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Universal Health Coverage in Tanzania

Evaluating the potential of a Public-Private Partnership in Tanzania's health financing system

Jondolar Lambrecht
s0216274

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Promotor: Prof. Dr. Trui Steen
Verslaggever: Marleen Brans

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ABSTRACT

After decennia of international development plans, the global community is still facing significant inequalities. When considering health, one of the challenges within the Sustainable Development Goals is to strongly reduce the number of six million children dying before their fifth birthday, of which 80% occurs in sub-Saharan Africa and South Asia. Searching for more effective ways to reduce existing inequalities, the international community endorsed social protection mechanisms as a new development priority (ILO, World Bank & UN, 2015). Within the domain of health, this vision of social protection was translated into the concept of Universal Health Coverage (UHC).

OBJECTIVE: Being a relatively new concept for the developing world, this dissertation first of all wants to analyze how UHC is being implemented in the health financing system of a developing country, Tanzania. Secondly, this dissertation wants to research whether the concept of public-private partnerships (PPP), through means of the governmental health insurance fund (i)CHF, can make a contribution towards UHC.

METHODOLOGY & RESULTS: A literature review indicated that Tanzania has been investing in several health insurance schemes since the nineties. However, instead of more coverage this has led to a fragmented health financing system fraught with low enrollment numbers. Being faced with a large informal economy and a small tax-base, the Government of Tanzania (GOT) has been searching for alternative mechanisms to redesign their health financing system, like the use of PPP. To evaluate the added value of PPP within a UHC-context, it was chosen to conduct a descriptive cross-sectional survey in the Kilimanjaro region in Tanzania. Results pointed out that the iCHF-program is making a modest contribution to UHC when considering equity and financial protection, but is falling behind on quality. It is however concluded that PPPs, taken some reservations in mind, can make a positive contribution to the goal of UHC.

KEYWORDS: Universal Health Coverage, Community Health Fund, Public-Private Partnership, Tanzania

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LIST OF ABBREVIATIONS

CBHI	Community Based Health Insurance
CHI	Commercial Health Insurance
CHF	Community Health Fund
D-by-D	Decentralization by Devolution
GOT	Government of Tanzania
HFS	Health Financing Strategy
HSSP IV	Health Sector Strategic Plan IV
ICESCR	International Covenant on Economic, Social and Cultural Rights
IDG	International Development Goals
LIC	Low income countries
MDG	Millennium Development Goals
MIC	Middle income countries
NHIF	National Health Insurance Funds
OECD	Organisation for Economic Co-operation and Development
OOP	Out-of-pocket payments
PPP	Public-private partnerships
SDG	Sustainable Development Goals
SHI	Social Health Insurance
SHIB	Social Health Insurance Benefits
THE	Total Health Expenditure
UDHR	Universal Declaration of Human Rights
UHC	Universal Health Coverage
UN	United Nations
WHA	World Health Assembly
WHO	World Health Organization

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After my first inscription at KUL in September 2009, much has changed. Although not always for the better, these changes brought in a considerable amount of experience, which proved to be an asset when writing this dissertation. The chosen topic has been a part of my professional life for almost 4 years and hopefully will continue to do so in the coming years. So far, it already has been an absolute privilege being able to conduct my fieldwork abroad. By working and living in a development context, one realizes its own fortune for possessing things easily taken for granted, like education and health. For that reason, I have considered my dissertation as an opportunity rather than a burden and I hope that my motivation will be an equivalent of the quality provided in the forthcoming pages.

Ending this acknowledgment, without actually acknowledging someone would be a bad start. First and foremost, I would like to thank my foster parents Odette Schamp and Adrien De Vleesschauwer. While always emphasizing the importance of education as the key to my development, their everlasting care and support has been of invaluable importance to me. Secondly, the role of my partner Natalie Vanden Eynde in the wording of this work was unprecedented. Her job as a junior assistant in Tanzania has provided me with the opportunity to carry out my fieldwork. Not only did she support me with the logistics, she also proved to be the perfect companion/soundboard when setting up/out my research plan. Without her insights and technical expertise it would probably have taken me another year to finish my master degree. Last but not least, I am grateful for the opportunity and guidance I received from my promotor Trui Steen and my internship PharmAccess Moshi. Fruitlessly calling out to a variety of experts and organizations in Europe, I received a warm 'karibu' from PharmAccess Moshi as soon as I touched down on Tanzanian soil. Although every single staff member at PharmAccess and NHIF guided me, I need to single out 'kijana' Emmanuel Carl for his role as a facilitator when carrying out my fieldwork.

Thank you all! Nashukuru wote!

INTRODUCTION

"Of all the forms of inequality, injustice in health care is the most shocking and inhumane."

Martin Luther King Jr.

The quote above dates back to a medical conference for human rights in Chicago on March the 25th 1966, in which Dr. King connected the topic of healthcare to injustice (Tan, 2015). Despite the fact that half a century has passed since this remark, still 11.2 million Americans were pushed into poverty because of medical expenses according to most recent figures of the United States Census Bureau (Renwick & Fox, 2016). In comparison with other OECD countries, a 2016 report indicated that 'relatively few people in most OECD countries face catastrophic health spending or fall into poverty because of such spending' (Paris et al., 2016, p.8). What might be even more striking is that despite this significant socio-economic disadvantage, the US by far outspends other countries on health care (The Commonwealth Fund, n.d.). When searching for an explanation for this contradiction one only has to turn on the news. At the moment of writing, the everlasting American discussion on health insurance was heating the debates again. The Trump administration was scheduling a vote in Congress in order to repeal and replace the Affordable Care Act (ACA), alias Obamacare.[1] Since the ACA, the uninsured rate in America dropped to 10%, but still left 28 million Americans uninsured (Young, 2016). While the un-insurance rate in the USA cannot be considered as a sole indicator for catastrophic and impoverishing healthcare spending, there seems to be a strong correlation between health insurance and poverty when analyzing these statistics.

As pointed out above, most European citizens do not have to worry about their assets when falling ill. This can mainly be explained by the development of our social welfare state. In contrast with the United States, European governments chose to implement social programs to protect their citizens from socio-economic distress (Alesina, Glaeser & Sacerdote, 2001). The earliest steps towards social protection in the domain of health were taken in Germany during the rule of Otto Von Bismarck (George Marian, 2015). In 1883 the German Sickness Insurance Act was introduced by the German Chancellor in a reaction to social unrest. As a devout Lutheran, Von Bismarck was inspired by Martin Luther who already in the 16th century proclaimed that those who were unable to work due to illness and could not afford needed care, should be provided with the necessary treatments to restore their health so that they could return to work (Katzmann, 1992). However, this health coverage was only intended for a limited group of people (an estimated 10%) and eventually it took until 2000 to attain full coverage of the German population, meaning that every legal German resident was enrolled in a public or a private health insurance plan (Carrin & James, 2005).

It did not take long before other (European) countries followed Germany's example. Especially during the post-Second World War many labor and left-wing political parties strived for more social protection which resulted in the development of health insurance schemes all around, and even outside, of Europe (Gaffney, 2013). Despite using different methods, all of these schemes had one goal in common: ensuring the right to health care for all of its citizens, nowadays referred to as 'universal health coverage' (WHO, 2010). When considering some indicators for UHC, we can see that the hard work during the 21st century has paid off and most of the OECD countries have obtained (near) UHC (Paris et al, 2016). In an annual report on health, Health at a Glance (OECD, 2016), it is stated that the quality of care has undoubtedly improved. In most countries life expectancy is above 80, which is an improvement of six years compared with the early 1990's. Another indicator is the rate of out-of-pocket payments (OOP) which has dropped to an average of 19%, when below 20% is considered to be a good indication of reduced risk of catastrophic health spending and impoverishing expenditure for health care (WHO, 2015).

[1] When finishing this work, the Republican healthcare bill to replace and repeal the ACA was passed in the House of Representatives but was upheld by the Senate. According to the nonpartisan Congressional Budget Office, the new law would increase the number of US citizens without health insurance by 22 million by 2026 (The New York Times, 2017).

However, when aggregating the numbers to a global level, a much less brighter picture is painted. Most recent WHO-report concerning health indicates that the OOP payments in low-income countries (LIC) amount to 42.3% of the Total Health Expenditure (THE) while only 21.2% for high income countries (HIC). Also life expectancy, despite improvements, is worse off on the global level; global life expectancy in 2015 was 71,4 years. But when looking at the lowest quintiles, there are still 22 countries where life expectancies are below 60 years, all of them in sub-Saharan Africa (WHO, 2016). It is striking to see that these significant differences still exist at a time where already much international effort has been invested to create a more equal world. The United Nation's development plan, Millennium Development Goals (MDG's), aimed to improve global poverty, education, health and environment. In 2015 the UN itself stated that: "*Although significant achievements have been made on many of the MDGs targets worldwide, progress has been uneven across regions and countries, leaving significant gaps. Millions of people are being left behind, especially the poorest and those disadvantaged because of their sex, age, disability, ethnicity or geographic location*" (UN, 2015, p.8). A possible explanation for not achieving its goals might be found in the absence of social protection mechanisms within the MDG-framework. The UN seemed to acknowledge this flaw when presenting the MDG follow-up program, the Sustainable Development Goals (SDGs) in 2016. The plan includes 17 goals of which the first and the third explicitly refer to the concept of social protection. While the first goal encourages national governments to implement social protection systems, the third goal states: "*Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all*" (UN, 2016, p.11).

So how realistic is this goal of achieving UHC in developing countries by 2030? It took Germany 127 years to cover its entire population, can we really expect from developing countries to achieve this in ten times less (Oxfam, 2013)? In order to formulate an answer to these and other concerns, this dissertation will analyze the health financing system of a developing country, Tanzania, and its steps towards UHC. With a per capita income of $950, the East African country is among the least developed countries in the world, ranking 151th out of 188 countries on the Human Development Index (UN, 2016). Since working towards UHC also means including the most vulnerable, Tanzania proved to be an 'ideal' case.

This dissertation consists out of four main chapters. The first chapter will give some background on research design, objectives and the conceptual framework that will be used. The second chapter will provide for a theoretical framework. What is meant with 'UHC', 'financial protection', 'catastrophic healthcare spending', 'impoverishment' and other relevant concepts? All of these will be discussed alongside a historical perspective on the quest towards UHC. Throughout the third chapter the Tanzanian healthcare system will be discussed in combination with the concept of public-private partnerships in health insurance. How is Tanzania working towards the goal of UHC? What are its main challenges? And how are public-private partnerships used to tackle these challenges? Finally, the last chapter will present the results of a case study that was conducted by researching a public-private partnership and its contribution to UHC in Tanzania.

CHAPTER I: METHODOLOGY

1.1 Research design: problem, research questions and objectives

In its quest for Universal Health Coverage (UHC) the government of Tanzania (GOT) adopted in 2001 the Community Health Fund-act. This act officially established the Community Health Fund (CHF) as a "*voluntary community based financing scheme whereby households pay contributions to finance part of their basic healthcare to complement governments health care financing efforts*" (GOT, 2001, p.5). The establishment of a community health financing system was considered to be key to provide health insurance to millions of Tanzanians that are working in the informal economy and/or living in rural areas.[2] However, despite its good intentions, low enrollment remains one of the biggest challenges to the CHF. By January 2016 only 8.2 million out of 51.8 million of Tanzanians were enrolled in the CHF (USAID, 2016). Knowing that currently an estimate of 69% of the Tanzanian population is living in rural areas and on average 80% of the sub-Saharan population is employed in the informal economy, there is still a long way to go for Tanzania before reaching the goal of UHC (World Bank, 2015; ILO, 2015).

An interesting initiative to raise enrollment with the CHF was initiated in 2014, when the National Health Insurance Fund (NHIF) signed a contract with the Dutch non-profit organization, PharmAcces. The iCHF, improved CHF, is a partnership between the National Health Insurance Fund (NHIF) of Tanzania, the district councils (local government), public and private healthcare facilities backed up with technical assistance of PharmAccess (PharmAccess, 2016). Such kind of collaborations between public authorities and private entities are commonly labelled as 'public-private partnerships' (PPP). However, in order to assess whether these kind of PPPs are a valuable complement to the public ownership of health insurance provision and if they can add sustainable improvements towards UHC, a thorough research needs to be done.

To guide and steer my research into the right direction, the following two research questions were chosen:

1. How is the concept of UHC influencing the Tanzanian health financing system?
2. Can the concept of public-private partnerships, through means of the governmental health insurance fund (i)CHF, make a contribution towards UHC?

1.2 Context, sources and data-collection

In order to construct an authentic image of the functioning of a Tanzanian health insurance scheme, an internship was taken for over two months with the above mentioned organization, PharmAccess, on their iCHF-program. Although the organization is not responsible for running the scheme, the ownership stays with the Tanzanian government, they are closely involved with all of the relevant aspects. Including marketing, premium setting, enrollment strategies, monitoring of quality, advising NHIF on the contracting of public and private health providers, digitalization, … .

The study has used both primary and secondary data. Primary data were collected through non-participatory observation and informal conversations during the internship. When there was a need to get a comprehensive insight within a certain matter, open interviews were scheduled with the responsible colleague (ex. marketing department, medical department, ...).[3] Another source of primary data collection were the questionnaires conducted with iCHF members. A last source were the internal documents I was able to consult through my internship with PharmAccess (e.g. program document iCHF June 2017) or at the NHIF (e.g. CHF-reform report).

Secondary data was obtained through consulting different kinds of literature retrieved through the internet. Mainly Libis and Google Scholar were used to retrieve academic articles, working papers, policy documents of a variety on international organizations and NGOs (UN, WHO, OECD, ILO, World Bank, Oxfam, 11.11.11,

[2] Informal economy can be defined as "jobs or work without employment-based social protection in informal enterprises, formal firms and/or households" (ILO, 1993).

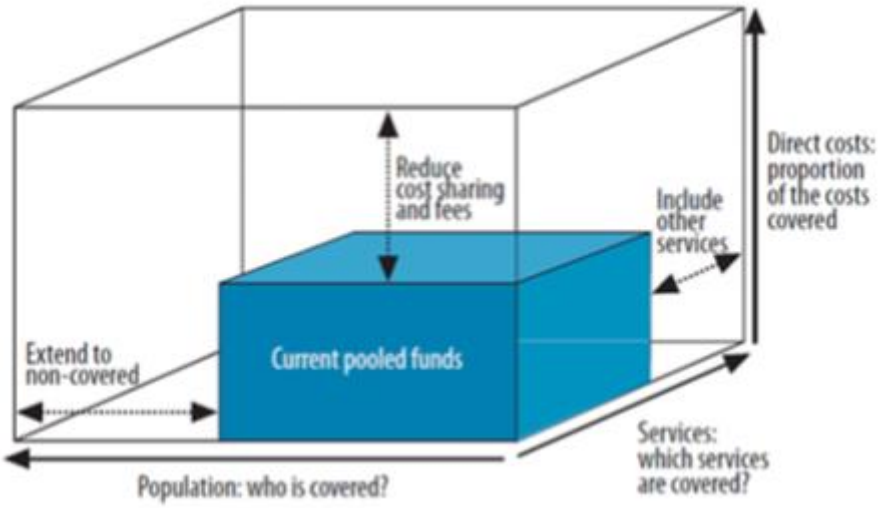
[3] See Annex I

…) and national/international legislation. Also, before starting my internship I had some orientational meetings and interviews concerning the topic of community-based health financing. Another important source was provided through the use of social media. By following relevant actors on Facebook and Twitter an instant live feed was provided to the publications of most recent information concerning my topic.

1.3 Conceptual framework

When working towards UHC, progress is visualized by a three dimensional cube (see figure 1) and consists out of three dimensions: population coverage, services offered and direct costs covered. We can only refer to UHC when all of these three dimensions are maximized within the cube (extension of the colored cube) (WHO, n.d.). The center of the cube refers to the pooling of funds through the use of health financing systems like taxes or insurance schemes. These funds can be used to extend coverage to individuals, services and costs that previously were not covered. The cube recognizes the specific context of each country and the scarce resources to ensure full coverage of all these dimensions. It calls for a set of priorities to incrementally improve coverage in all three dimensions tailored by the individual country context (WHO, 2014).

Figure 1: The three-dimensional UHC-cube



(Source: WHO, 2010)

Population coverage refers to the inclusive vision of UHC to include all populations, in all circumstances, in all countries. People should not receive health services based upon financial power, but based upon need. This dimension provides a framework for addressing health inequities and ensuring access of vulnerable groups. Positive discrimination policies should prevent discrimination of people based upon socioeconomic status, sex, ethnicity, race, sexual orientation, age or religion.

Health services should also contain a comprehensive set of services responding to critical health issues, financed through the public system, available to every citizen. The WHO lays out that intervention packages should cover health promotion, prevention, diagnosis, care, treatment, rehabilitation, palliation care, antenatal care and terminal care. The organization also calls for robust monitoring and evaluation systems to measure progress in coverage and to ensure equity and quality of services. Also here flexibility is required since not every country has the same financial resources at its availability. Prioritization is needed when selecting interventions to achieve the greatest impact and create the most rapid and efficient way to universal coverage.

Finally, the UHC-framework focusses on the proportion of **direct costs** covered or **financial protection**. Crucial is the development of health financing systems where governments have responsibility to raise funds through public and private sources, establish mechanisms to pool funds and optimize the use of health resources. With this dimension UHC opposes the notion of out-of-pocket payments (OOP) which is seen as the cause of catastrophic health expenditures pushing vulnerable groups into poverty. General taxation systems and compulsory health insurance systems are seen as the most equitable and efficient systems to obtain the reduction of OOP. Concerning health insurance or prepayment schemes three issues are put forward:

compulsory contributions, pooled funds with government budgets to cover for the poor and pooled funds should be unified making them sufficiently comprehensive to cross-subsidize for the poor.

These three dimensions will provide a guiding line throughout the course of this dissertation. The following two chapters will provide a literature review by discussing important, related concepts. First through the evolution of UHC and its current definition, afterwards within the context of the Tanzanian healthcare system. The last chapter will make an analysis of a health insurance public-private partnership in Tanzania, iCHF, and assess its contribution to UHC.

CHAPTER II: UNIVERSAL HEALTH COVERAGE

The concept of Universal Health Coverage (UHC) evolved gradually throughout the 21st century. In order to understand its current definition, one should start with analyzing the way the topic of health has been framed at the international stage. This chapter will first of all provide an historic overview of some key evolutions that contributed to the conceptualization of UHC. Secondly, we will look at how UHC is defined today by a key actor relating health policies, the World Health Organization (WHO). Lastly, we will discuss the topic of health financing systems which is seen as the main strategy to reach the objectives put forward by UHC.

2.1 International milestones towards Universal Health Coverage

2.1.1 1945 – 1976: The right to health

Health is a human right. Already in 1948 article 25 of the Universal Declaration of Human Rights stipulated: "*Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."* While the UNDHR is only a declaration, meaning it has no legally binding effect for the signatories, it was albeit an important first step to encourage governments in protecting political, civil, social, economic and cultural rights in the aftermath of World War II (Glendon, 2004).

Specifically for health related issues, the next step was taken in 1966 when the International Convenant on Economic, Social and Cultural Rights (ICESCR) was adopted by the General Assembly of the UN. Entering into force in 1976, the right to health held a prominent position in the Convenant. While article 12 explicitly mentions the creation of '*conditions which would assure to all medical service and medical attention in the event of sickness*', article 9 recognizes '*the right of everyone to social security, including social insurance*'. Being a multilateral treaty, once ratified or accessed by the signatory countries the ICESCR becomes a legally binding document (Coomans, 2007). Currently 165 parties have done so, despite signing in 1977 the United States remains one of the big absentees on the memberships list. Compliance with the ICESCR is being monitored by the Committee on Economic, Social and Cultural rights through a mechanism of state reporting. Member states are obliged to report every five years on the domestic implementation of their obligations under the ICESCR. These reports are being examined by a group of 18 independent human rights experts and eventually results in the Committee's 'concluding observations' in which recommendations are being made. Although legally binding, sanctioning is beyond of the competence of the Committee and is also not its goal. Instead of exposing or condemning violators, the Committee rather engages in a constructive dialogue with the concerned governments in order to reach its goals of health and social protection (Alston, 1987).

2.1.2 1978 – 2000: Alma-Ata declaration

The signing of the Alma-Ata declaration in 1978 by the World Health Organization (WHO), the United Nations Children's Fund and 134-signatory nations was another cornerstone on the road towards UHC (Brown et al., 2016). In this declaration the signatories reaffirmed that health was a fundamental right and condemned the gross inequalities in the health status between developed and developing countries. Alma-Ata underpins that '*the enjoyment of the highest attainable standard of health is a most important world-wide social goal'* and also lays the connection between health, sustainable development and world peace. To attain these goals, the signatories envisaged a crucial role for primary health care and community participation: '*Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford'* (WHO, 1978). In essence, the Alma-Ata declaration demanded for a more horizontal approach focusing on a reinforcement of the health care system which should deliver 'Health for all' by the year 2000.

Almost 40 years later we can state that the principle of 'Health for all by 2000' has not been reached. So how come that experts and world leaders made such an overestimation of the global health community to reach its goals? Much can be explained by the shift that was made from a holistic, horizontal approach (strengthen the health system) towards a vertical approach (targeted interventions) during the 1980's. This vertical approach

went by the name of 'selective healthcare' in which cost-efficient and specific interventions for vulnerable groups (e.g. women and children) were promoted by the World Bank et al. (Cueto, 2004). The adjusted strategy led to massive cuts within health budgets during the 80's and 90's and the installment of 'direct payments' or OOP-policies in many countries. However, as admitted in 2014 by the executive director of the World Bank, these direct payments led to deteriorating health standards and clearly did not contribute to the goal of 'health for all' (11.11.11, 2016).

2.1.3 1990 – 2015: Millennium Development Goals

In the face of declining aid budgets and after a series of major UN sectorally focused conferences (education, children, environment, women, …) in the early 90's, the members of the OECD's Development Assistance Committee released a statement of policy in 1995 called 'Development Partnerships in the New Global Context'. In this joint statement Ministers and Heads of Aid Agencies, agreed on shared orientations for development co-operation efforts in the 21st century. After many rounds of high-level consultations this common vision eventually led into the crafting of an unprecedented development plan. In 2000 former Secretary-General of the UN Kofi Annan presented the International Development Goals (IDGs), jointly prepared by the OECD, IMF, UN and the World Bank (UN, 2000). Generating important public awareness, later that year the IDGs were included in the Millennium Declaration under the name of the 'Millennium Development Goals' (MDGs). Although similar, the IDGS were not identical to their successor. One example was the establishment of an eight goal in the MDG-framework, which resulted from a critique towards the lack of indicators for the developed countries stipulated in the original IDGs (Manning, 2009). When analyzing the MDGs and their results, we can see that the three goals directly related with health (reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases) were not reached (UN, 2001; UN, 2015).

2.1.4 2015 – 2030: Sustainable Development Goals

On the 25th of September 2015 the Sustainable Development Goals (SDGs) were adopted, as the successor of the MDGs, at the UN General Assembly in New York (UN, 2016). The SDG-framework was different from the MDGs because of a number of things (Kilama, George, Katera & Rutatina, 2016). First of all, there were much more actors (national governments, private sector and civil society) involved with the crafting of the SDGs, which resulted in a widely supported plan. While the MDGs used a top-down approach directed by the OECD-countries, the SDGs represented a much more participatory process by including low- and middle-income countries, elaborately consulting the civil society and acknowledging the role of the private sector and local governments. By doing so, the framework became universal and applied to both developing countries and developed countries. As indicated by its mantra 'Leaving no one behind', the plan is also much more inclusive because of its human rights based orientation towards development. To quote a UK policy advisor: "Inequality for me is not just measured in terms of growth but in terms of making sure the most excluded can exercise their human rights." (The Guardian, 2015). For doing so, the concept of social protection floors was included in the SDG framework. This concept was launched in 2009 by the ILO and the WHO representing the protection of a basic set of social rights by insurance mechanisms (ILO, 2011). Finally, the SDGs represent a much more comprehensive vision towards health capturing the three previous MDGs (4, 5 and 6) into one goal. This goal, 'Ensure healthy lives and promote well-being for all at all ages', also includes several targets of which target 3.8 can be considered the most comprehensive: "*Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all*". With this target, the concept of 'Universal Health Coverage' (UHC) was officially introduced at the international stage of development policies.

2.2 Defining Universal Health Coverage

Each year on the 12th of December the 'health for all'-movement celebrates the anniversary of the unanimous UN General Assembly endorsement of UHC (Health for All, 2016). Since UN-membership encompassed 193 member states, the following definition for UHC can be considered the most representative among many others: "*Universal health coverage implies that all people have access, without discrimination, to nationally determined sets of the needed promotive, preventive, curative and rehabilitative basic health services and essential, safe, affordable, effective and quality medicines, while ensuring that the use of these services does not expose the users to financial hardship, with a special emphasis on the poor, vulnerable and marginalized segments of the population*" (UN, 2012). However, the resolution also emphasizes the leadership role of the World Health Organization (WHO) on health matters and calls for strengthening UHC-collaboration of member states through the WHO. Since it was also the WHO that took first initiatives on defining and lobbying towards UHC, following paragraphs will look specifically at the evolution of UHC within the constraints of the WHO.

2.2.1 World Health Organization

Established in 1948 as a specialized agency of the United Nations (UN), the WHO can be considered as the leading authority when it comes down to health matters. When adopted in 1946, the WHO constitution was signed by 61 countries, nowadays WHO-membership encompasses 194 member states. Within this constitution health is described as '*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*'. Members also agree that '*the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition*' (WHO, 1948). Despite their broad representative power, neither the constitution or resolutions are binding agreements which puts the WHO in a mainly supportive role to obtain their global health objectives. They embody their role by providing leadership on critical health matters, producing health guidelines, monitoring the health situation and providing technical support. Working area's vary from fighting (non)communicable diseases, health education, coordinating health responses during emergencies and the development of health systems (WHO, n.d.). Within this last domain UHC has been set as a priority goal. Although the ingredients of UHC (health as a human right, extension to all people, responsibility of governments, …) were already firmly rooted in the WHO-constitution, the concept and definition of UHC did not come overnight. The concept was not only influenced by international evolutions, as previously discussed, but within the scope of ten years also the WHO altered its definition of UHC.

2.2.2 From 'universal coverage' to 'universal health coverage'

In 2005 the World Health Assembly (WHA), the decision making body of the WHO, referred to 'universal coverage' as "*health-financing systems that include a method for prepayment of financial contributions for health care, with a view to sharing risk among the population and avoiding catastrophic health-care expenditure and impoverishment of individuals as a result of seeking care*" (WHA 2005). It seems clear that within its initial conceptualization UHC was mainly viewed as a tool in order to prevent financial hardship because of healthcare expenditure. Already in 2003 Carrin and others referred to 'universal financial protection' as the true objective of universal coverage (Carrin, 2003). However, over time this definition evolved into 'universal health coverage' in which the health component was highlighted as well. In 2015, the WHO released its 'first global monitoring report' in which it defines UHC as: "*all people receiving the health services they need, including health initiatives designed to promote better health (such as anti-tobacco policies), prevent illness (such as vaccinations), and to provide treatment, rehabilitation, and palliative care (such as end-of-life care) of sufficient quality to be effective while at the same time ensuring that the use of these services does not expose the user to financial hardship*." (WHO, 2015)

2.2.3 Three conceptual objectives

The WHO relates its definition of UHC with three interrelated objectives (WHO, n.d.). First of all, **equity** in access to health services; everyone who needs services should get them, not only those who can pay for it. This dimension is very important when considering UHC on the African continent since it is estimated that 39% of Africans are poor (earning less than 2$/day), 54% are low-income (earning between $2,01 and

$10/day), 6% are middle class (earning between $10 and $20/day) and only 1% are high-income (Micro Insurance Center, 2015). When talking about equity, or fairness, it's also important to make a distinction between vertical and horizontal equity. While horizontal equity refers to equal treatment of similar cases, vertical equity requires an unequal treatment of dissimilar cases (WHO, 2014). More specifically, vertical equity applies when people with greater health needs receive more healthcare than those with lesser needs. Horizontal equity applies when people with the same healthcare needs have similar access to healthcare services. When translating these concepts within a UHC framework, the WHO developed two concrete guidelines: fair distribution and fair contribution. While fair distribution represents coverage and use of services based on needs (horizontal equity), fair contribution represents the ability to pay (vertical equity) rather than to calculate contributions based upon the need for services.

Secondly, the **quality** of health services should be good enough to improve the health of the beneficiaries. This objective is directly related to the strength of domestic health systems which consists out of several dimensions. Major inadequacies in health workforce (personnel) and infrastructure remain. Also medical products are not meeting up with expectations with reports on spurious, falsified, falsely labelled and counterfeit medicines. Another important dimension is health service quality which in its turn can be defined in a number of ways including: "*patient safety (avoiding injuries to people for whom the care is intended), effectiveness (the degree to which evidence-based health services achieve desirable outcomes), people-centredness (providing care that responds to individual preferences, needs, and values) and integratedness (care that makes available the full range of health services from health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, throughout the health system, and according to people's needs throughout the life-course)*" (WHO, 2015). One last dimension is 'transparency and accountability' which refers to the degree in which the public participates and is provided with necessary information in order to evaluate the process of delivering healthcare services. In other words, people should not just be recipients of services, but also be in the driving seat when shaping the system and how services are financed and delivered (WHO, 2014).

The third component relates to **financial-risk protection**, which is assuring that the cost of using services does not lead to impoverishment or catastrophic health expenditure (WHO, 2015). Impoverishment can be defined as pushing a household below the international poverty-line of US$ 1.90 per day per capita (Thomson, 2016). Catastrophic health expenditure is set to occur when health care costs exceed 25% of the total household budget (WHO, 2016). Note that one does not automatically leads to another, also rich families can face catastrophic health expenditure which generally does not lead to impoverishment. When referring to direct payments for healthcare services at point of use, the concept of 'out-of-pocket payments' (OOP) is used. OOP's can also be seen as a measurement for calculating the amount that households are financing the provision of health services in a country (WHO, 2016). The use of OOP comes with a number of disadvantages of which the most challenging is the fact that it discourages poor people from seeking health care. By focusing on the level of OOP payments the WHO measures the degree to which people lack financial protection. In 2013, the level of total health expenditure (THE) from OOP payments amounted to 32% which accounted for a slight reduction down from 36% in 2000. Since these are global numbers they hide discrepancies between the number of developed and developing countries. In order to be able to reduce the risk of catastrophic health expenditure governments should strive to limit the amount of OOP payments to be less than 20% of THE (WHO, 2015).

2.3 Investing in health financing

The solution put forward by the WHO is to invest in sustainable health financing arrangements, like proposed in their 2005 resolution which introduced the concept of universal coverage within international policy frameworks. Despite acknowledging that '*the choice of a health-financing system should be made within a particular context of each country*', resolution 58.33 also urged member states to '*ensure that health-financing systems include a method for prepayment of financial contributions for health care*'. To be even more specific, the resolution suggest the introduction of social health insurance and the involvement of public and private approaches when pursuing health financing reforms (WHO, 2005).

In 2010, the WHO published its World Health Report on health systems financing. An important achievement of this report was to point out that UHC, still mainly referred to as 'universal coverage', is not the prerogative of HICs, since countries as Brazil, China, Thailand and Rwanda have made considerable progress towards UHC (WHO, 2010). With estimates of 20% to 40% of all health spending being wasted though inefficiency, the Director-General of the WHO, Margaret Chan, even states that countries can move closer to UHC without increased spending. With direct payments considered to be the greatest source of inefficiency, the replacement with prepayment systems is portrayed as the most efficient and equitable way to increase coverage.

However, the report does put two important constraints on the use of prepayment schemes. First of all, when considering the UHC-cube (see chapter 1), trade-offs are inevitable. No country will be able to provide full coverage on every dimension, choices will have to be made taken into account the specific context of each and every country. Secondly, despite claiming there is no model or blueprint for the design of health financing reforms, the WHO does lay out three crucial components of any health financing system: revenue collection, pooling and purchasing (WHO, 2017). Revenue collection refers to the way money is raised (tax-funded, insurance premiums, solidarity levies or the contested OOP payments), pooling of funds is the accumulation and management of financial resources while purchasing refers to way health services are being paid for. Next paragraphs will discuss these components more in depth along the line of health insurance schemes.

2.3.1 Health insurance schemes

So while the WHO does not seem to favor any specific health financing system claiming that there does not exist a 'one-size-fits-all' model, a careful reading of their policy documents suggests otherwise. As indicated above, resolution WHA58.33 singles out social health insurance as an example of sustainable health financing. And when analyzing the 2010 health systems financing report, a word count shows the presence of 'insurance' as one out of 10 most frequented words throughout the document (see figure 2). Another interesting fact is the predominance of 'private' above 'public', which will be further discussed in the next chapter when focusing on public-private partnerships. Following paragraphs will define the concept of health insurance along the line of three major classifications of health insurance schemes.

Figure 2: Nvivo word cloud-analysis of World Health Report on health systems financing (2010)

2.3.1.1 Social Health Insurance

The first and most common organizational mechanisms for raising and pooling funds to finance health services are categorized under the name of social health insurance (SHI) (Oxfam, 2013). Although many different models exist under the umbrella of SHI, all of them share a number of defining characteristics. First of all, the contributions are risk-independent which means that the contributions or premiums are not linked to the health

status of their members. Premiums are tied to the income, mostly a certain percentage, and automatically cover the members spouse and/or children. Important to note is that also employers and self-employed are required to contribute to social health insurance funds (Saltman, Busse & Figueras, 2014). A second characteristic is the central role of sickness funds in most SHI schemes. These sickness funds, ran by not-for-profit organizations, parastatal or nongovernmental institutions, are mainly responsible for the purchasing of health services on behalf of the population by contracting and reimbursing health providers, also known as the 'purchaser-provider split' (Haazen, 2012). A last characteristic is the solidarity in population coverage since most of the SHI schemes are compulsory for the entire population. By doing so the system also implements cross-subsidization from the rich to the poor and from low to high risks (Saltman, Busse & Figueras, 2014).

The combination of these characteristics explains the WHOs preference for SHI, since they align closely with their general recommendations towards formulating health financing policies (WHO, 2010). The WHO states that in order to raise sufficient funds, contributions need to be compulsory to prevent the rich and healthy to opt-out causing lack of financial resources for the poor and the sick. Especially since in every country a proportion of the population will be too poor to contribute via income taxes or premiums. Also pools need to be of sufficient size in order to be viable in the long run, while multiple pools are considered to be inefficient and non-equitable.

2.3.1.2 Community-based health insurance

Despite being a successful formula in Europe, SHI is a less viable option when looking at developing countries. In many countries the majority of the population is working in the informal economy which limits a possible tax-base. The combination with a low organizational capacity of the public sector explains the constraints to establish SHI in developing countries (Carrin, 2003). As earlier mentioned, the introduction of health care via user fees, as a response to the limited government budgets during the late 80's, turned out to have severe negative effects for the poorest households in developing countries (Lagarde, 2006). In order to de-link utilization from direct payment, policymakers started to include communities in health financing through the concept of community-based health insurance (CBHI). CBHI is defined as "*a mechanism whereby households in a community (the population in a village, district or other geographical area, or a social-economic or ethnic population group) finance or co-finance the current and/or capital costs associated with a given set of health services, thereby also having some involvement in the management of the community financing scheme and organization of health services*" (Carrin, 2003). Important to add is that these are voluntary, not-for-profit schemes, specifically targeted at those outside the formal economy and applying the basic principles of solidarity. As long as these characteristics are present, however not always to their full extent, CBHI can be used as a common denominator when talking about mutual health insurance schemes, *mutuelles de santé*, medical aid schemes, … (Waelkens, Soors and Criel, 2017) .

In some cases CBHI is also referred to as micro health insurance schemes (Kihaule, 2015). However, while micro health insurance schemes share above mentioned characteristics, they are not similar to CBHI. In comparison with CBHIs, micro insurance is specifically focused on low-income groups and include for profit schemes. The ILO described micro-insurance as '*the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved*' (ILO, 2006). Furthermore, micro-insurance is considered to be autonomous and independent of external promotors, whereas CBHI are dependent on decisions at the level of government or NGOs (Dror &Jacquier, 2001).

2.3.1.3 Commercial health insurance

Maybe the most controversial of all schemes are commercial health insurances (CHI) in which for-profit health insurers are offering their services. Although CHI can provide the alternative of prepayment and the pooling of health risks instead of direct payments, private insurance schemes are not considered to be an effective heath financing option when operating in rural communities in sub-Saharan Africa (Ejughemre, 2013). When considering the issue of 'adverse selection' PHI are more likely to exclude the poor and the high-risk individuals since they are less profitable. Also, the premiums tend to be higher than with SHI or CBHI again excluding low income earners. By neglecting basic principles like cross-subsidy and solidarity, the concept of CHI severely conflicts with the goal of UHC to provide an inclusive coverage of the population.

2.4 Conclusion

Within this chapter the origins of UHC were traced. Starting with a human rights approach, the road led to the community perspective of the Alma-Ata declaration. Although failing the goal to obtain 'Health for all' by the year 2000, the conference deserves credits for galvanizing the debate. When considering health, another international failure was noted in 2015 since none of the MDG-targets, except for one, were reached. In order to turn things around, a different and much more comprehensive approach was found in the declaration of the SDGs with the inclusion of UHC as one of the development targets. Although the concept of UHC was not a separate goal within the framework of the SDGs, as hoped by health advocacy groups (Soors, 2017), it could be considered as an important evolution after years of passively floating around within academic and development circles.

When looking at the conceptualization of UHC in 2005, the WHO emphasized its financial dimension. 'Universal coverage' served primarily to protect citizens from financial hardship. Along the course of the following ten years a health(care) component was added to universal coverage and by doing so creating UHC. However, the debate between 'care' and 'coverage' did not disappear once UHC was introduced. Especially since 'coverage' is explicitly part of the concept, while 'care' seems to be cropped out. Although not opposing the concept of UHC, organizations like Oxfam, 11.11.11 and Global Health Watch, stress the importance of strengthening public health systems equally to developing health financing systems.

Despite the dilemma, one can already state that financial protection is highly needed when receiving health care. Reducing the amount of OOP payments by providing equitable prepayment schemes for every citizen should be a priority goal for all national governments. Not only because of a human rights approach, but also because good health has proved to be critical for achieving economic growth and tackling inequality (Oxfam, 2014). This conscious led to the rapid rise of the UHC concept on the international agenda (cfr SDGs). And despite claiming that there is no 'one-size-fits-all' model for developing health financing models, the WHO did lay out some clear guidelines. Next to expressing its preference for SHI-models, a 2005 resolution did also suggest on a collaboration with the private sector under strong overall government stewardship. The next chapter will provide an example of this governmental cooperation with the private sector in a Tanzanian context, also referred to as public-private partnerships. In order to do so, the chapter will start with a short introduction on Tanzania and its public health sector.

CHAPTER III: HEALTH FINANCING IN TANZANIA

Officially referred to as 'The United Republic of Tanzania' (including Tanzania mainland and the semi-autonomous island of Zanzibar), Tanzania is situated in the East-African region and holds the centrally located Dodoma as capital.[5] According to the last official census in 2012, the country was home to 44.928.923 million Tanzanians of which 43.625.354 were living on the mainland. With an annual population growth of 3.1%, population numbers were estimated to be 50.14 million in 2016 (World Bank, 2017; Tanzania National bureau of Statistics, 2017). When knowing that, according to Tanzania's national poverty line[6], 12 million people were living in poverty in 2012 (GOT, 2014) and about 70% of those were living in rural areas (Belhaj et al., 2015), one can indicate the challenge of UHC for Tanzanian policymakers. This chapter will first of all outline the historic and political context in which the development of Tanzania's public health sector took place before discussing its current structure, results and prospects more in depth. Finally, this chapter will take a look at how public-private partnerships were introduced within health policies by using the case of iCHF.

3.1 Early health policies

On 9 December 1961 Tanganyika gained independence from British colonial rule. One year later the republic of Tanganyika was formed in which Julius Nyerere became the first president. Under his rule the 'Republic of Tanganyika' united with the 'People's Republic of Zanzibar' and became the 'United Republic of Tanzania'. Not long after, *Baba wa Taifa* (father of the nation) issued one of its most profound policy initiatives by signing the Arusha Declaration in 1967. Within this declaration Nyerere introduced a form of African socialism labelled as 'Ujamaa' (Sheikheldin, 2015). Resulting from a post-colonial spirit during the sixties, African leaders sought for a different approach towards development, one that incorporated African values instead of European ideologies like capitalism or communism. Ujamaa was built on the principles of self-reliance by means of governmental technical support for rural cooperatives and communities focusing on agricultural and educational systems. Rural development was considered being the backbone of economic development and a strong community sense was considered key into the country's nation building following colonial rule. To put it into Nyerere's own words: "*the foundation, and the objective, of African socialism is the extended family*" (Nyerere, 1967). In order to achieve this objective, a process of 'villagization' was initiated all across Tanzania. The aim was to unite the rural peasantry, who were sparsely located, into communal villages of at least 250 households in which Tanzanians would live and work communally (Wakota, 2016). Almost 10 million peasants were moved, most of them forcefully, into villages or communes where they would have better access to education and medical services (The Guardian, 1999). Private-for-profit medical practices were banned by the government in 1977 and health care free of charge was provided for all citizens who attended governmental (primary) health facilities (Mubyazi et al., 2000). Also the number of facilities and staff were rapidly expanded under an extensive referral pyramid structure. These investments resulted in a considerable above sub-Saharan standard coverage rate of 70% of the population living within five kilometers of a state-funded facility (Burki, 2001).

With the retirement of Nyerere in 1985 the Ujamaa was abandoned as well. Admitting its failure, poor economic situation, rising public healthcare costs, influx of pandemic diseases such as HIV/AIDS and others, Tanzania made the shift towards a free-market economy and neo-liberal measures were taken within the health sector. Private individuals and organizations would again be allowed to run health facilities and in 1993 a cost-sharing policy in the public sector was launched with the installment of user fees for certain healthcare services that were free of charge before (Munishi, 2003). As mentioned before (see 'three conceptual objectives'), the introduction of user fees or OOPs had negative effects on the general access to the healthcare system. Especially people with low incomes experienced financial thresholds when considering medical treatment. In

[5] During the further course of this dissertation, when talking about Tanzania, facts and figures are referring to the Tanzanian mainland.

[6] The basic needs poverty line in Tanzania was estimated TZS 36.482 (2600TZS = ±1 euro) per adult equivalent per month (World Bank, 2015, p.2)

order to address these barriers, several risk pooling mechanisms were rolled out during the late nineties and the early 2000's to provide financial coverage for the Tanzanian population.

3.1.1 MDG results and SDG prospects

When publishing its final MDG report in 2014, Tanzania was expecting to achieve MDG 4 (reduce child health) and MDG 6 (combat HIV/AIDS, Malaria and other diseases) but failing to achieve MDG 5 (improve maternal health). Despite being one of few African countries to reach MDG 4 and 6, more efforts will be required to reach the 'all-inclusive' SDG 3 (WHO, 2016). It is noted that limited access to quality health services has undermined health outcomes. As indicated, people delay seeking medical care because of financial reasons. Because of this, the Tanzanian government has embraced the concept of UHC. In august 2015 the Tanzanian government published their fourth Health Sector Strategic Plan (HSSP IV). This document lays out the policy direction the Ministry of Social Health and Welfare (MOHSW) will be heading in the following five years. The HSSP committed itself to achieve universal health coverage by developing a 'Health Financing Strategy' and by doing so '*providing universal and equitable access to essential health services, while improving sustainability of the health sector*' (MOHSW, 2015). However, already before the concept of UHC was launched, Tanzania invested considerable efforts by installing different kinds of national health insurance schemes (NHIF, CHF, SHIB, …) and on the international stage, during the Abuja Declaration in 2001, Tanzania pledged to allocate at least 15% of their annual budget to health budgets. However, when looking at Figure 3 we can see that the GOT did not live up to its promise, since public health allocations were only above 15% from 2006 until 2009.

Figure 3: Government spending on health (% of Total Budget)

(Source: Factsheet Mamaye – Health Financing in Tanzania, 2013)

When translating the 2012 percentage of government spending into per capita government expenditure on health, this amounted to $43, which is fifteen times less than the global average of $652 (Mtei, 2014). When further disaggregating, another vulnerability is shown, since around 40% of THE was donor financed. As to be expected, OOP payments also account for a considerable share of THE, amounting to 32% in 2012. Also when looking at revenue collection through health insurance schemes, these numbers are relatively insignificant since only 27% of the Tanzanian population is pooling funds through one of the major health insurances schemes, either CHF or NHIF (NHIF, 2016)[7] only accounting for 3% of THE (Soors, 2017).

[7] When searching for recent national enrollment numbers, many official sources were contradicting each other. Eventually it was chosen to use official government numbers published by NHIF. However, informal contacts at NHIF were estimating that actual enrollment numbers are much lower than indicated in the report.

3.2 Tanzania's public health sector

Before expanding on the alternative of public-private partnerships as a health financing mechanism, one should also understand the way Tanzania's public health sector is organized. Prior to discussing possible reforms of health financing systems, the organizational structure and capacity of Tanzania's public health sector will be discussed.

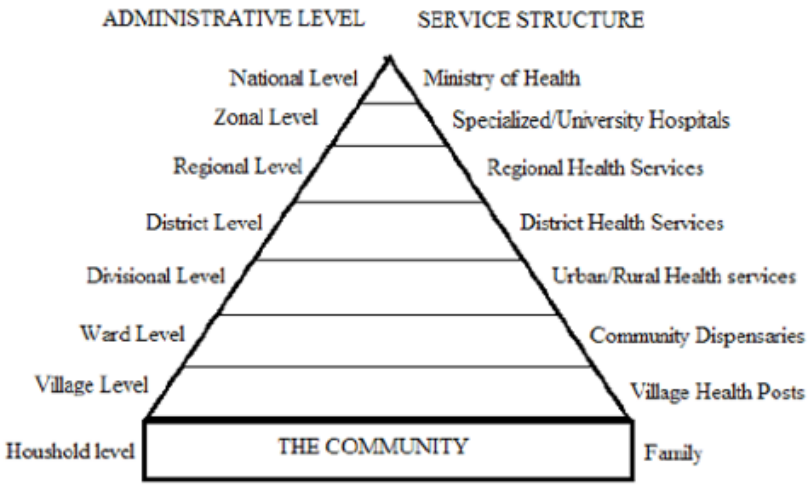
3.2.1 Healthcare pyramid

Tanzania has a public health system organized as a hierarchy with the Ministry of Health and Social Welfare (MOSHW) responsible at the national level, and regional and district authorities operating below that (Mtei, 2012). This strict division of responsibilities is a result of the Decentralization by Devolution (D-by-D) policy of the GOT which was started up by the Health Sector Reform Programme (1996-1999). This process of decentralization was initiated by the World Bank during the nineties in which it was defined as "*the transfer of responsibility for the planning, financing and management of certain public functions from the central government and its agencies to field units of government agencies, subordinate units or level of government, semi-autonomous public authorities or corporations, or area-wide, regional or functional authorities*" (World Bank, 2001). Indeed, through D-by-D the Local Government Authorities (LGAs) in Tanzania became in charge of delivering social services and the 'Prime Minister's Office – Regional Administration and Local Government' (PMO-RALG) was the supervising authority at the regional level to coordinate LGAs activities in line with the policies and guidelines of the Sectoral Ministries. By doing so the PMO-RALG became responsible for the management and administration of public health services at regional and council level and the LGAs became the most important units to organize primary health care for the districts. (HSSP IV, 2015)

When looking at the pyramidal structure of health services, primary health care (PHC) services constitute the foundation of the pyramid (see figure below). PHC consists out of community services (promotion and prevention) at household level, followed with community dispensaries (curative) at ward level and health centers at divisional level. While dispensaries are only accessible during a certain time schedule, health centers provide 24h services where patients also can be admitted for a short period (inpatient care). Secondary care, provided in hospitals, starts at the district/council level with council hospitals providing medical and basic surgical services. When more specialized care is required patients get referred to regional referral hospitals where specialist medical care is provided. Finally, tertiary care is provided in zonal and national hospitals where advanced medical care is provided and teaching hospitals are situated.

One last important feature of this pyramidal structure is the referral system. This system is a gatekeeping mechanism whereby patients have to start with visiting primary level facilities before being allowed to get services at a referral or secondary level (Starfield, 1992). Services are increasingly sophisticated and well-defined, however the referral system is not always efficient due to lack of transport to the next level or an inability at referral level to provide specialized services (MOSHW 2015). Currently Tanzania has an extensive health system network of 6549 dispensaries, 718 health centers and 252 hospitals of which five zonal and five national hospitals (National Bureau of Statistics, 2016). When combining the amount of dispensaries and health centers, this equals into approximately 90 percent of the Tanzanian population living within five kilometers of a primary health facility.

Figure 4: Organizational Pyramid of the Tanzanian national health infrastructure



(Source: WHO – Health Systems Profile Tanzania, 2004)

3.2.2 Private healthcare provision

Next to this public structure of healthcare providers Tanzania also has a growing network of private healthcare providers (1333 health providers in 2014) (MOHSW, 2015). Within these private providers difference can be made between not-for-profit and for-profit institutions. Not-for-profit private organizations refer to faith-based organizations (FBOs) who are closely cooperating with the government and are integrated within the public health pyramid. When taken into account the share of FBOs, about 40% of all health facilities are owned by the private sector. Private for-profit health providers differentiate themselves by the fact that the surplus of revenue is distributed to the organization's owners or, simply put, their primary focus on generating profits (Gama, 2013). As mentioned before, private-for-profit organizations were prohibited by law during the Ujamaa of president Nyerere. However, the liberalization policy during the 1990s resulted in re-allowing for-profit organizations in the Tanzanian healthcare system. The health reform policy even went a step further by imposing LGAs in establishing partnerships with private providers in health services (HSSP IV). The GOT encourages the cooperation in health service delivery between public and private providers in order to spark innovative approaches and promotion of private sector engagement. This kind of cooperation between public and private actors is referred to as 'public-private partnerships'.

3.3 Public-private partnerships

Public-private partnerships (PPP) within the health domain of Tanzania have been in existence since independence (HSSP III). In theory, it took until 1999 for the MOH to formulate a policy vision incorporating the concept of PPP. This vision was articulated with the publication of the first major health sector strategic plan, the Health Sector Program of Work (POW). Since then, the concept has been recurring as a key component in each Health Sector Strategic Plan (HSSP II, III and IV). In general, PPPs are defined as 'forms of cooperation between government and business agents – sometimes also involving voluntary organizations (NGOs, trade unions) or knowledge institutes – that agree to work together to reach a common goal or carry out a specific task, while jointly assuming the risks and responsibilities and sharing resources and competences'. Figure 5 points out five key characteristics of (developmental) PPPs.

Figure 5: Five key criteria of developmental PPPs

#	Characteristic
1	A cooperation between the public and private sector (also NGO's, trade organizations and knowledge institutes) with a common (development) goal;
2	A clear agreement between the public and private party on the goal(s) of the PPPs;
3	A combination of Public and Private funding
4	A clear agreement between the public and private party on the sharing of resources and tasks;
5	Distribution of risks between the public and the private sector.

(Source: IOB study, 2013)

3.3.1 From CHF to iCHF

As earlier mentioned the GOT established the Community Health Fund (CHF), a district-level voluntary prepayment scheme, in 2001. Households, compromising of parents and children aged 18 years and below, could be insured for outpatient health services at primary level by paying an annual contribution. The intention was to create a mechanism to guarantee (free) access to basic healthcare services within rural areas. As such, it was not conceived as a financial mechanism to raise funds, but rather to improve health care access for poor and vulnerable groups. People were encouraged to join the pre-payment scheme in order to avoid the risk of needing to pay a large amount in health care user fees if they fell sick without being insured (Mtei and Mulligan, 2007).

However, the CHF has never lived up to its objectives. Since enrollment in CHF was voluntarily, one of the major challenges of the fund were its low enrollment numbers. Most recent numbers indicate that by January 2016 a number of 8.2 million people were affiliated under CHF which equals to 15.5 per cent of the Tanzanian population. Reasons for this low enrollment are attributed to weak management, poor understanding of the concept of risk pooling, poor quality of services in public facilities and a limited benefit package (Borghi et al 2013; Maluka, 2013; Mtei & Mulligan, 2007). Another reason put forward is the widespread inability to pay membership contributions, despite the fact that the CHF design manual indicated that district councils are expected to fully subsidize the membership fees, by exemptions or waivers, of those who are unable to pay (Kamuzora 2007; Mtei and Mulligan 2007). These challenges led to the take-over of management by the National Health Insurance Fund (NHIF), a compulsory health insurance scheme in Tanzania for the formal public sector, in 2009. It was envisaged that the CHF would benefit from this merger through improved data systems, supervision and management support (Borghi, 2013). Although CHF-membership more than doubled after the reform, from 4% in 2008 to 8.3% in 2011-2012, numbers dropped again to 7.3% in 2012-2013 (Dutta and West-Slevin, 2015).

When searching for new ways to revamp enrollment in CHF, policymakers noticed that a part of their target group in the Kilimanjaro-region was choosing to enroll in the Kilimanjaro Natives Cooperative Union (KNCU) health plan instead of CHF. The KNCU health plan was a CBHI scheme (see chapter II) for the members of a

co-operative for coffee farmers, started by the Dutch NGO PharmAccess in 2011. In July 2014, the NHIF signed a Memorandum of Understanding with PharmAccess to work together with LGA's to redesign the existing CHF. By doing so, the 'improved CHF' (iCHF) was established as one of the first public-private partnerships within health insurance on Tanzanian soil.

3.3.2 iCHF

Despite its 'improved' structure iCHF remains a voluntary, district-owned health insurance scheme targeting people in rural and low-income groups. The districts remain the owners of iCHF with NHIF responsible for marketing and operating as a third party administrator. The improved, private component can be found within the addition of PharmAccess, as a private oriented NGO, in the management of iCHF through advice and technical support.

Another private dimension is located within the operational setup of iCHF. While before, only public health providers were included, now iCHF also contracts private healthcare providers (mainly faith based) for service delivery. Knowing that in 2015 the majority of enrollees (72%) in Kilimanjaro chose to access healthcare services through a private (faith based) provider, this inclusion can be considered an important first step for improving quality of services (PharmAccess 2016). This improvement is perfectly in line with the 2007 PharmAccess-paradigm to develop viable healthcare systems in LIC. While the old paradigm, "Health for All" (see chapter II), envisaged governments as the dominant provider of health care, the PharmAccess-paradigm represents a different approach. First of all, health care is regarded as an industry (financing, administrative functions, infrastructure, supply lines, …) with health insurance as the overarching mechanism where demand (financing) and supply (delivery) should be aligned. Accordingly, private resources for health care (OOPs) should be channeled towards bottom-up risk pooling schemes in order to realize solidarity in the demand side. By doing so, they create a cross-subsidizing, stable and sustainable source to finance an efficient and qualitative supply chain. Working in complement with government programs, the insurance schemes are encouraged to embrace a strong community approach by involving beneficiaries in organizational decisions regarding the benefit package, premiums and cost coverage. A last element is to enforce quality standards where the regulatory capacity of the government is weak. Within iCHF this task is conducted by PharmAccess and its SafeCare-program. SafeCare is a standardized quality program for healthcare facilities in low- and middle income countries, whereby affiliated health facilities receive quality control visits and staff training on a regular basis. When budgets are available certain facilities might purchase equipment or improve their infrastructure. When resources are lacking, healthcare facilities could apply for a loan through the Medical Credit Fund (PharmAccess, 2016; Doherty, 2011).

In order to increase enrollment some more changes were implemented compared with the CHF-setup. The benefit package was extended with inpatient care (limited to 5 days) compared to only outpatient care with CHF. Large teams of trained community health workers, iCHF officers, were deployed to raise awareness and sensitize the community about iCHF as well as carrying out administrative functions like collecting premiums and issuing receipts for those in remote areas who want to join. Also customer service received an upgrade from having no feedback mechanisms for CHF-clients to a toll-free phone number where people could inform, make suggestions or send in complaints.

When trying to finance these improvements some other changes were made. To enhance cross-subsidization, enrollment was done by a pro-active door-to-door marketing strategy carried out by above mentioned iCHF-officers. Before, a passive enrollment strategy was used by signing up members for CHF-services when at the health facility leading to an adverse selection of only sick people in the risk pool. Also a 14 day waiting period was introduced to mitigate financial risks. But the most profound measure was the raising of the premium, based upon actuarial analysis of the targetgroup, from 5000-10000TZS with CHF to 30,000TZS with iCHF. This premium allows to enroll a household of 6 members and is doubled by a government matching fund to a total of 60,000TZS to cover all related expenses, making it a self-sustainable program. On the side of the providers, a capitation system was installed meaning that they would get monthly reimbursements depending on the number of people enrolled at their facility, instead of services delivered, resulting in a stable revenue. With CHF, reimbursements for healthcare providers were first paid to the district medical officers resulting in non-payments or long waiting times before receiving finances.

Despite the above mentioned financial alterations, iCHF convinced more than 100,000 people on low incomes to pay in advance for health care. But when considering its target population, iCHF still only covers 5% of the rural population, indicating that further developments and improvements will be necessary when working towards UHC.

3.4 Conclusion

When analyzing Tanzania's public health system the extensiveness of its health infrastructure cannot be denied. Finding its roots in the Ujamaa of former president Nyerere during the seventies, public health facilities have been built all around the country. Although the socialist policies were abandoned during the nineties, investments in expanding the accessibility of health facilities within communities remained present in sequencing health policies. Today these investments have resulted in 90 percent of the Tanzanians living within 5 kilometers of a primary health facility, which is a considerable achievement taken into account the extent of the Tanzanian mainland. With this emphasis on community development and the promotion of community-based health services, Tanzania was even pioneering the Alma-Ata declaration discussed throughout the previous chapter (MOHSW, 2015).

However, reality turns out that living near a health center is not sufficient for a healthy population. Although the GOT has succeeded in making health services more physically accessible to the population, questions can be raised concerning some major quality constraints facing the health sector. Many (primary) health facilities do not have enough qualified staff, availability of key medicines is low, health facilities in remote areas lack electricity and reliable water supply, … . In short, quality of existing health services is substandard. When benchmarking the populations health on the indicators put forward by the MDGs, Tanzania is relatively 'healthy' since successfully obtaining 2 out of 3 MDG-goals concerning health. Child mortality and some major diseases like HIV/AIDS and malaria have been reduced significantly with only maternal health falling (far) behind its targets. However, comparing the situation with OECD-countries and taken into account Tanzania's population growth, the GOT will have to invest much more resources in its healthcare sector to provide quality health care to its citizens. A considerable rise in resources could already be provided by simply sticking to its promises made during the Abuja Declaration.

Taking all aspects in account, it seems clear that investing in health care should be part of a wider and comprehensive strategy in order to have a positive effect on healthcare outcomes. The GOT acknowledged this by accepting the concept of UHC as a goal within their development policies and started investing in health financing systems. Several health insurance schemes were established at the start of the 21st century but none of those succeeded in bringing the country considerably closer to UHC. Voices advocating for a unified and compulsory national health insurance fund (Single National Health Insurer) are getting louder, but the GOT has also started experimenting with the concept of PPP to accelerate the process towards UHC (GOT, 2015). The reform of the governmental CHF into iCHF has been used as an example, but to analyze whether this collaboration is actually bridging the gap towards UHC, the next chapter will present research results collected throughout an internship with iCHF.

CHAPTER IV: FIELD STUDY

Within this final chapter an answer will be provided on the research question '*Can the concept of public-private partnerships, through means of the governmental health insurance fund (i)CHF, make a contribution towards UHC?*'. Next paragraphs will first of all explain the research setup, followed by a detailed analysis of results generated throughout the research period.

4.1 Methodology

When trying to answer above mentioned research question, a first step was taken by developing a suitable analytical framework. This framework was built upon the conceptual frameworks earlier described when discussing the UHC-cube (coverage of population, service and directs costs) and the WHO-definition of UHC (equity, quality and financial risk protection). All of these combined, led to nine sub questions covering a specific aspect of UHC within the iCHF-project (see table 1). To answer these questions, a digital questionnaire was developed with the ONA-collect application.[8] By doing so, a considerable amount of information could be collected and processed in a short period of time. Through consultation between PharmAccess, NHIF and the principal researcher, a team of 15 iCHF-officers were assigned with the task to collect these data.[9] All of them being familiar with their districts and in possession of a motorbike and tablet, a more efficient data-collection could be ensured.

By installing the ONA-application on tablet or smartphone the questionnaire could be downloaded by the iCHF-officers and results could be send to a central server for analysis. Closed questionnaires were taken face-to-face from iCHF-members with mainly nominal and ordinal questions orally presented to the respondents by the interviewer.

The research can be categorized as a descriptive cross-sectional survey with all of the data being collected throughout the months of May-June 2017. Independent study variables were age, sex, level of education, income receiving pattern and number of household. Dependent variables were looking at the level of coverage and the dimension of equity, quality and financial risk protection.

Table 1: Analytical framework

Variables	Population coverage	Service coverage	Direct cost coverage
Equity	What is the socio-economic profile of the average iCHF-member?	Which facilities are most used by iCHF members?	Does affiliation with iCHF prevent poor people from having OOP?
Quality	How are iCHF-members involved in the evaluation of delivering health care services?	Are iCHF members satisfied with quality provided in their facilities?	Are members prepared to increase premiums in order to increase quality of services?
Financial risk protection	Is iCHF coverage sufficient for one household?	Is there a need for additional providers?	Are members prepared to increase premiums in order to decrease OOPs?

[8] See Annex V

[9] See Annex II

4.1.1 Study area

The research area was located in the Kilimanjaro region, which is one of 27 administrative regions in Tanzania, consisting out of seven districts. According to the last census in 2012, Kilimanjaro was home to 1,640,087 people of whom only 184,292 are living in the urban area, which means the majority of people are living in rural areas (GOT, 2013). This rural population proves to be an ideal surrounding when trying to research whether the iCHF, as a public-private partnership, is actively contributing to the goal of UHC. Data-collection was performed in the districts of Siha, Hai, Rombo and Moshi rural. Same and Mwanga were left out since iCHF was only recently launched in those two districts, while Moshi municipal does not belong to the target population of iCHF.

4.1.2 Sample size

In order to determine a representative sample size, most recent information on enrollment numbers in the iCHF-program were gathered. The enrollment report of April 2017 indicated that in the Kilimanjaro-region a total number of 71.559 people were enrolled in the program (NHIF, 2017). Of this total number, 69.983 members were enrolled in the four districts of study. When searching for a confidence level of 95% with a 5% margin of error, it was calculated that 383 questionnaires would be needed.[10] Looking at the specific enrollment numbers per district, the table below indicates how many questionnaires were needed in each district.

Table 2: Enrollment numbers per district – sample of questionnaires

District	iCHF-members	% of total enrollment in Kilimanjaro-region	# questionnaires
Siha	7365	10.2%	40
Hai	10.905	15.2%	60
Moshi Rural	23.361	32.6%	125
Rombo	28082	39.2%	150

However, numbers of questionnaires per district were slightly adjusted in order to limit the workload of iCHF-officers working within bigger districts. It was chosen to divide the questionnaires more equally, 25 each, between the data collectors. Because of this redistribution, Siha and Hai-members were slightly overrepresented while Rombo-members were slightly underrepresented within the survey.

Table 3: Division of questionnaires according to workload

District	# of iCHF-officers	# of questionnaires
Siha	2	50
Hai	3	75
Moshi Rural	5	125
Rombo	5	125

[10] Following website was used to calculate an appropriate sample size https://www.checkmarket.com/sample-size-calculator/

4.1.3 Data-collection and ethical considerations

Data could be collected either way at the house of respondents or when visiting iCHF-health facilities. When interviewing people at public places, iCHF-officers received the instruction to respect respondents' privacy. Informed consent was given throughout the introduction stating that participation was voluntarily and anonymous. To improve representativeness within the districts as well, officers were told to collect data from different villages.

Permission to conduct the study was granted since the research was carried out under the name of iCHF which is closely collaborating with the government. Also, prior to data-collection a visit was made to the district offices to inform about the research, duration and purpose.

4.1.4 Limitations

One major limitation to the study is the incapacity to collect the data independently due to the relatively high number in questionnaires, a short collection period, remoteness of certain areas and the language barrier. However, in order to enhance the reliability, a field training was provided to each iCHF-officer. During these trainings the questionnaire and its purpose were explained. Afterwards the principal researcher, who is the author of this work, joined the iCHF-officer on the field to conduct the first questionnaires. As a follow-up mechanism, all of the officers received a reminder through email with an attached PowerPoint on how to work with the ONA-data collect program.[11] Also a WhatsApp-group was started for each district where officers could ask questions when encountering problems or share data-collection progress.

Another mechanism to enhance reliability was provided through the ONA-program. When receiving results, start and end time of the questionnaires were indicated. Questionnaires below four minutes as well as high numbers of questionnaires within a short timeframe were left out of the sample. The questionnaires also included geo-points, making it possible to see where questionnaires were taken.[12]

Since most of the iCHF-officers were fluent in English, questionnaires were made in English. However, the language barrier still might have caused misinterpretations when receiving instructions or translating the questions to respondents in Swahili. Therefore the WhatsApp group proved to be crucial where instructions were repeated and being translated in Swahili by the NHIF-coordinator.

Regarding the digital questionnaires, the devious process to make minor alterations to some of the questions was also considered to be a limitation. Once a questionnaire was downloaded by the iCHF-officers, changes could only be made if the old version was deleted and replaced with the new one, risking to lose all the information collected so far. For this reason some of the questions could not be corrected along the process. For example, it was noted that some iCHF-members also had other health insurance (e.g. NHIF). Not being able to change the questions accordingly this might have caused bias when asking questions regarding the need for additional providers or the prevention of paying OOPs caused by affiliation with iCHF. Lastly, there is no record of non-response, since the interviewers were told to continue questioning until the number of 25 respondents were reached. However, during the pre-test training with the individual interviewers it was noted that there was only a small refusal to participate indicating towards the assumption of a considerable response-rate.

[11] See Annex III

[12] See Annex IV

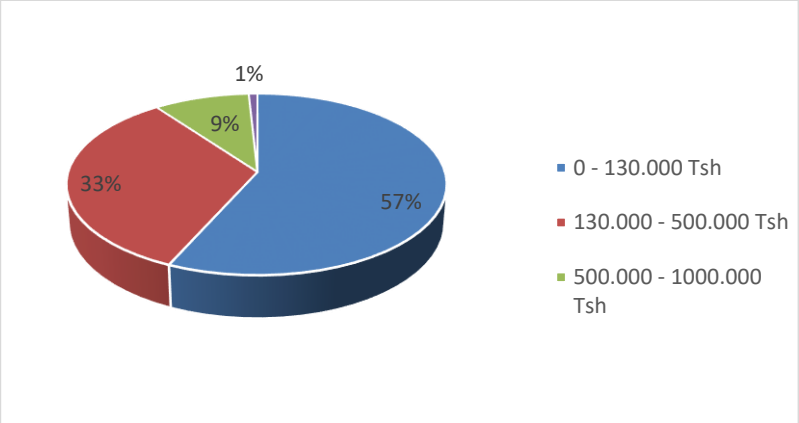
4.2 Results

In total 383 questionnaires were taken starting from the 25th of May until the 16th of June. When adding the questionnaires collected during training, the total number of 383 was reached. In general, the questionnaires were quite equally divided by sex since out of 383 respondents, 45% were female and 55% male. The age group between 36 and 52 years was predominant representing 46% of the questionnaires, 28% was taken with respondents between 18 and 35 years and 26% of the respondents were above 52 years. Analyzing the results provided by these respondents, following paragraphs will generate answers to the questions raised in the analytical framework described above.

4.2.1 Population coverage

When considering **equity** within population coverage, the aim of this research was to reflect the socio-economic profile of the average iCHF-member. In order to analyze whether iCHF is actually expanding the health insurance pool to the most vulnerable people in society, level of income and education were used as the main indicators. Out of 383 respondents, 57% responded to earn less than 130,000TZS per month (see figure 6). Another 33% earned between 130,000T and 500,000TZS and 9% indicated to earn between 500,000TZS and 1,000,000TZS. Only three members (1%) were earning more than 1,000,000TZS. This question generated a small non-response since 21 people preferred not to enclose details concerning their financial situation. Regarding education, the majority of respondents (52%) indicated primary education as their highest level of education, 32% finished school after secondary school and 8% received post-secondary education. Another 8% indicated to have received no education at all. Analysis of these statistics clearly indicate that iCHF actually targets poor groups as well as people with a limited level of education. Since this last group could be more prone to a limited understanding of the concept of health insurance, their high percentage can be seen as a positive result of the iCHF door-to-door strategy to raise awareness and sensitization. When considering equity, these results are not able to evaluate a fair distribution (see 'three conceptual objectives'), but they do indicate a fair contribution for iCHF-members with a membership fee of 30,000TZS/year for a family of six.

Figure 6: Level of income of respondents in the Kilimanjaro region



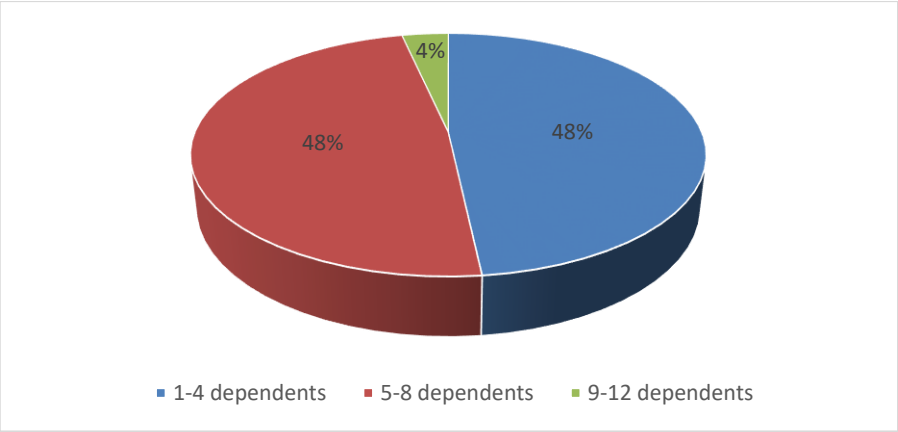
When discussing **quality** linked with population coverage, the analytical framework raises the question whether iCHF-members are actually involved in the evaluation of health service delivery. Although the questionnaire did not explicitly ask if sufficient feedback options were present in the iCHF program, the 'general comments' section at the end was frequently used by 219 out of 383 respondents. Indicating that more than half of iCHF-members likes to speak out about the program. Twelve members even directly referred to the issue by indicating that they would like to have more feedback opportunities in the program (see table 4). As discussed throughout the previous chapter, iCHF provides a hotline for customers to provide feedback regarding their services. While this hotline might be a useful tool for more communicative and assertive members, not everyone will make use of it. Especially when considering that the questionnaire also showed that 12% of iCHF members does not own a mobile phone. The remaining results of the general comments will be discussed in the next paragraph about 'service coverage', for now, it suffices to point out that also 6% of the comments indicated the need to extend the number of household which brings us to the next paragraph.

Table 4: General comments of iCHF-members

General comments	
More providers to select/use (also regional/national)	52
improvement of services	38
Thanks/praise	28
More drugs/improve pharmacy unit	26
Better quality of providers	16
Extend number of household/ remove age barrier	13
Better customercare/more feedback opportunities (with facilities and iCHF)	12
More education/sensitization on iCHF (with members and facilities)	11
Unclear comment	7
Complaint	5
Importance of health insurance	5
Problem with referral system	3
Distance to health center	3
Grand Total	**219**

Considering **financial protection** the results show that the current number of six people insured with iCHF, through the head of household, is a good representation of the average household in the Kilimanjaro-region. When asked for the number of people living in the same family and being financially dependent of the head of household, 48 per cent indicated to live in a household between 1 and 4 members, another 48% lived in a household between 5 and 8 members and 4% responded to live in a household between 9 and 12 members. However, it should be noted that iCHF only insures mother, father and up to four children (CHF, 2001). Since households can also include other relatives, the number of six might not always be sufficient to insure the entire household (as also indicated in the general comments section). In order to get a better indication, a more specific survey towards household composition might be necessary. Depending on these results, it might be necessary to extend/change the iCHF definition of households in order to work towards UHC.

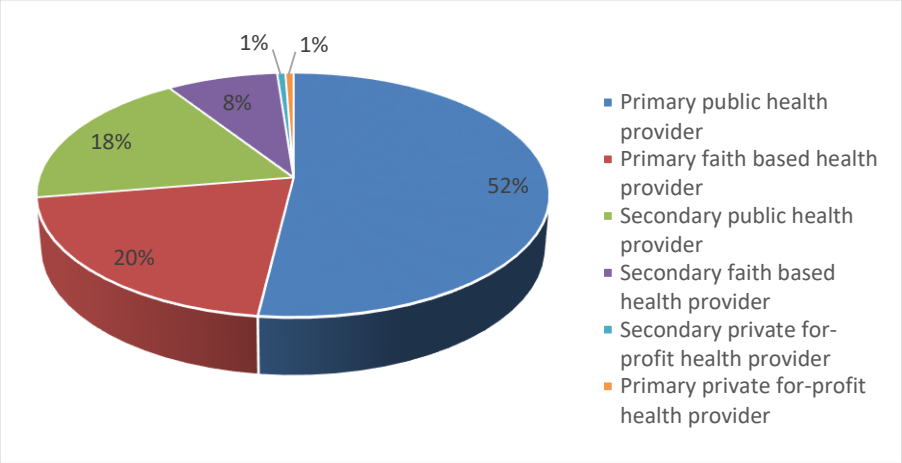
Figure 7: Number of household with iCHF-members



4.2.2 Service coverage

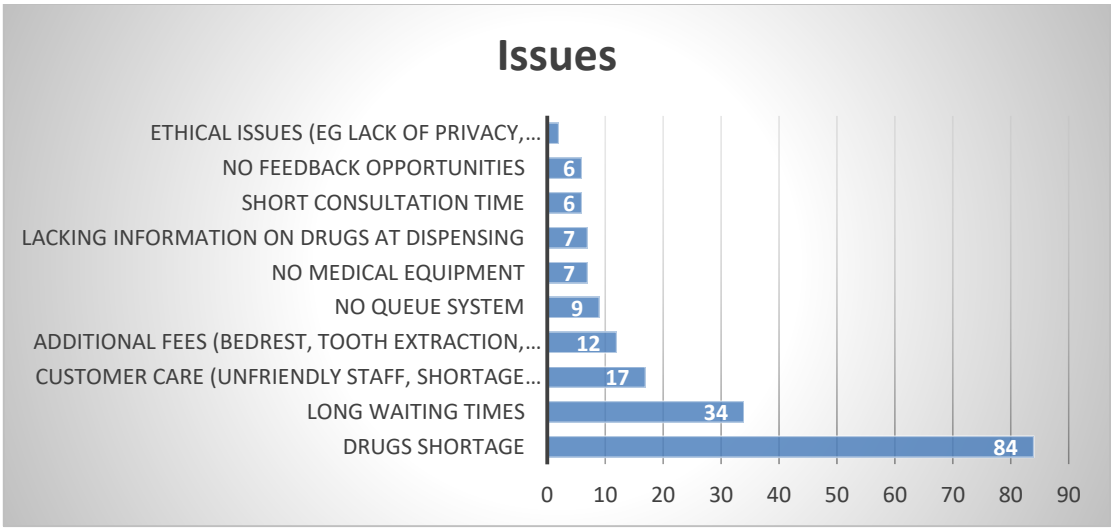
To analyze service coverage and **equity** a first step was taken by looking at which facilities are most used by iCHF members. Secondly, these results were linked with the question whether iCHF should provide more services. By linking these two questions, an indication towards a 'fair distribution' of health services (horizontal equity) could be provided. Out of 337 respondents (46 respondents already indicated not having used iCHF services since affiliation), 52% had visited a primary public health provider when using iCHF-services. Out of this 52% (or 175 respondents), a majority of 84% responded to want more services. Despite the study design does not allow to compare with other regions, these numbers already provide a significant indication that a fair distribution is more likely not to be reached. Even after making use of the most frequented health service, iCHF-members still have a need for more services.

Figure 8: Health providers used within benefit-package



When asked whether iCHF-members were satisfied with **quality** of health services provided, 69% gave a positive answer. However, 31% (or 103 members) answered negative. Being able to indicate several reasons for their unsatisfaction, respondents indicated a shortage of drugs as their major concern with long waiting times and customer care to complete the top 3. In general, it can be concluded that iCHF-members are satisfied with services provided, but with 82% of the people indicating drugs shortage as a problem, priority should be given to solve this issue.

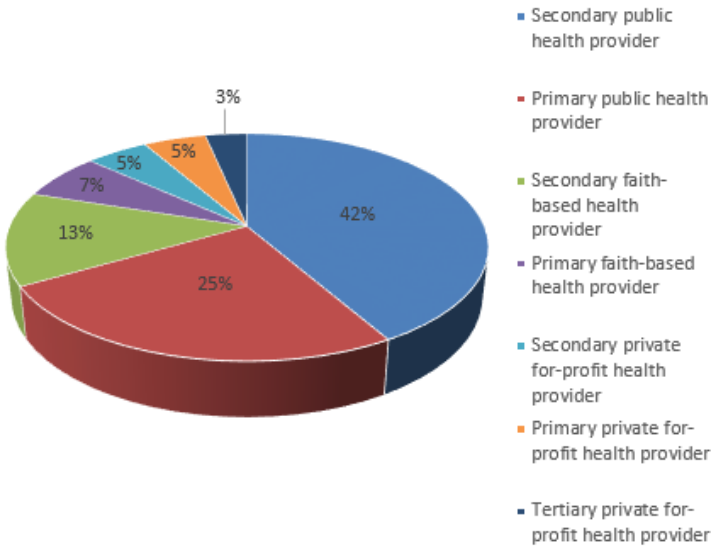
Figure 9: Issues concerning quality of services



In order to research if iCHF-services are providing sufficient **financial protection** to its members, it was asked if they have used health providers outside of the iCHF benefit package since affiliation. Out of 383 respondents, 60 indicated to have done so. With 25 members visiting secondary health providers these were the most frequented facilities outside of the benefit package. It is as assumed that these visits were situated at secondary regional public health providers, since iCHF only provides coverage up until secondary district health providers (see 'health pyramid'). Since members can also select one primary public health provider for iCHF-coverage, it was surprising to see that 15 members indicated to have visited a primary public health provider not covered through iCHF. Out of these 15 members, 9 indicated that the reason for their visit was because of better quality. While these results should not be considered as an indication towards a structural problem of available services, it might be important to keep track of facility usage (on a larger scale) in order to extend financial protection by selecting new or other health facilities when necessary. So, when only focusing on the need for additional providers the 'financial protection' by iCHF-services is relatively strong. However, to paint

a more comprehensive picture towards the dimension of financial protection, a longitudinal research could also allow to collect data on levels of impoverishment and catastrophic health spending.

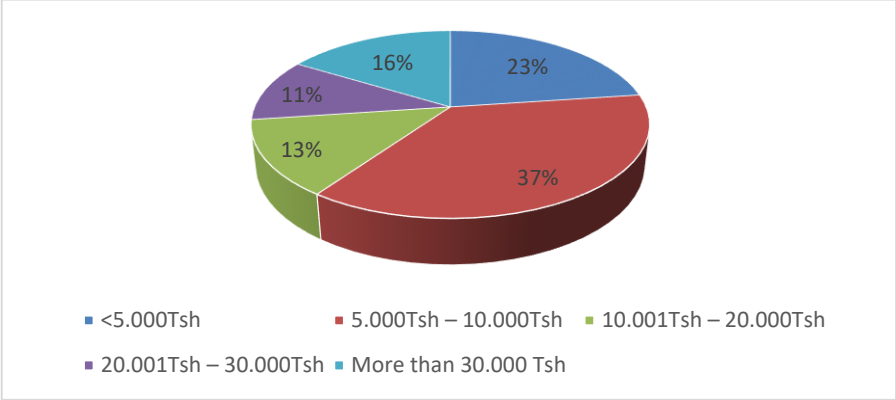
Figure 10: Health providers used outside of iCHF



4.2.3 Direct costs

Reducing the amount of direct costs or OOPs, especially for poor people, should be the goal of **equitable** health financing systems. That's why the analytical framework raises the question whether affiliation with iCHF prevents poor people from having OOPs? This question was partially answered by asking iCHF-members if they had ever paid additional fees when using iCHF-services. Partially, since the possibility still exists that people have paid OOPs when using health services outside of iCHF. When answering the question, results were filtered on income. Out of 203 poor members, earning no more than 130,000TZS/month or 2$/day, 27% indicated to have paid additional fees when using iCHF services. Out of this 55 members, 51% indicated to had paid additional fees between 5000 and 20,000TZS. So, although a relatively small group of poor iCHF members are still facing OOPs when using iCHF-services, these results should not be neglected. Especially when considering that 13% has spent more money on OOPs than on iCHF premium.

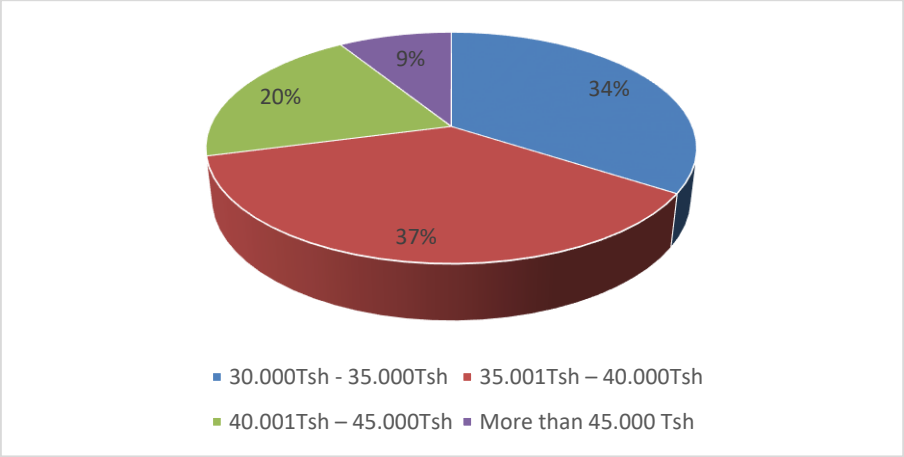
Figure 11: Out-of-pocket payments when using iCHF-services



When considering the issue of **quality** combined with direct costs, the research analyzed how many percent of iCHF-members who indicated to want improvement of services (see Annex V, question 10) actually wanted to pay more premium for these improvements. Out of 383 respondents, 80% (306 members) indicated to want improved services, of which 66% are prepared to pay more premium for such improvements. When further disaggregating this 66%, it is shown that 37% are prepared to pay a premium between 35,000TZS-40,000TZS and 29% is even prepared to pay a premium above 40,000TZS. Since no data was available when the current premium of 30,000TZS was calculated, calculations were based upon data from comparable programs

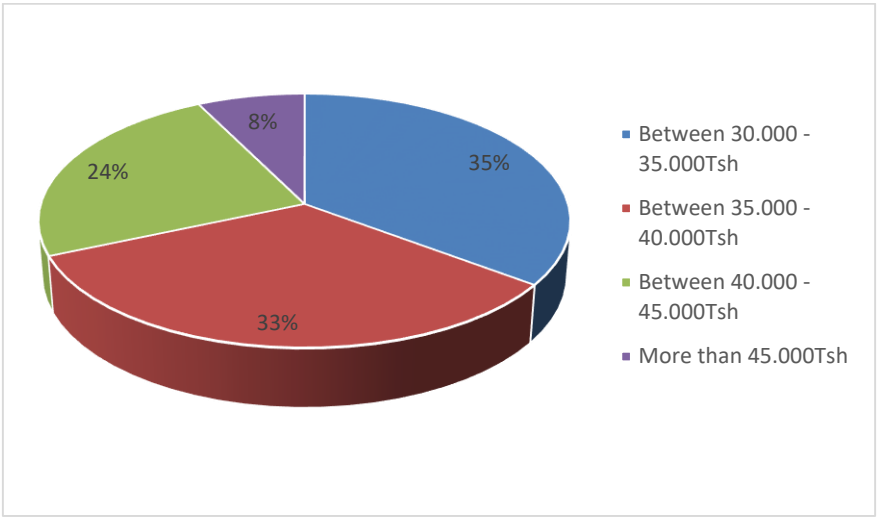
(PharmAccess, 2016). However, current results have taken into account the voice of a representative share of experienced iCHF-members in the Kilimanjaro-region and can prove to be of great value when calculating premiums during future actuarial analysis.

Figure 12: More premium for improved services



With regard to **financial protection** and direct costs, it was measured whether iCHF-members were prepared to increase their premium in order to decrease OOPs. This was done by looking at the number of members who still faced OOPs, despite their insurance with iCHF, and their willingness to increase their premium. Results showed that 59% of the people who had faced OOPs (92 persons) were prepared to increase their premium. Out of this group, 32% was prepared to pay a premium of more than 40,000TZS. Comparing this result with the willingness to pay more premium for improved services, it can be stated that members put more value into the absence of OOPs.

Figure 13: More premium for less out-of-pocket payments



4.3 Conclusion

When evaluating iCHF on the dimensions laid out in the above presented framework, following visual analysis was created based upon the results presented in above paragraphs:

Table 5: Analytical framework with results

Variables	Population coverage	Service coverage	Direct cost coverage
Equity	The average iCHF member is poor with primary education.	Primary public health facilities are most used, but there is a big need for more services.	Poor iCHF-members are largely prevented from paying OOPs.
Quality	iCHF should provide more opportunities for members to evaluate the program.	iCHF-members are generally satisfied with services, but the lack of drugs provision raises concerns.	The majority of members is prepared to raise premiums to improve quality of services.
Financial risk protection	iCHF coverage is sufficient for one household, but the definition of household might be too limited.	The need for additional service providers is negligible.	The majority of members is prepared to raise premiums to decrease OOPs.

The majority of the areas are colored in orange, meaning that the program has achieved some encouraging results but more improvements are necessary when working towards UHC. Especially the direct cost coverage representing quality and financial risk protection should be singled out. While it is a positive sign that members are prepared to increase premiums when trying to raise funds for future improvements, questions can be raised whether poor people should pay or pay even more for health insurance. Nevertheless, it is impressing that 63% of poor iCHF-members (not mentioned in above research results) are willing to contribute more premium, indicating that there is only a small positive correlation between income and willingness to pay for health insurance. The research also indicated that members are more willing to pay more for eliminating OOPs than paying for an improvement of quality of services. Which could be useful information when deciding on a 'set of priorities' on the way to UHC as previously indicated when discussing the UHC-cube (see 'conceptual framework'). Three out of 9 areas are colored in green showing that iCHF is making a considerable contribution towards UHC on those areas, especially by targeting the most vulnerable in rural communities. When considering population and service coverage, two red areas are shown. As discussed in Chapter II, quality (of population coverage) is also measured by the degree in which the public participates when evaluating health care services. During the research it was shown that members were very eager to share their thoughts on iCHF, indicating that the current feedback hotline might not be sufficient when trying to create a transparent and accountable program.

In general, based upon the Kilimanjaro region, it can be concluded that the iCHF program has all the right ingredients to start bridging the gap towards UHC. However, as indicated in the analytical framework, further improvements are needed for these ingredients to result in a full UHC-recipe. It is expected that by making targeted investments, enrollment rates will keep on increasing since a spin-off study for PharmAccess indicated that 47 percent of the non-members have ever considered joining iCHF.[13] One last critical reflection towards gathered results is the fact that only 5% of the members were affiliated with iCHF for over a year. Either this

[13] During the research also 109 non-members were questioned, since these numbers are not representative for the entire Kilimanjaro-region it was chosen not to include these results in the research.

can be explained by the relatively recent start-up of the program (November 2014) or by a lack of re-enrollment. If the latter, special efforts will be required to guarantee the sustainability of the program.

GENERAL CONCLUSION

The right to health has been a central concern throughout many international treaties and development plans. During the nineties the Alma-Ata declaration applied a horizontal approach by promoting investments in healthcare systems, followed by the MDGs using a vertical approach by tailoring three specific goals towards health. Since both strategies did not succeed in significantly ameliorating global health statistics, a combination of both was used in the following SDG-framework. Vertical because it still included a targeted approach towards previous health MDGs, horizontal because the framework was much more comprehensive with the introduction of UHC as an exponent. UHC aims at delivering quality healthcare services in combination with providing financial risk protection for all citizens, including the most vulnerable, and urges all countries to develop suitable health financing mechanisms in order to do so.

When closely analyzing the health financing situation in Tanzania, three major constraints were found. First of all, the country does not possess the institutional and socio-economic capacity in order to develop SHI, the most recommended health financing mechanism by the WHO. Secondly, the health insurance landscape is highly fragmented leading to small risk pools and limited cross-subsidization being contradictory when talking about insurance mechanisms. Lastly, all of the health insurance schemes are suffering from low enrollment numbers. In order to bypass these issues and accelerate the progress towards UHC, the GOT has explored the alternative of partnering up with private partners, so-called PPPs, to provide health insurance for its population. One of these collaborations between NHIF and PharmAccess led to the establishment of the improved CHF (iCHF). A thorough research with iCHF-members in the Kilimanjaro-region, based upon an analytical framework inspired by the UHC-cube, indicated that the program is actually targeting poor and low-income groups in remote areas and provides them with financial protection, although further research towards impoverishment and catastrophic healthspending is required. The capability of iCHF to effectively reach these vulnerable groups cannot be underestimated since working towards UHC implies a universal approach by not solely focusing on 'the easiest to reach' like the ones employed in the formal sector.

It would however be too soon to conclude that the concept of PPP could prove to be an added value in the domain of health financing, nevertheless, the results presented in this dissertation point towards some interesting discussion points. In general, the concept lacks a well-defined definition and legal framework when discussing UHC. While not applicable to iCHF, involving the private sector might require the condition of profit-generation. It should be defined (and researched) whether offering equitable services is reconcilable with profit margins and, if so, to what extent. Another conceptual addition of PPPs could include the 'P' of 'people' and by doing so stressing the accountability component as this was a problem area within the current setup of iCHF. Secondly, the concept of PPP has a limited 'private' scope in the health financing system of Tanzania since mainly collaborating with NGO's. When working more with the private-for-profit sector, the public sector might also benefit from innovative and cost-efficient approaches (e.g. digital/mobile technology for healthcare savings and payments). Lastly, this research only highlighted one PPP in Tanzania with a relatively limited membership base. In order to research their viability on a larger scale, a variety of PPPs should be analyzed. Taken into account these reservations, this research believes that PPPs hold sufficient potential to complement current health financing mechanisms. Especially in the case of iCHF, since the 'improved' fund did not only generate a self-sustainable structure with much needed additional resources, they did so without further fragmenting the landscape of health insurance in Tanzania.

One last note goes out to the equilibrium within PPPs between the public and the private dimension. Reminding that health is a human right, the Tanzanian government should remain in control and accountable for the end product. This leadership role shall demand considerable investments where necessary in its public health system. When searching for equitable ways to finance these investments, it should for example be considered if more financial resources could be found within the formal sector (review of current wage contributions, compulsory contributions of formal employment, …). To carefully weigh and compare all relevant aspects when designing their health care financing strategy, it will also be important to prioritize reliable, inclusive and up-to-date data-collection. It is hoped that the results collected throughout this dissertation will already prove to be a valuable quantitative effort for the further expansion of (i)CHF and UHC in Tanzania.

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APPENDICES

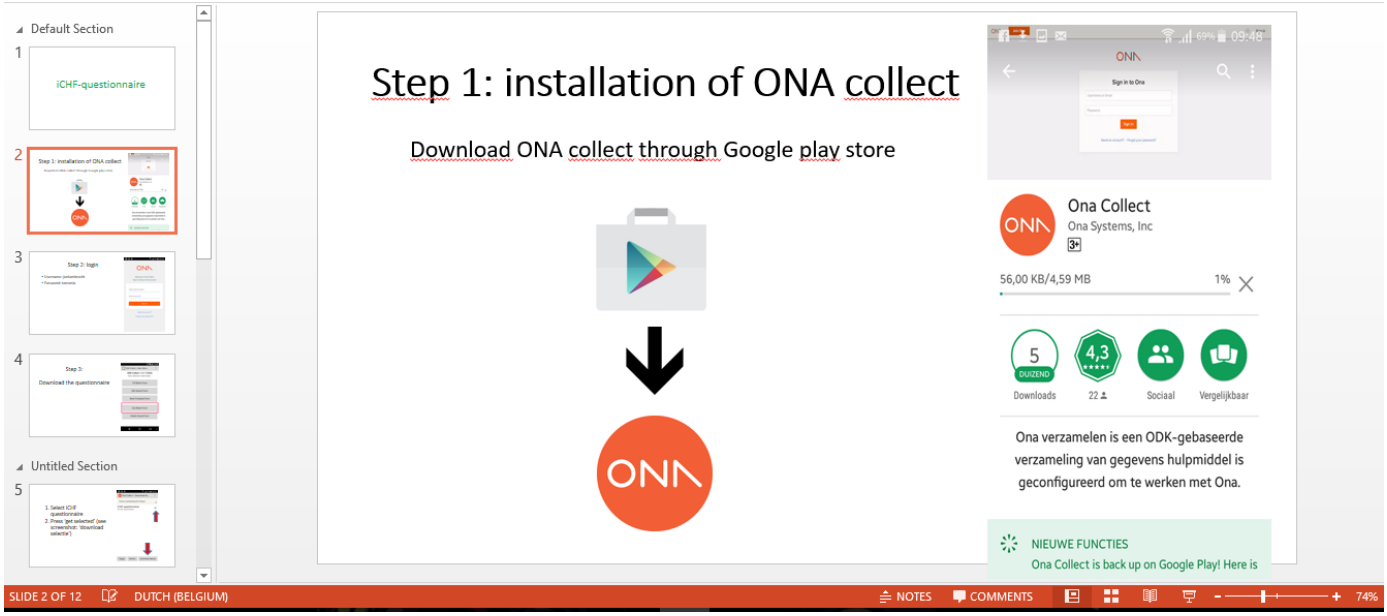
ANNEX I: List of interviewees

Name	Function	Institution	Topic	Date
Benedicte Fonteneau	Researcher	HIVA	CBHI	07/12/2016
Adeline Ajuaye	Tanzanian PhD student	HIVA	CBHI in Tanzania	07/12/2016
Emmanuel Carl	Marketing coordinator	PharmAccess	Introduction iCHF	28/01/2017
Joris De Vries	Investor	Self-employed/NGO	Private health facilities	09/03/2017
Dr. Johnson Yokoyana	Medical Team	PharmAccess	SafeCare program	04/04/2017
Dr. Nicholas Lyimo	Ex-District Medical Officer (DMO)	NHIF	Tanzanian healthcare system	21/04/2017
Morris Msofe	Marketing officer	NHIF	NHIF and iCHF program	04/05/2017
Diederick Van Eck	PharmAccess Amsterdam	PharmAccess	Actuarial analysis	12/05/2017

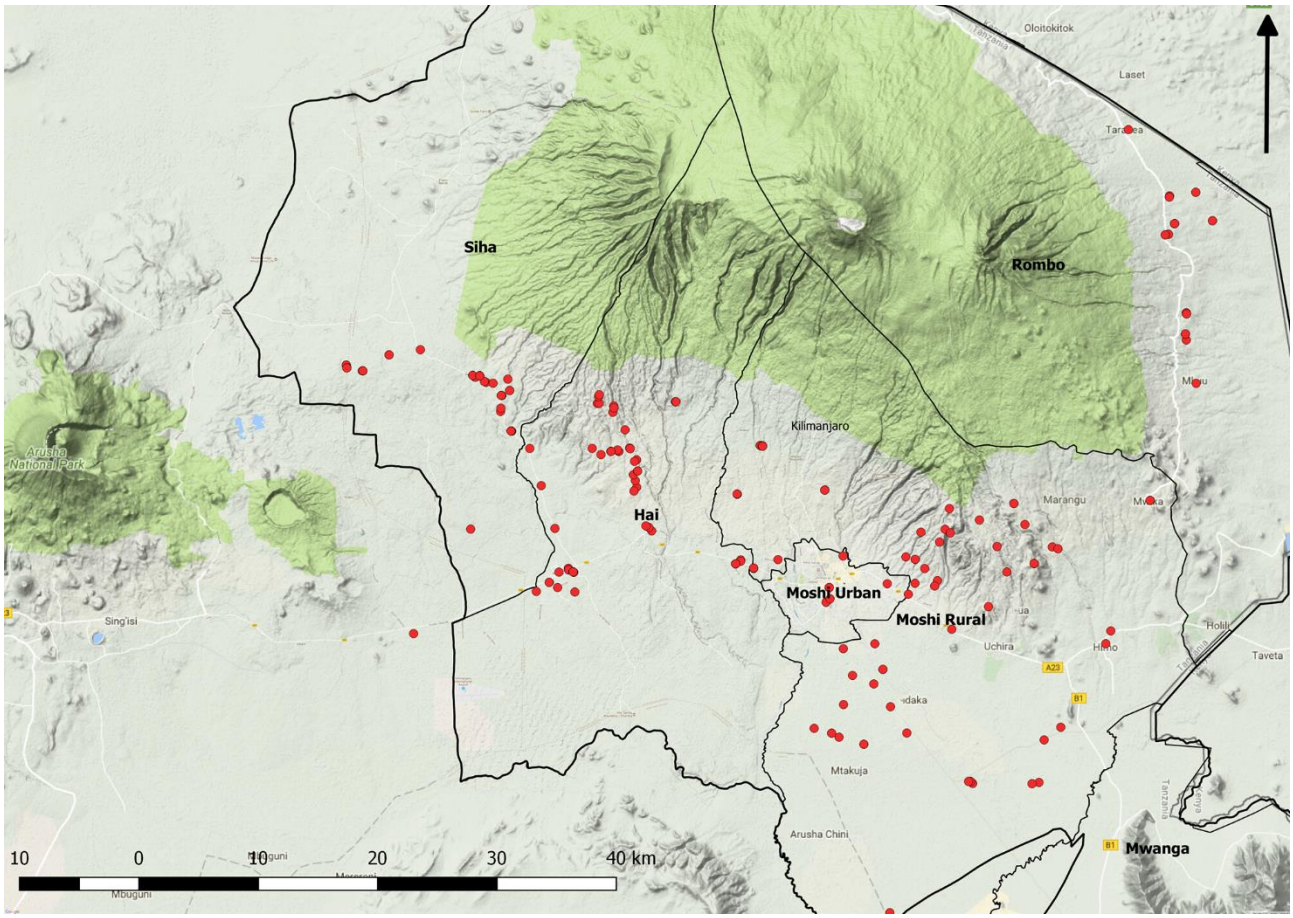
ANNEX II: list of iCHF-officers

Name	District	Division	Training
Mathias Munishi	Siha	Karansi	24/05/2017
Davies Kimaro	Siha	Sanya Juu	24/05/2017
Mike Ngowi	Moshi rural	Mwika	02/06/2017
Dickson Mmassy	Moshi rural	Old Moshi	02/06/2017
Damas Baltazary	Moshi rural	Kibosho	29/05/2017
Samwel Mlay	Moshi rural	Kahe	29/05/2017
Hillary Lema	Moshi rural	Himo	25/05/2017
James Massawe	Hai	Machame	25/05/2017
Roman Nicholaus	Hai	Boma	23/05/2017
Michael Vitalis	Hai	Masama	30/05/2017
Eliehonami Mwanga	Rombo	Tarakea	26/05/2017
Raynold Malay	Rombo	Usseri	31/05/2017
Steven Muduma	Rombo	Mashati	26/05/2017
Gidion Mushi	Rombo	Mkuu	26/05/2017
Vincent Kateri	Rombo	Mengwe	31/05/2017

ANNEX III: Example of PowerPoint



ANNEX IV: Geo-locations respondents



Red dots indicate where interviews were taken, the green area indicates the Mt. Kilimanjaro which is located near the Tanzanian border with Kenya. (*Source*: *produced with QGIS*)

ANNEX V: iCHF-questionnaire

Introduction

1. This questionnaire is part of an organizational research, organized by PharmAccess, concerning the iCHF-program. The research intends to get a better view on customer satisfaction of iCHF-members and enrollment barriers for non-members. We would like to have 10 minutes of your time to ask some short questions about your (non-)membership with iCHF. This survey is entirely anonymous and voluntarily. Questions asked are free to respond or refuse. All the information provided will be confidential and only be used for data-generation.
2. Name of the interviewing iCHF-officer
3. In which district do you live?
    - Siha
    - Hai
    - Rombo
    - Moshi
    - Mwanga
    - Same
    - Other
4. What would you consider the most important to develop a good future?
    - Good employment
    - Good education
    - Good health
    - Other: …
5. Are you an iCHF-member
    - Yes
    - No

Demographics

1. Sex
    - Male
    - Female
2. Marital status (Note to the interviewer: give respondents all options by reading them out loud)
    - Single
    - Married
    - Divorced
    - Widowed
    - Other: …

3. Age (Note to the interviewer: don't ask for specific age, but read options for respondent and ask to indicate their category)
    - 18 to 35 years old
    - 36 to 52 years old
    - Above 52 years old
4. How many people live in your household? (Note: household is total number of people living at the same address that are financially dependant of the head of household)

Socio-economic

1. Education
    - No education
    - Primary education
    - Secondary education
    - Post-secondary education
    - Other
2. What is your main occupation? (Note to the interviewer: main occupation is your professional activity which generates the most income)
    - Livestock
    - Farming
    - Shopkeeping
    - Transport
    - Business
    - Other: …
3. What is your average monthly income (Note to interviewer: If respondent does not want to answer or is uncomfortable with this question, leave blank/empty)
    - 0 – 130,000TZS
    - 130,001 – 500,000TZS
    - 500,001 – 1,000,000 TZS
    - More than 1,000,000 TZS
4. Do you own a mobile phone?
    - No
    - Yes
        - Do you own a smartphone?
            - No
            - Yes

<u>iCHF</u>

1. Since when have you been affiliated with iCHF?

a. Less than 1 month
b. One month – three months
c. Four months – six months
d. Seven months – one year
e. More than one year

2. How did you hear about iCHF?
    a. iCHF-volunteer
    b. Health-facility
    c. Radio
    d. Friends/family
    e. Village meetings/faith house sensitization
    f. Other: …
3. Why did you (or your head of household) decide to join iCHF?
    a. Because of health services
    b. Because of health facilities
    c. Because of possible health costs
    d. Other: …
4. Before today, when is the last time you used iCHF-services?
    a. one to three months ago
    b. four to six months ago
    c. seven to twelve months ago
    d. More than a year ago
    e. I haven't made use of iCHF-services
5. Which facility was used the last time you used iCHF-services?
    a. Primary public health provider
    b. Secondary public health provider
    c. Primary faith based health provider
    d. Secondary faith based health provider
    e. Primary private for-profit health provider
    f. Secondary private for-profit health provider
6. Were you satisfied during your last visit to one of these iCHF health providers?
    - Yes
    - No
        - If no, why?

- Long waiting times
- No queue system
- Short consultation time
- Lacking information
- Customer care (unfriendly staff, shortage of staff)
- Shortage of drugs
- Lacking information on drugs at dispensing
- Ethical issues (eg lack of privacy, confidentiality, …)
- No feedback opportunities
- Other: …

7. Since being a member of iCHF, have you used health facilities not with iCHF?
    a. No
    b. Yes
        i. If yes, which?
            1. Primary public health provider
            2. Secondary public health provider
            3. Tertiary public health provider
            4. Primary faith based health provider
            5. Secondary faith based health provider
            6. Tertiary faith-based health provider
            7. Primary private for-profit health provider
            8. Secondary private for-profit health provider
            9. Tertiary private for-profit health providers
            10. Traditional provider
            11. Other:….
        ii. How many times have you used a health provider outside of the iCHF
            1. 1-3
            2. 4-10
            3. More than 10
        iii. Why did you use health providers outside of iCHF?
            1. Services not included in iCHF-package
            2. Better quality of services
            3. Closer distance to home

4. Emergency
5. Other: …

8. What is the distance from your home to the nearest iCHF-facility of your choice?
    a. 0 – 5km
    b. 5 - 10km
    c. 10 - 20km
    d. More than 20km
9. Have you ever paid additional fees when using iCHF services?
    a. No
    b. Yes
        i. If yes, for what type of service?
        ii. How much did you pay in total?
            1. <5,000TZS
            2. 5,000TZS – 10,000TZS
            3. 10,001TZS – 20,000TZS
            4. 20,001TZS – 30,000TZS
            5. More than 30,000 TZS
10. How could iCHF become even more improved?
    - Fine as it is
    - More services
        - Which benefits? (Note to the interviewer: give respondents all options by reading them out loud)
            - Pharmacy
            - Transport
            - Longer in-patient care
            - More dependants
            - Other: ...
    - More health facilities
        - Which facilities?
            - Secondary regional health providers
            - Secondary faith-based health provider
            - Secondary private for-profit health providers
            - Tertiary public health providers
            - Tertiary faith-based health provider

- Tertiary private for-profit health providers
- Traditional medicines
- Other: ...

11. If these improvements would be made, would you be prepared to pay more premium for these improvements?
    a. Yes
        i. If yes, how much premium would you be prepared to pay?
            1. 30,000TZS - 35,000TZS
            2. 35,001TZS – 40,000TZS
            3. 40,001TZS – 45,000TZS
            4. More than 45,000 TZS
    b. No