chapter focuses on summarising the entire research through providing conclusions and offering recommendations.

Chapter 5: Summary, Conclusions and Recommendations

5.0 Summary

The purpose of this research was to lay groundwork for an in-depth study of the application of RBF as the emerging preferred primary health-financing model in developing countries. The research focused on the health services sector as it was used as the launch pad for the implementation of the RBF initiative in Zimbabwe. The main objective of the study was to evaluate how RBF has performed to ascertain whether it can be the effective financing model in a resource constrained Zimbabwe post the MDGs period. In the quest to satisfy this objective, the study examined how health systems thinking influences the achievement of health outcomes and identified preconditions that enable the effectiveness of aid management tools within the economic framings of governance, sustainability, equity, effectiveness and allocative efficiency.

In terms of governance findings established that in the post- RBF era there has been a marked improvement in the number of child deliveries in rural health care centres across the country, as well as a noticeable decline in under 5 and infant mortality attributable to improved governance of RBF funds. These findings are in contrast to findings by Sachs (2012) who established that most developing nations have been found to have weak governance systems for accountability of foreign aid since there are characterised with flagrant abuse and misappropriation of funds. Current findings also support the argument of Quaye (2007) under the dictates of the Standard Model that the introduction of incentive methods ensures efficient delivery of health services by health care providers. There is clear motivation of primary health care staff, which has significantly improved service delivery.

Allocative efficiency and effectiveness findings established that there has been a positive impact in post-natal care visits in rural health care centres that are sponsored by the RBF program as opposed to the pre-RBF period. Most importantly, there has been the liberalisation of the health care system to achieve higher levels of allocative efficiency through community based decision-making and empowerment approaches. The study is consistent with debates on the need to

identify of patterns of health spending to achieve allocative efficiency in the health sector (Care, 2015) and embracing community participation in funding and decision-making to increase allocative efficiency (Olmen *et al.*, 2012).

RBF implementation is poised for the future to reap sustained gains due to community buy in and appreciation of the public health system. Sustainability findings are mainly hinged on Zimbabwe assuming Savedoff (2011) responsibility for the RBF programmes and its outcomes on a national level without overly depending on donor funding. The sustainability of funding is at risk because considering the limited fiscal allocation to the health sector; the government on its own will not be able to finance the RBF programme without donor aid. This exacerbates Zimbabwe's foreign aid dependency syndrome that affects the sustainability of the health system. Results Based Financing programme scraps user fees for primary health care to improve accessibility to health care services but however the efficacy of scrapping user fees is attenuated by poor and dilapidated infrastructure and shortage of drugs. This compromises RBF returns as evidenced in the implementation of the RBF in Afghanistan and Haiti (Hansen *et al.*, 2008).

In terms of equity and inclusiveness, the current study revealed that there is a trade-off between achieving allocative efficiency and equity, especially when scaling up health programmes under the RBF programme. Findings are consistent with revelations that donors acting alone or at ideological odds with one another can undermine the reform process in aid management and coordination and ultimately equity and inclusiveness (Buse and Walt, 1996). The current study also established that RBF expends more resources to reach marginalised populations with primary health care in order to guarantee equity and inclusiveness. This is consistent with protecting society's most vulnerable through exempting them from paying (Wang'ombe *et al.*, 2002), universal coverage in access to health care (Bonfrer, 2015), budget constraints impacting negatively on achieving equity in health care delivery (The World Bank, 2005).

5.1 Conclusions

The study established that there is a trade-off between achieving allocative efficiency and equity, especially when scaling up health programmes under the RBF initiative. Issues of access to health funds has been a topical issue in health financing, the works of Akortsu (2013) highlight that irregular flow of funds and gradual delays in the disbursement of RBF funds results in poor execution of the RBF initiative. In the Zimbabwean context, the government has been struggling

to disburse funds to the health sector amongst other sectors in the economy even if the funds were properly budgeted for. The increasing failure to pay health employees' salaries and administrative expenses in time gives credence to claims that RBF works best in resource moderate and rich environments, especially so when there is autonomy in the disbursement of health funds.

The imposition of user fees with the hope of ensuring the sustainability of higher-level health systems has often been beset with inherent weaknesses that are related to the socio-economic context under which user fees are being implemented. Weaknesses may be in the form of poor revenue collection structures, which is compounded by the inability of patients to pay user fees and charges. In some cases, services are offered on credit though there are high default rates. In addition, delays in settling payments on the part of the treasury for services rendered to those patients who are qualified for exemption affects the viability of health services. Revelations from the current study highlight that the sustainability of the RBF initiative is largely attributed to continued donor engagement, as the government cannot solely financially sustain the magnitude of the program.

The pre-RBF era was characterised by poor primary health outcomes, unsound governance and a lack of confidence in the public health delivery system. The government's dominant role as the chief financier of health services, the predominant socialistic ideology thinking and loci of control of health care finance threatened the viability and sustainability of health care funding initiatives. The initiation of RBF ushered in a new dispensation in health care financing in Zimbabwe characterised by health systems strengthening through providing supplementary health sector budgetary support with the view to influence and unlock positive health outcomes. Though significant progress has been registered in the post-RBF period with regards to access to health care to marginalised groups, the same cannot be said in terms of improvements in health care outcomes such as mortality rates. This phenomenon can be attributed to notable challenges that include a lack of expertise in the health sector, religious and cultural beliefs, deteriorating infrastructure, poor remuneration, legal frameworks and red tape as well as corruption hampering the implementation of the RBF.

Nevertheless, there has been some commendable advancement on improving health outcomes where allocative efficiency and effectiveness of the primary health delivery system is concerned

as shown by slight increases in post-natal care visits in rural health care centres that are sponsored by the RBF programme as opposed to the pre-RBF period. This can be attributed to the liberalisation of the health care systems to achieve higher levels of allocative efficiency through community based decision making and empowerment approaches to help communities to design their own plans and procure medicines and equipment on their own. Moreover, under the auspices of the RBF, private partners assumed an active role in health finance outside government with a view to improve transparency, governance, sustainability, equity, effectiveness and allocative efficiency in health care financings.

5.2 Recommendations and Future Research Direction

In terms of Governance of Health Systems, it is urged that the government upholds the spirit of partnership under the Private Public Partnerships (PPP) initiative, especially with key partners such as CORDAID. Such PPP arrangements in the implementation of RBF has ensured donor coordination, mutual accountability, harmonisation of efforts to ensure positive health outcomes and ownership of the initiative due to active involvement of communities and the state. Following favourable results in the pilot districts, the RBF programme was rolled out across all provinces and districts in Zimbabwe. PPPs ease the allocation of resources, enhance equity in health care provision and are a good governance mechanism to ensure that the health delivery system is operating well in line with the dictates of the RBF philosophy.

The paradox between the other two granular measures of the RBF programme, efficiency and equity can also be resolved through operating under a PPP initiative. A study by Steketee and Eisele (2009) corroborated the above assertion by suggesting that countries with higher levels of health care coverage do not necessarily achieve higher levels of equity. For sustained efficiency, a more sustainable approach must be put in place as incentives only work as a short-term measure and they create a perpetual expectation or entitlement, which leads to disgruntlement when withdrawn on the part of the recipients.

A quarter of respondents highlighted that health care is not easily accessible, which affects the viability of RBF programmes. Building more rural health centres in proximity to communities can enhance accessibility of health care services by the underprivileged and most vulnerable. RBF scale-up initiatives must address the issue of health staff shortages to improve the allocative

efficiency of expended resources. However, this is only possible within an accountability framework that curbs corrupt activities.

As a way of sustaining the RBF programme it is prudent to link and align the RBF programme to the central government budgetary system and allocate more resources to the health sector to complement aid resources. Based on previous budgetary allocations across sectors in Zimbabwe, it appears that issues of national sovereignty take precedence over the sustainability of development initiatives like RBF. The World Bank (2013) reports that Burundi managed to integrate its RBF health financing needs with the national budget with the national fiscal space contributing up to 52 % of the financing costs of the RBF program, which is a strong pre-determinant of sustainability, commitment, and assumption of ownership of RBF. It is therefore apparent that integrating RBF with the national fiscal space goes a long way in ensuring positive development outcomes.

In the spirit of achieving higher levels of inclusiveness in the Zimbabwean Primary Health care sector; it is advised to nurture community engagement as promulgated through partnerships and social participation. These initiatives will go a long way in enabling accessibility of health centres, and the involvement of marginalised and excluded people.

The current study focused on the efficacy of the Results Based Financing model as an aid management tool in the health sector in a typical developing country context characterised with resource constraints. Future research directions might conduct a similar study in other public service sectors that received RBF, for instance the Primary and Secondary Education Sector that received under the UNICEF education financing programme to make a better-informed judgement on how best RBF can effectively and efficiently contribute to better aid management, ensure equity and improve governance of service delivery in the context of Zimbabwe and other developing economies. Alternatively, RBF can be compared with other health financing frameworks to ascertain which model is better suited to the unique context of Zimbabwe and can better achieve results towards the 2030 development agenda. Moreover, under the principle of additionality, it would be ideal to have an impact assessment of RBF across sectors to attribute its contribution to society and public sector reform, using a set of common evaluation metrics to determine where its most applicable and whether it can be the solution that cuts across sectors.

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Appendices

Appendix 1: Performance Indicators

Development effectiveness criteria and key performance indicators

| THEME/CRITERIA | DEFINITION | KEY PERFORMANCE INDICATORS |
|--|---|---|
| Governance | Governance is the manner in which power is exercised in the management of a country's economic and social resources for development (World Bank). It refers to general exercise of authority, rule of law and government effectiveness | Share of positions that are vacant Stock out rates for essential drugs Share of budgeted funds that are executed Share of health facilities that receive supervisory visits in accordance with national guidelines |
| Allocative efficiency and effectiveness | These measures how well an aid project uses resources in order to obtain desired results, benefiting most people at low cost, whether the right share of resources is being devoted to health care versus other goods in the economy. | Percentage of government health budget allocated to primary care Per cent of government expenditure directed to primary care Personnel expenditure as a total of recurrent health expenditure |
| Sustainability | This is the ability of host countries to assume responsibility for programs outcomes without adversely affecting the ability to maintain or continue program objectives or outcomes. Sustainable projects are those with benefits that are likely to continue after donor funding has been withdrawn. | Government health expenditure as a percentage of GDP Per cent of health expenditure financed by donors Total per capita expenditure on health Sources of financing for health and their relative shares of total expenditure |
| Equity and inclusiveness | Equity and inclusiveness for the purposes of this study means, everyone should have equal access to community resources and, opportunities, policy should be directed with impartiality, fairness and justice towards these ends and community partnership is key | Community engagement/partnership/social participation in setting health priorities Access to health centres Involvement of marginalised and excluded people Communication of guidelines and standards to all staff and partners in |

in setting development needs. accessible formats.

Indicators and definitions adapted from (OECD, 2010), (Mehdi, 1999) and (Sayedoff, 2011).

Appendix 2: Questionnaire



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QUESTIONNAIRE FOR PERSONNEL IN GOVERNMENT AND THE DONOR AGENCIES RESPONSIBLE FOR IMPLEMENTATION OF RBF IN ZIMBABWE

Questionnaire Number:

Please tick appropriate box where applicable

SECTION A: DEMOGRAPHICS

1. GENDER:

- 1. Male ☐
- 2. Female ☐
- 3. Prefer not to answer ☐

2. Age group:

- 1. 20-39 years ☐
- 2. 40-59 years ☐
- 3. 60 years and above ☐

3. Designation

- 1. Nursing Officer ☐
- 2. Medical Officer ☐
- 3. Health administrator ☐
- 4. Policy maker ☐
- 5. Donor Community ☐

6. Other (Please specify)

4. Years in the health system

- | | |
|-----------------------|--------------------------|
| 1. 0-5 years | <input type="checkbox"/> |
| 2. 6-10 years | <input type="checkbox"/> |
| 3. 11-15 years | <input type="checkbox"/> |
| 4. 15 -20 years | <input type="checkbox"/> |
| 5. 20 years and above | <input type="checkbox"/> |

5. Level of operation

- | | |
|-----------------------------------|--------------------------|
| 1. District level | <input type="checkbox"/> |
| 2. Provincial level | <input type="checkbox"/> |
| 3. Ministry of Health Head Office | <input type="checkbox"/> |
| 4. Donor organisation | <input type="checkbox"/> |
| 5. Other (Please specify) | |

SECTION B: Governance of Zimbabwe's Health System

6. Are there qualified and adequate personnel (nurses, doctors and administrators etc.) at each level in Zimbabwe's health system?

- 1) Yes ☐ 2) No ☐ 3) Not sure ☐

If **NO** which areas of the health system are experiencing the most critical shortages in personnel.

.....

.....

.....

.....

7. Is there a well-documented RBF policy framework in Zimbabwe's health system?

- 1) Yes ☐ 2) No ☐ 3) Not sure ☐

8. Are the set performance indicators collecting relevant and appropriate data on RBF at institutional level?

- 1) Yes ☐ 2) No ☐ 3) Not sure ☐

9. How do you rate the RBF implementation system in Zimbabwe in terms of monitoring, evaluation and auditing on a scale 1-5?

| Variable | 1. Very weak | 2.Weak | 3.Satisfactory | 4. Good | 5.Excellent |
|---------------------|--------------|--------|----------------|---------|-------------|
| Internal monitoring | | | | | |
| External monitoring | | | | | |

SECTION C: Allocative Efficiency and Effectiveness in Zimbabwe's Health System After the Introduction of RBF

10. Were community needs incorporated in the RBF framework through a baseline study?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

11. Are the health institutions accessible to the target beneficiaries in terms of distance and cost?

a) Distance 1) Yes ☐ 2) No ☐ 3) Not sure ☐

b) Cost 1) Yes ☐ 2) No ☐ 3) Not sure ☐

12. How would you rate health institutions in terms of equipment, medicines and health personnel to meet the health needs of target beneficiaries?

| Variable | 1. Very weak | 2.Weak | 3.Satisfactory | 4. Good | 5.Excellent |
|----------------------------|--------------|--------|----------------|---------|-------------|
| Equipment | | | | | |
| Medicines | | | | | |
| Qualified health personnel | | | | | |

13. Does RBF cover all the units within a health institution or there is selective application of departments covered by the programme?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

If your response is Yes or No how does this affect the moral of health personnel not covered or covered by the RBF programme at institutional level

.....
.....
.....
.....

14. Has RBF promoted effectiveness and efficiency in the use of resources at institutional level?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

Section D: Equity and Inclusiveness in Zimbabwe's Health System After Introduction of RBF

15. Has the implementation of RBF promoted equal opportunity for both men and women to improve and maintain their health well-being?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

16. Is there equity in health care provision in Zimbabwe's rural areas as a result of RBF?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

Please justify your response if it is Yes or No

.....

.....

.....

.....

SECTION E: SUSTAINABILITY OF RBF IN ZIMBABWE'S HEALTH SYSTEM

17. How long has been RBF implementation programme in Zimbabwe?

- | | |
|--------------------------|--------------------------|
| 1. 0-5 years | <input type="checkbox"/> |
| 2. 2) 6-10 years | <input type="checkbox"/> |
| 3. 3) 11-15 years | <input type="checkbox"/> |
| 4. 4) 16 years and above | <input type="checkbox"/> |

18. Is the implementation period of RBF so far sufficient to achieve the goals of the health system?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

19. Can the Zimbabwe health system sustain the momentum built by RBF after the donors pull out of the programme?

1) Yes ☐ 2) No ☐ 3) Not sure ☐

If your response is Yes or No, please justify your response

.....
.....
.....

SECTION F: Suggestions and Recommendations for Improving Implementation of RBF in Zimbabwe's Health System

- 20.** Can you give suggestions on how to improve the implementation of RBF in Zimbabwe's health system in order to achieve efficiency, equity, effectiveness, accountability and responsiveness that meet the health needs of the people?

.....
.....
.....

THANK YOU FOR YOUR COOPERATION!!!

Appendix 3: Interview Schedule



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Interview Schedule for Key Informants

Introduction

My name is Yvonne Mutopo, I am a Masters in Development Finance student with University of Cape Town Graduate School of Business researching on health care financing models in Zimbabwe. I am particularly interested in the Results Based Financing Model, targeting health care at primary level in rural areas. My questions are structured around three broad areas; how the health system works, performance of the RBF model and preconditions for health care financing in developing economies using Zimbabwe as a case study. Can you kindly tell me about yourself, your role in the Zimbabwean health system and possibly how long you have been working within the system?

Health systems thinking

1. How do you best describe the Zimbabwean health system and how it works?
2. Can you tell me about the history and evolution of health care financing in Zimbabwe and what has shaped its discourses?
3. In your opinion, what influenced changes in funding models from as far as you can remember?
4. Can you describe the state of primary health care prior to RBF introduction?
5. What prompted RBF implementation and how the intervention was designed within the context of Zimbabwe?
6. How has/is the RBF model strengthening the Zimbabwean health system?

Performance of the RBF model: efficiency, effectiveness, equity and sustainability

1. How has the RBF programme performed in Zimbabwe?
2. What could have been done better?
3. What would you change given the opportunity to redesign the programme for the better?
4. How does RBF in the health sector succeed in benefiting the groups and individuals it targets?
5. What measures are in place to ensure access to those geographically disadvantaged, women who find it difficult to access health services because of religious and cultural constraints?
6. What in your view is and has been the role of incentives in RBF?

7. How are the incentives managed at health centre level?
8. What is the long-term effect of the whole incentives system to health personnel in the long term?

Preconditions for effective health care financing in Zimbabwe

1. What are the minimum conditions for any developmental funding in Zimbabwe?
2. What lessons can be learnt from other countries from which Zimbabwe can capitalise to reap the full benefits of the RBF model in financing its health system?
3. What can be done to improve the implementation of RBF in Zimbabwe?

THANK YOU!!!

Appendix 4: Expanded Analytical Tables

Appendix 4.1: Trends in the health outcomes (selected few)

| Time Period | | 2005-2010 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---------------------------------|---------|-----------|------|-------|-------|-------|-------|------|
| Mortality | Under 5 | 76% | 82% | 79% | 77% | 74% | 71% | 69% |
| | Infant | 63.5% | 57% | 55% | 53% | 52% | 51% | 50% |
| Basic vaccination coverage | | 59% | 64% | 66% | 69% | 73% | 75% | 76% |
| Unmet needs for Family Planning | | 15% | 15% | 14% | 13.5% | 12.9% | 12.7% | 13% |
| Child stunting | | 33.5 | 35% | 34.7% | 33.1% | 29.6% | 28.4% | 27% |
| Trends in net-ownership | | 17% | 29% | 35% | 38% | 42% | 46% | 48% |
| Trends in H.I.V Testing: Women | | 19.4% | 34% | 37% | 40% | 44% | 47% | 49% |
| Men | | 13.4% | 21% | 25% | 28% | 31% | 34% | 36% |

Source: Adapted from the Zimbabwe Demographic and Health Survey (2015) and (2010-11) (*Averages used in some instances due to overlapping periods*)

Appendix 4.2: Overall healthcare outcomes by Province

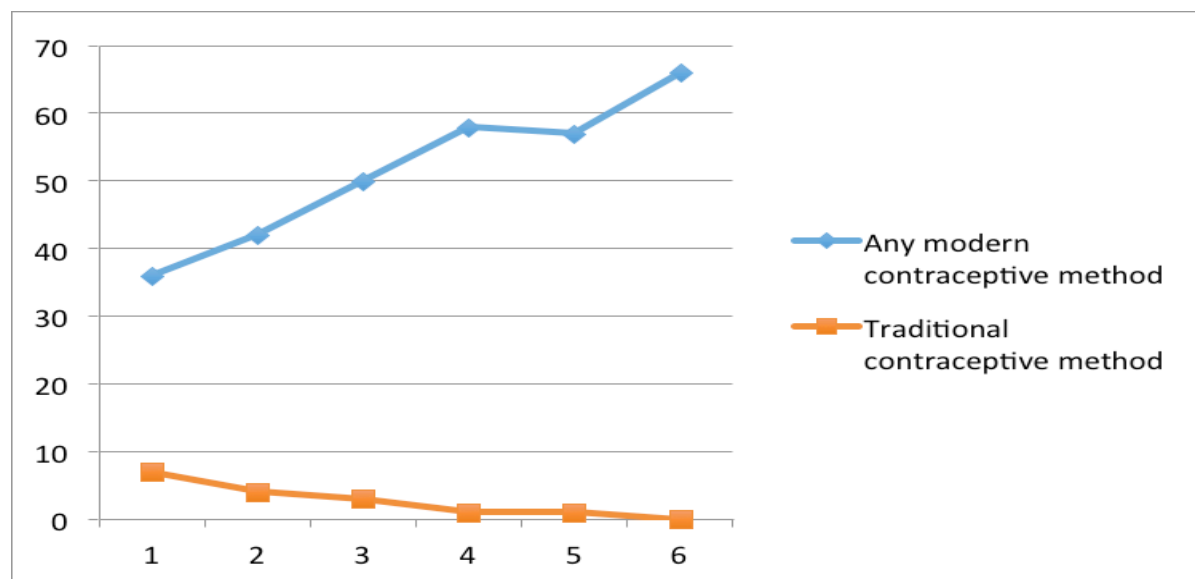
| Health outcome | Mash West | Mash Central | Mash West |
|---|-----------|--------------|-----------|
| Under 5 mortality | 101 | 90 | 101 |
| Health facility deliveries (National average = 77%) | 66% | 69% | 73% |
| Basic vaccination Coverage (National average = 76%) | 78% | 80% | 83% |
| H.I.V Prevalence Rate (National average = 14%) | 13% | 15% | 12% |

Appendix 4.3: Source of Modern Contraceptive methods

| Type of contraceptives | Public Sector | Private Sector | Other sources |
|------------------------|---------------|----------------|---------------|
| 2005-06 | 68% | 22% | 10% |
| 2010-11 | 73% | 14% | 13% |
| 2015 | 73% | 22% | 5% |

Source: Adapted from the Zimbabwe Demographic and Health Survey (2015), (2010-11) and (2005-06)

Appendix 4.4: Trends in the use of Modern Contraceptive methods



Period 1-1988, Period 2-1994, Period 3-1999, Period 4-2005-06, Period 5-2010-2011, Period 6-2015

Source: Adapted from the Zimbabwe Demographic and Health Survey (2015), page 111

Appendix 4.5: Performance of RBF in terms of Internal monitoring

| | Frequency | Percent | Valid Per cent | Cumulative Per cent |
|--|-----------|---------|----------------|---------------------|
|--|-----------|---------|----------------|---------------------|

| | | | | | |
|-------|--------------|----|------|------|-------|
| Valid | Very weak | 17 | 53.1 | 53.1 | 53.1 |
| | weak | 8 | 25.0 | 25.0 | 78.1 |
| | Satisfactory | 4 | 12.5 | 12.5 | 90.6 |
| | Good | 1 | 3.1 | 3.1 | 93.8 |
| | Excellent | 2 | 6.3 | 6.3 | 100.0 |

| Appendix 4.6: Level of operation and Years in the health system | | | | | | | |
|--|-----------------------------------|----------------------------|-----------------|------------------|------------------|------------------|-------|
| | | Years in the health system | | | | | Total |
| | | 0 - 5 years | 6 - 10 years | 11 - 15 years | 16 - 20 years | over 20 years | |
| Level of operation | District level | 8 | 0 | 0 | 0 | 0 | 8 |
| | Provincial Level | 0 | 3 | 2 | 3 | 0 | 8 |
| | Ministry of Health Head office | 0 | 1 | 1 | 2 | 4 | 8 |
| | Donor Organisation | 0 | 1 | 3 | 0 | 0 | 4 |
| | Other | 0 | 3 | 1 | 0 | 0 | 4 |
| Total | | 8 | 8 | 7 | 5 | 4 | 32 |
| | Total | 32 | 100.0 | 100.0 | | | |

Source: SPSS Output Data