Accessibility to the Kenyan health care system

Barriers to accessing proper health care

Caroline Mwangi

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Arcada University of Applied Sciences

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Kenya har en befolkning på cirka 44 miljoner människor. Hälso- tjänster tillhandahålls via ett nätverk av över 4700 vårdinrättningar landsomfattande, med den offentliga sektorn står för ca 51 % av dessa anläggningar. Den bästa kvaliteten på vården finns vid de nationella remisssjukhus, som ger diagnostiska, terapeutiska och rehabiliterande tjänster. Kenya spenderade 5,1 % av sin bruttonationalprodukt (BNP) på sjukvård år 2002. Den förväntade livslängden är också på tillbakagång. År 2006 var barndödligheten 78 per 1000 levande födda. Bland de kenyaner som är sjuka och väljer att söka vård, var 44 % hindras av kostnader och korruption. En annan 18 % hindrades av det långa avståndet till närmaste vårdinrättning. Grundläggande primärvården ges på vårdcentraler och apotek. Syftet med denna uppsats är att skapa medvetenhet om den nuvarande sjukvårdssystemet i Kenya, dess tillgänglighet och upplysa om lagringssjukvårdsposter. Frågeställningarna var: Vad är den nuvarande situationen på sjukvård tillgänglighet i Kenya? Vilka är fördelarna med att införa ett datorbaserat system i den kenyanska hälsosektorn ? Resultaten ger en tydlig bild och hur hälso-och sjukvården i Kenya driver och hur tillgängligheten till hälso-och sjukvårdsanläggningarupplevs av kenyanerna. Några kenyaner inte får tillgång till hälso-och sjukvården på grund av olika anledningar. En av dem är avståndet till vårdcentraler i samband med transport och brådskande för behandling. Ett annat problem är kostnaden för sjukvård, särskilt på landsbygden, där ett stort antal civila ligger under fattigdomsgränsen. Det finns också fördelar att vården kommer att vinna på att införa en datoriserad metod för medicinsk lagrings post för att bättre identifiera patienter och göra bättre vård.

Nyckelord:	*barrier to health care*, *transparency*, *medical care*, *healthcare*, *accessibility*, *medical record*, *MDGs*
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Kenya has a population of approximately 44 million people. Health services are provided through a network of over 4,700 health facilities countrywide, with the public sector accounting for about 51% of these facilities. The best quality of care is found at the national referral hospitals, which provide diagnostic, therapeutic and rehabilitative services. Kenya spent 5.1% of its Gross Domestic Product (GDP) on healthcare in 2002. Life expectancy is also on the decline. In 2006, the child mortality rate was 78 per 1,000 live births. Among the Kenyans who are ill and choose to seek care, 44% were hindered by cost and corruption. Another 18% were hindered by the long distance to the nearest health facility. Basic primary care is provided at primary healthcare centers and dispensaries. The purpose of this paper is to create awareness of the current healthcare system in Kenya, its accessibility and enlighten on storage healthcare records. The research questions were: What is the current situation on healthcare accessibility in Kenya? What are the benefits of introducing a computer -based system in the Kenyan health sector? The results give a clear picture and what the healthcare system in Kenya operates and how the accessibility of healthcare facilities is experienced by the Kenyans. Some Kenyans are unable to access healthcare services due to various reasons. One of them is the distance to the health centers in relation to transport and urgency for treatment. Another problem is the cost of healthcare especially in the rural areas where a good number of civilians are below poverty level. There are also the benefits that the healthcare system will gain from introducing a computerized method of medical record storage to better identify the patients and render better healthcare services.

Keywords:	*barrier to health care*, *transparency*, *medical care*, *healthcare*, *accessibility*, *medical record*, *MDGs*
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1 FOREWORD

The Kenyan government-owned (pubic) health care system is one of the major service providers for the 44 million citizens of Kenya. It is relatively cheaper than the private sector and some goods and services are offered free by the government.

Last year, I was on holiday in my motherland and unfortunately caught a flu. I visited a hospital within my hometown for a health check-up and when I reported at the reception, they informed me that it would take a while to create me a file as a new patient. On explaining that this was not my first visit, they said they hardly have a copy of patients who don't visit the hospital at least every 3 months.

That was a really shocking experience because it got me thinking of patients who are taken to the hospital after accidents. If there are no records for such patients and they are taken to the hospital by strangers, how can the personnel know their medical history, their allergies, their illnesses or medication that they constantly use? How do they even admit such patients when they have no real names of the patient? How is the care plan for such a patient drawn?

Another thing that seemed to shock me was the amount of fee I was charged for the visit. The hospital pharmacy said to me that the medication prescribed to me was out of stock and so I had to pay extra at a regular pharmacy. What about the poor masses in Kenya? Can they afford medication worth over 10 euro or do they prefer to wait till the pharmacy is restocked so they can get it for free?

There was a very long queue before getting to see the doctor and I noticed there was no particular order; some people came in first and others got treated before them. Others exchanged a few words with the personnel and got to be treated before the rest of us who had been waiting for hours. Suppose a patient was really struggling, could they get first aid or priority?

This paper highlights the experiences that Kenyans go through just to access basic health care and the author comes up with the common barriers to accessing proper and unbiased treatment so as to improve this sector.

After all, they say that in Kenya, hakuna matata (meaning in Kenya, there are no worries).

2 INTRODUCTION

Kenya has a massively growing population but more than half of its population makes up the majority poor (Tumbo-Oeri, 2000). People living under the poverty line do not have enough earnings for their basic needs, food, water and shelter. They are therefore the people who rely most on government subsidies for health care. Unfortunately, they face many barriers in accessing health care and usually end up receiving poorer services than the minority rich population.

The Ministry of Health, MOH is the main organization that heads the Kenyan health care system. It gives the stipulations of health care and plays a big role in making the rules of the health care personnel. There are three main sectors of health care: the public sector which represents all government owned health care facilities, the private sector which collaborates private individuals and institutions and the non-profit making organizations which include organizations like churches which form health care facilities that are non-profit-making.

There are about 4, 700 health care facilities in Kenya that cater to the population of 44 million residents. The public sector serves more than half the citizens of Kenya and accounts for about 51% of all health care needs. The reason it takes precedence over the private sector is that more residents of Kenya can afford care at the government owned health care facilities as the prices are greatly subsidized and some services are offered free in public health care facilities. The main national referral hospitals in the country are the Kenyatta National Hospital, in Nairobi and the Moi Referral and Teaching Hospital in Eldoret, all of which are government-owned structures. This paper focuses on the government-owned health care facilities (public sector).

As a result of the high population, the Kenyan government has tried to provide equity in the health care system so as to effectively alienate human suffering and improve lifestyles of her citizens. The Kenyan medical system is marred by many factors that render accessibility and delivery of health care difficult. These factors include poor governance, overreliance on donor funds, corruption, nepotism, traditional and cultural beliefs

of the citizens, a lack of a medical filing system, lack of efficient infrastructure, massive poverty and illiteracy.

One of the main economic activities that bring great revenue in Kenya is agriculture. This is a highly manual labour that requires lots of productivity and good health care of her citizens ensures great productivity at work too thus lowering the poverty level.

Proper health care is of importance in reducing poverty and increasing the economic growth because as it is, general unwellness of the citizens renders Kenya poorer. Most adults are unable to access proper medical care thus staying away from their workplaces on long sick leaves. These long sick leaves end up reducing the economic growth.

The set Millenium Development Goals (MDGs) focus on the improvement of health as well as enhancing human life on a global scale. There are 8 set MDGs and three of them relate to the improvement of health care provision to human beings. The three goals aim at improving maternal health, reducing child mortality as well as enhancing the fight against HIV/AIDS, malaria and other diseases. Kenya is currently battling the HIV/AIDS pandemic and malaria is one of leading causes of death in Kenya. Maternal health has lots of room for improvement in order to reduce the mortality of infants and loss of maternal deaths.

Inaccessibility to health care in Kenya is mainly evidenced by the gap between the wealthy and the poor citizens. The rich among the society are able to pay an extra amount to have their health care needs met appropriately and fast while the poor have no option but to accept whatever care they receive, at whatever time the care is availed. The health care of these poor majorities is greatly minimized by the favouritism greatly showed to the rich minorities.

The poverty level in Kenya in a study conducted in the rural areas in Kenya in 2007 linking poverty levels to the geographical conditions was estimated to be at 45%. This report showed that almost half of the 44 million residents of Kenya live under a dollar per day. This is equivalent to living under Kenyan Sh105 a day (Okwi et al, 2012).

Corruption is one of the biggest battles that affect both the Kenyan health care sector. Forms of corruption in the health sector are often conducted in many ways, including officials embezzling the funds set aside for the health care sector or individual personnel taking bribes in form of money and inequitable distribution of health care services and goods so that the poor majorities will not get all the medical attention, services and goods that the rich in the same ward receive.

This kind of attitude and inequality affects the effectiveness, accessibility quality and quantity of health care offered to the sick people. As a result the costs of health care for the poor shoot up as the personnel do not give them the required attention and could miss important details on health changes of the patients and the volume of services given reduces.

The following chapter reviews the aim and purpose, as well as the questions the author hopes to answer at the end of this paper.

3 AIM AND RESEARCH QUESTIONS

The aim of this study is to get sufficient information on the transparency and accessibility of health care in Kenya. This in turn will help create awareness of the challenges faced by Kenyans in relation to accessing and receiving health care and enlightenment on ways to better improve the health care sector.

The purpose is to contribute awareness of the benefits of improving health care provision to the Kenyan people as well as proper medical record storage which will be a step closer to efficient health care in Kenya.

To achieve the aim and purpose of this study, it is necessary to answer the following research questions:

- What is the current situation on healthcare accessibility in Kenya?
- What are the benefits of introducing a computer -based system in the Kenyan health sector?

4 BACKGROUND

The International Covenant on Social and Economic Rights summarizes the right to health care as the right to accessibility and the ability to make use of standard physical and mental health regardless of class hierarchies or bias. However, according to a recent report, over two billion people internationally lack access to primary health care and essential medication. (Eleftheriadis, 2012)

Many patients suffer from illnesses and infections that are easily preventable but due to lack of basic care, they suffer immeasurably. Access to health care in Kenya is greatly defined by the geographic availability of health care facilities. Most residents of the rural areas in Kenya have to make long trips to access health care services as health care facilities are very scarce. Most of the health care personnel prefer to work in the capital towns where access to other facilities like electricity, tapped water and transportation are fully operable. Furthermore, access to health care is defined in terms of: availability, accessibility, affordability, and acceptability of the patients (O'Donnell, 2007).

The Kenyan health care sector is one of the main sectors that are a direct replication of the government and how well it's able to cater to the hardworking population. The government of Kenya has continually tried to revamp the health care sector so as to live up to the internationally set and acceptable standards.

Access of medical care in Kenya can be defined by the main features of the health care system, the policies of the country's health sector and its governing bodies, the population of 44 million citizens at large and their medical needs and the real utilization of medical facilities. The interrelations of these variables involved are presented graphically in the diagram below (Aday& Andersen, 1974).

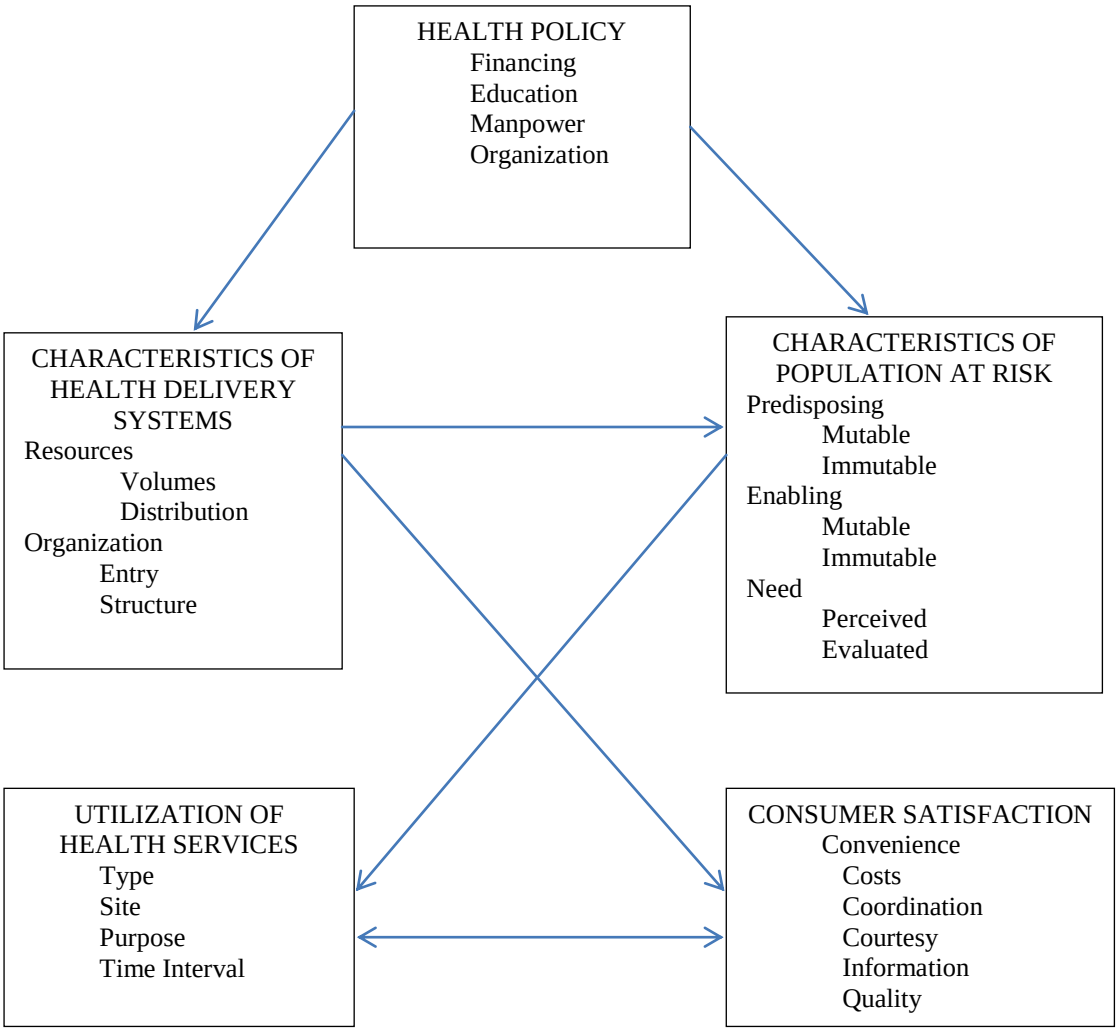

Figure 1: Framework for the study of access.

In public health and in relation to health care, vulnerability is defined as the stage at which an individual's health is predisposed to harm and risks. Vulnerability can be a cause of many factors such as the lack of access to health care and the reasons for it without the adequate self-protection or the individual's control. This renders the individual helpless and thereby undermining his/her wellbeing. As such, vulnerability is often relative and could be affected by the personality, social, cultural, religious, economic and political systems (Allotey et al 2012).

Kenya enjoys over 45 different cultural groups and they serve to shape the way an individual behaves. There are also over 10 different religious groups that seek to shape what

is acceptable regarding an individual's lifestyle; thereby setting standards that affect the person's health care.

Health care systems that provide universal health insurance coverage are organized differently and one of these is the one payer system. Through this system, all patients receive equal benefits and costs are closely monitored by the simplified administrations (Blewett, 2009). This is the kind of health care system that the Kenyan government has tried to implement but there is still a lot of room for improvement. Vices like corruption and nepotism serve as the greatest barriers to equality of access of health care services thus employing this one payer system is difficult.

The government of Kenya tries to offer some medical care free of charge or at a subsidized price for individuals in order to enhance primary care and prevention of diseases. A good example of this is the government's provision of free HIV/AIDS test kits, free condoms and antiretroviral drugs (ARVs) in all medical facilities to encourage the citizens of Kenya to get tested and get free advice in order to prevent the spread of the deadly viral disease. The government also offers free mosquito nets to try reducing deaths caused by malaria.

In Kenya, majority of the population suffers from social vulnerability. This is whereby poverty, illiteracy, cultural beliefs, religious beliefs and corruption shape and undermine the health of an individual. Most of the poor majorities are also illiterate and they suffer from being taken advantage of by the personnel in health care systems. They end up overpaying for services and because they cannot afford proper health care, they never get better.

The personnel greatly ignore the code of ethics when dealing with such patients as the patients do not even understand their own rights. To deal with the discrimination, isolation and help represent the rights of the poor majorities, proper human rights organizations as well as government principles must be enforced. In Kenya, the Kenyan Human Rights Commission has put so much effort in trying to fight for such patients.

A health care system should assure equitable access to health care provision to all individuals and especially to the poor majorities in order to avoid unnecessary human suffering and extreme poverty from having to pay heavily just to access basic health care.

The government of Kenya reads its' national budget once annually and despite the problems the health care system faces, there is still the huge problem of equal distribution of health care facilities and resources throughout the country. The health care staff is under-paid and over worked. As a result there are strikes by nurses and then doctors and this is mostly felt by the patients and their families who have to endure pain of sickness and at times in worse cases, loss of their loved ones.

The Kenyan health care sector enjoys a great percentage of the relief donor funds sent to support the development of major systems in the developing third world countries. A remarkable change on dependability is noted where in 1995, the Kenyan health sector got 4.9% funding from donors. In the year 2006, Kenya needed 14.8% donor funds. Despite the funding, the health care system is yet to make remarkable changes to reverse the declining access to health care and thus improve the lives of Kenyan citizens.

Below is an image from the smart global health organization's website that portrays the funding received from donors per year in Kenya:

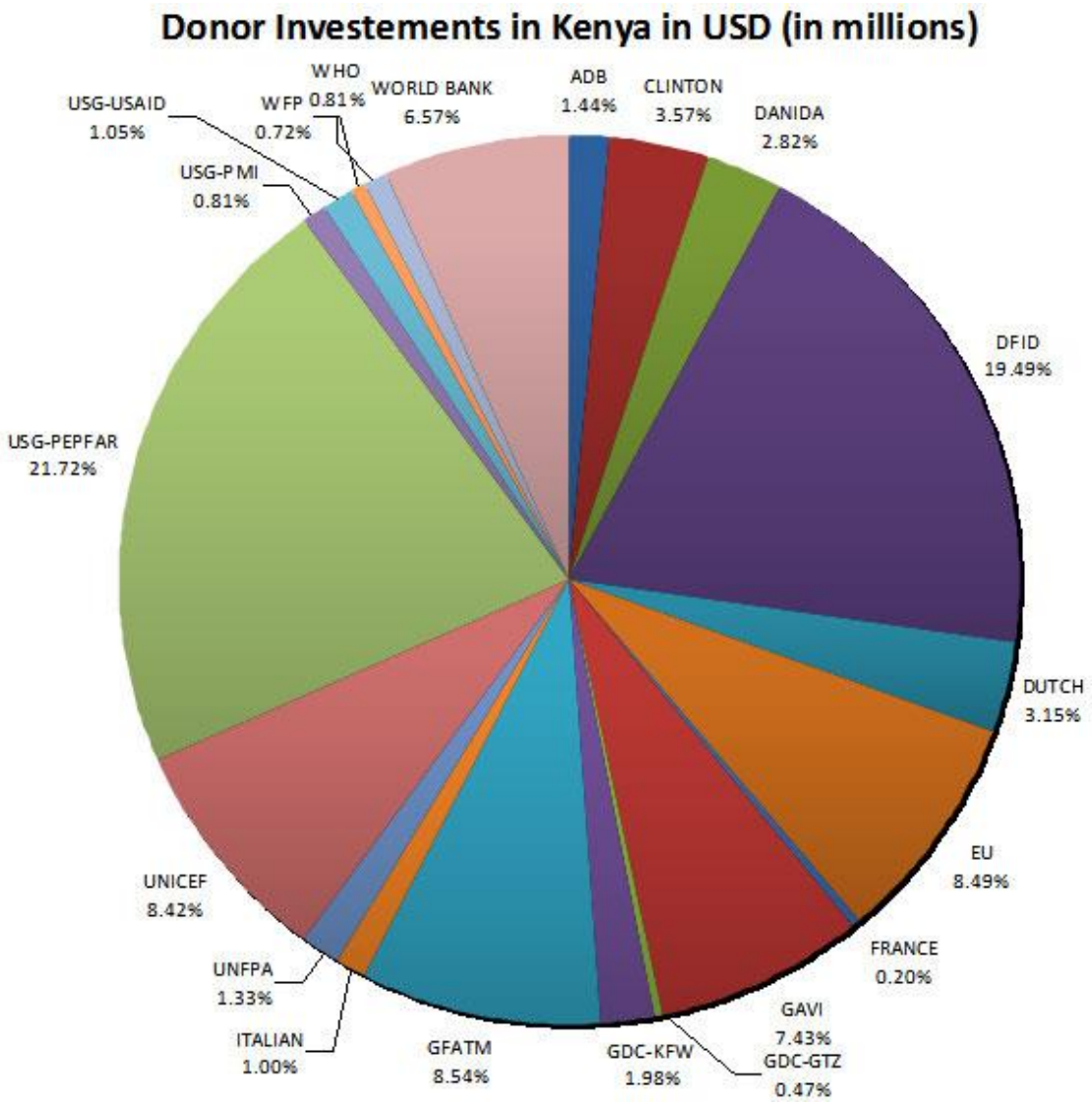

Figure 2: A pie chart representing annual donor support in Kenyan health care

The current situation in Kenya is that the health care system is marred by lots of corruption so that the people who really need health care do not access it easily because other richer members in the community are willing to pay an extra amount to access health care faster. This means that the fees legislated by the government and the level of need for urgent health care do not come into play in the Kenyan health care facilities. The richer the person and the more the amount they can use to bribe, the better and faster the health care provision.

In other highly developed countries, health care is respected as a basic right of every individual and organized in such a way that no one is above the law when it comes to access of medical care. As such, the systems are well organized and serve to enhance the well-being of every individual, regardless of financial, cultural, religious and individual perceptions (Blewett, 2009).

The causes of income disparities in access across countries with universal health coverage are not well understood. Possible explanations for differential access to care include differential treatment by health care providers and differences in behaviour, social networks, and environment that may make populations with lower socioeconomic status require more treatment or be more difficult to treat. (Blewett, 2009)

On efficiency of a health system, real trade-offs must be examined and this means that the goals of the health system must be identified. Health gains, equity and possible goals of a health system include:

- Achieving the greatest health gains for a given input without regards to whether this means concentrating the gains in one group.
- Achieving the fairest distribution of health for a given input without regard to the actual level of health achieved.
- Achieving an appropriate balance between the greatest health gains for a given input subject to the constraint of fairly distributing the health gains across social groups an outcome balancing health equity and health gains. (Allotey et al 2012)

Equity in access to care implies that all citizens should have the same access to needed health care services regardless of income, religious background, sex, health status, or other factors including race and ethnicity. Equity in access begins first with universal access to health insurance and a core set of covered health benefits. (Blewett, 2009)

Access to health care may be analysed in the quality of health care given to deserving patients and the willingness of these patients to seek and effectively use health care services offered to them. Good quality care given by health care centres will encourage

patients to visit the health care centres to acquire health care services and fully trust that they are in god hands. (O'Donnell, 2007)

The relationship between poverty and access to health care can be seen as part of a larger cycle, where poverty leads to deterioration in health and health maintains poverty. Public health and clinical health services, along with food, water, sanitation and other human assets, such as knowledge and education make up a solid base for quality health. Empowerment at the individual level affects individual choices over healthy lifestyles and choice of health services, whereas at the community level, empowerment involves the securing of resources for health and health services. (Peters et al, 2008)

Adopting a healthy lifestyle differs from achieving one's potential. Placing human potential and the creation of emergent and sustainable levels of wellness at the centre of health care is to forever change it, and that is where the revolution begins. (Senzom, 2011)

5 THEORETICAL FRAMEWORK: TRANSPARENCY IN HEALTH CARE: THE TIME HAS COME

5.1 Introduction

Health care is not a standardized service in that the health care team will always have a better idea of the illnesses of their patients. Patients are therefore more or less led to rely on the personnel for their diagnosis as well as the care process. The personnel may make biased decisions. Sometimes decisions made by the personnel are influenced by emotional stress, emergency condition and personal beliefs thus narrowing the health choices of patients care preferences. (Collins, Davis, 2006 pg. 5)

There are countless physicians and other personnel that are involved in the care process of patients, especially in very complex health illnesses and conditions. Patients in these conditions do not get to choose their own nurses, doctors, anaesthesiologist,

pathologists, radiologists or many of the consultants involved in their care. For acute medical care, personnel cannot quote an exact cost of all the care required (Collins, Davis, 2006 pg.5). The percentage of patients seen by many physicians is represented in the figure below:

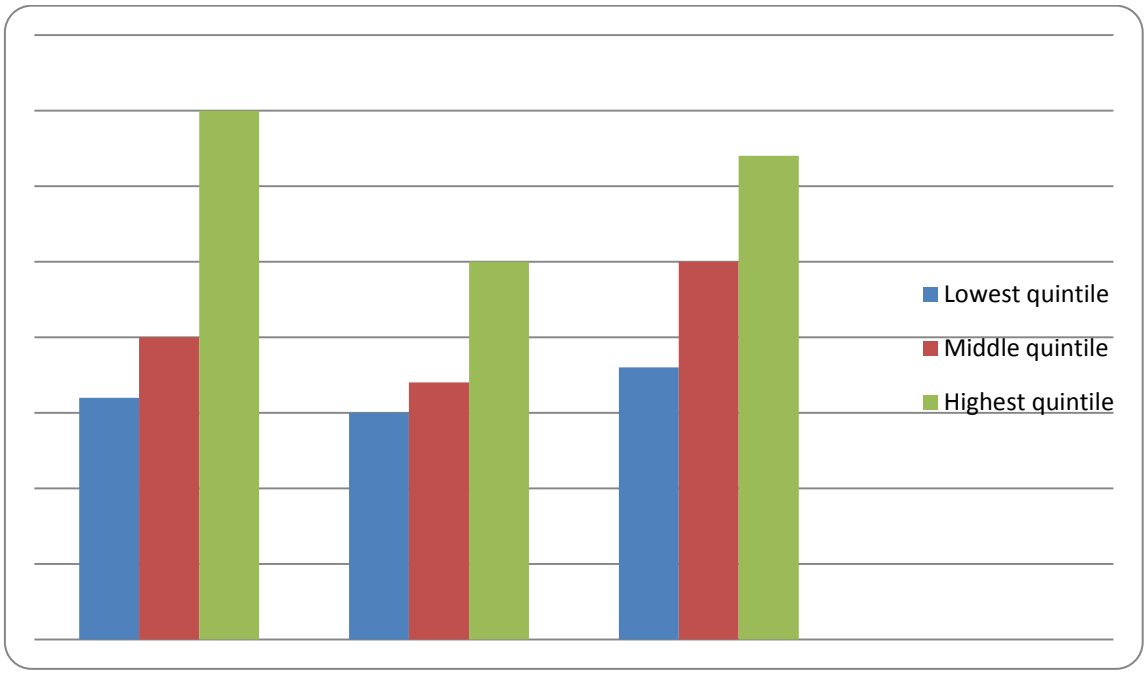

Figure 3: Percent of Patients Seen by 10 or More Physicians Varies across Medical Centers.

To summarise this, health care is different from other businesses which provide goods and services in that all the conditions required for perfectly competitive markets do not exist in health care. Health insurance aims at reducing medical bills for patients and ensuring that they have access to medical care. In a country like Kenya, this is rarely realized as there is a lot of corruption and inaccessibility to hospitals which makes patients with insurance not enjoy these advantages. Making patients pay even more for health care through corruption and other vices undermine the very reason why insurance exists (Collins, Davis, 2006 pg.5)

5.2 Price Information Is of Little Value by Itself

Transparency is of importance to the patients' well-being but knowing prices of health care services is of little value without information on the total cost of caring for a given condition and the quality or outcomes of that care. This means that for example, the patient will not always be advised to go to pocket friendly health care providers; they

would rather go to providers who are greatly known for their high level medical provision.

In Kenya, this always means the private sector as there are more specialized personnel who try to provide more equitable care but at a higher cost than the public sector. With the level of Patients are not always well advised to seek out the surgeon with the lowest fee e.g. It is important to know the quality of care provided and a surgeon's track record with complications or mortality (Collins, Davis, 2006 pg.6).

There is often no standard set of services that are provided to patients with a given condition. The total bill of the patient can depend on the tests undertaken and medication ordered, the length of the hospital stay, and the number of specialists and consultants involved in the care. A surgeon's fee is an important component of the total bill, but so are the anaesthesiologist's fee, the radiologist's fee, and the pathologist's fee. (Collins, Davis, 2006 pg.6)

A patient needs not only know the expected outcomes of care but also the expected out-of-pocket costs from the beginning to end of treatment. The patient has a right to also know the likelihood of complications or infections or a need for repeat surgery. The patient also needs to know how long the pain lasts and when they will get fully functioning (Collins, Davis, 2006 pg.6). In Kenya, the patient does not get to know these outcomes of the health care process. Most of the times, the patient does not even get a clear explanation of the bill received from the hospital. The diagram below shows satisfaction with out-of-pocket costs:

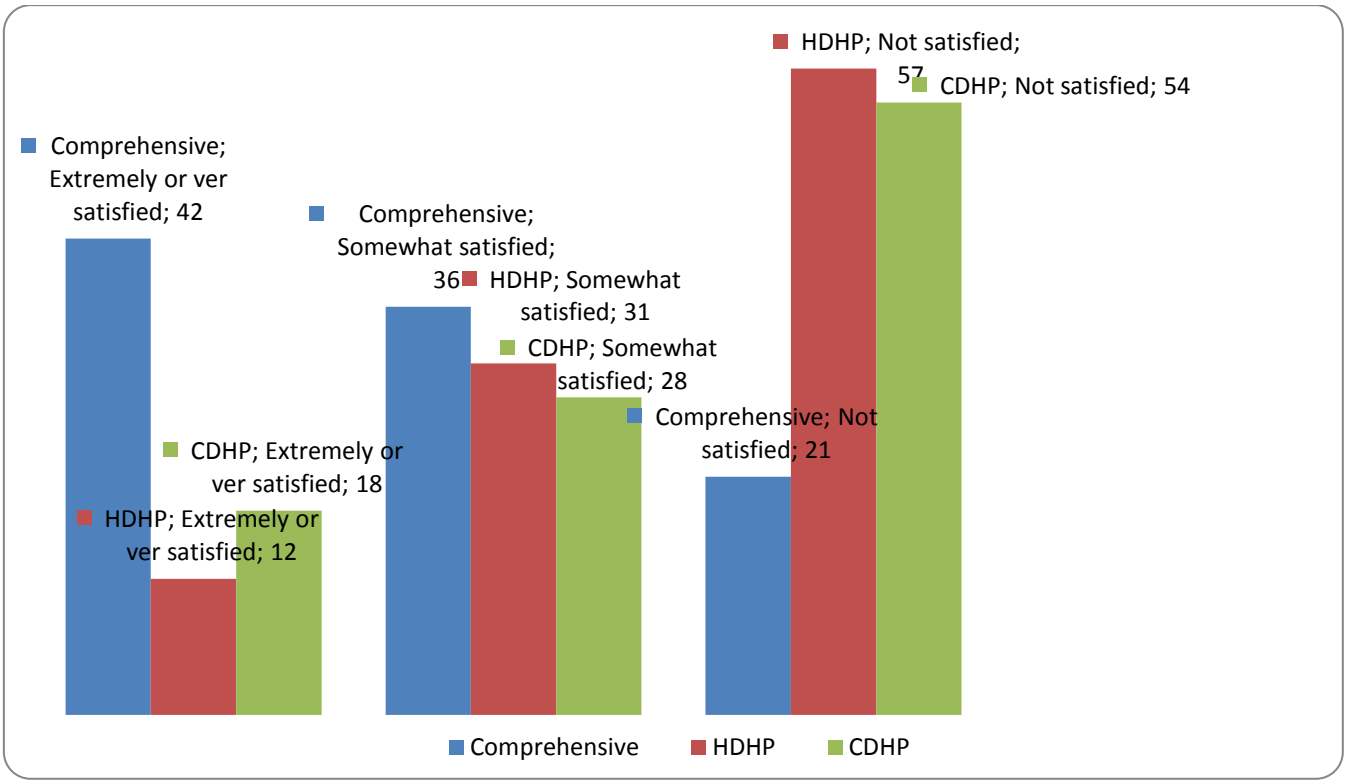

Figure 4: Satisfaction with Out-of-Pocket costs for Heath Care by Type of Health Plan

Providers are mostly worried of the cost of the treatment but they should also be concerned with the care quality and well-being of their patients. They should also check that their fees for the treatment are fair for the patient because medicine is more about saving lives than making money.

The total bill should be fairly discussed and decided upon by all the physicians involved in care to avoid more deaths and promote health care. In Kenya, most patients do not get discharged because there is no security that the patient will pay after leaving the ward. Patients are forced to clear the bills on time.

The personnel also unfairly pitch the prices for unknown patients and reduce remarkably or get away with the cost of treatment for their family and friends due to corruption. The patient wants to know not only about the success of their treatment but other risks

associated with the treatment like the likelihood of a hospital acquired infection (Collins, Davis, 2006 pg.7).

Sometimes in Kenya, these facts will not be brought forth because the physicians feel that the patient will somehow not treat them well enough or the patient will look for a better physician.

Due to illiteracy, some patients do not have the capacity to understand that physicians can only do so much in treating them as they do not always have the power to heal. Some cultural traditions believe in traditional medicine men and witch doctors for this reason and the fact that they charge way cheaper than contemporary hospitals.

5.3 The current state of information is inadequate

It shouldn't come as a surprise that the information currently available in Kenya doesn't begin to meet the needs of patient's, payers, or providers. Patients always report that they rarely have the government subsidized and accepted cost and quality information available to them (Collins, Davis, 2006 pg.7).

They are not consulted in matters relating to their health accordingly. They are for instance not informed of medication used in their treatment, optional methods or the cost of the treatment. They therefore have someone else deciding on their behalf and at the end; they have not participated in their care plan as should be the case. The patient sometimes does not even get to the right ward because of corruption in the Kenyan medical system and therefore undermining their health.

A good example is someone who deserves isolation due to communicable diseases. The patient might not enjoy the luxury of being in isolation because some other patient who

is in a better condition is a relative to personnel at the ward. This ends up making other patients sicker and as time goes by; their hospital stay and bill also increase.

Physicians rarely have comparative information on the quality of their own care or on the care of other physicians to whom they refer patients. Kenyatta National Hospital is the largest referral hospital in Kenya. Half the personnel in other counties have no idea who is the head of each department and due to lack of technology in the health care system; patients are advised to just go to the referral unit, without a reference to a specific doctor. In almost all situations in Kenya, only 5 percent of physicians have information on the quality of care rendered by other physicians to whom they refer patients meaning more than two-thirds say they rarely or never have such information (Collins, Davis, 2006 pg.8).

One in five physicians report receiving any process or clinical quality-of-care data on their own care, only one in four receive patient survey data, and only one in three receive any kind of quality data (Collins, Davis, 2006 pg 8). Availability of data during referrals is represented in the diagram below:

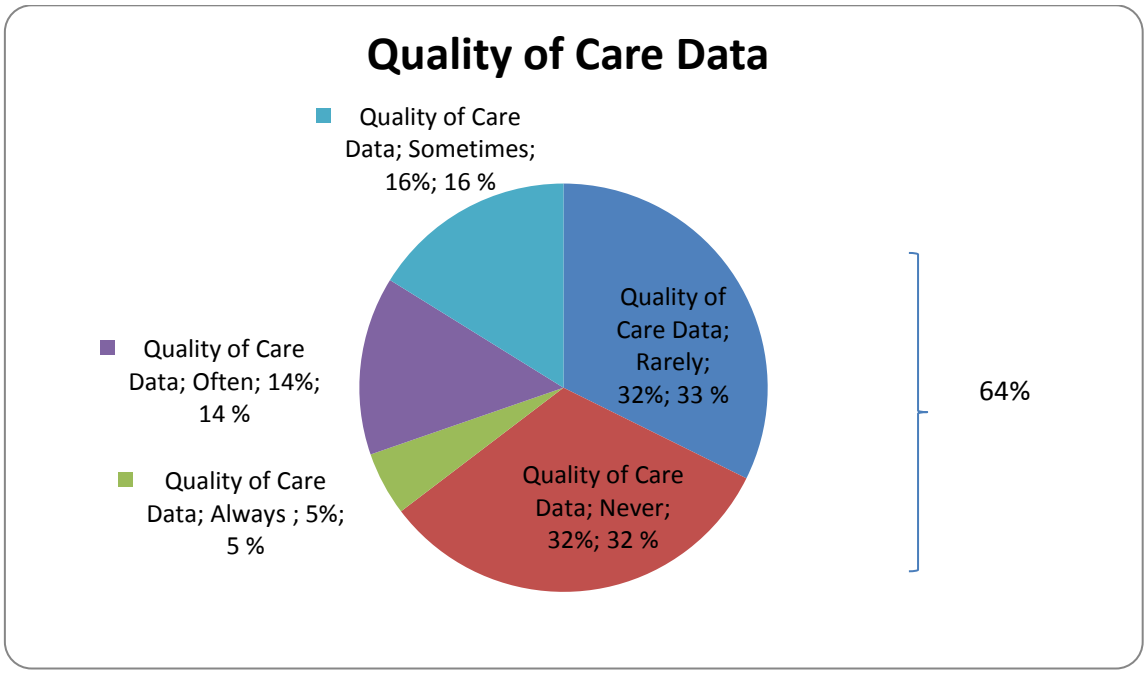

Figure 5: Availability of Quality of Care Data When Making Referrals.

In Kenya, special organizations that try to protect the sick patient try to gather the information regarding care of patients like the legally acceptable fees for different departments and tests. However, this information is very rarely available to the public. The majority of the patients still have no access to hospital facilities and due to poverty; access to information is very limited.

The art of assessing quality and patient experiences with care has advanced considerably in the last decade. However, there is room for improvement in spreading the information and ensuring that the public is aware of the information and updates are handled immediately. Majority of the people have access to the mass media like TV, radio or newspapers. The efficiency of physicians should also be measured to enhance patient safety as many quack doctors come into the scene and confuse the illiterate masses. Proper patient assessment should be made and corruption should be minimised so that each patient gets the proper care. (Collins, Davis, 2006 pg.10)

5.4 Patient Use of Information Is Not Likely to Transform Health Care

With adequate information and patient financial incentives, it's still unlikely that the transformation of health care system will be driven by patient choices of provider (Collins, Davis, 2006 pg.11). The patients in Kenya are in a weak position to demand efficiency and a better quality of care because they are still fighting for accessibility and equity in medical care.

The health care system in Kenya is currently being revamped with the government trying to allocate a great amount of money to try improving the way the system is currently working. The current situation is still bad in that the information still lies in the hands of the privileged masses while the majority poor masses have no idea of what is going on.

However, the money is not nearly enough as it lands in the wrong hands and the pre-planned budget has to be readjusted many times. Somehow, corrupt officials try to get a little bit of the money for their own selfish needs and there is hardly enough left to do the general good.

The poor keep getting poorer because their main point of interest is getting treatment. Instead of fighting for justice in the system, everyone is busy fighting their own battles just to be able to see a doctor. It does not occur to them that the situation can be improved or how they can be involved in revamping this system.

Most trusted sources for information can be show in the illustration below:

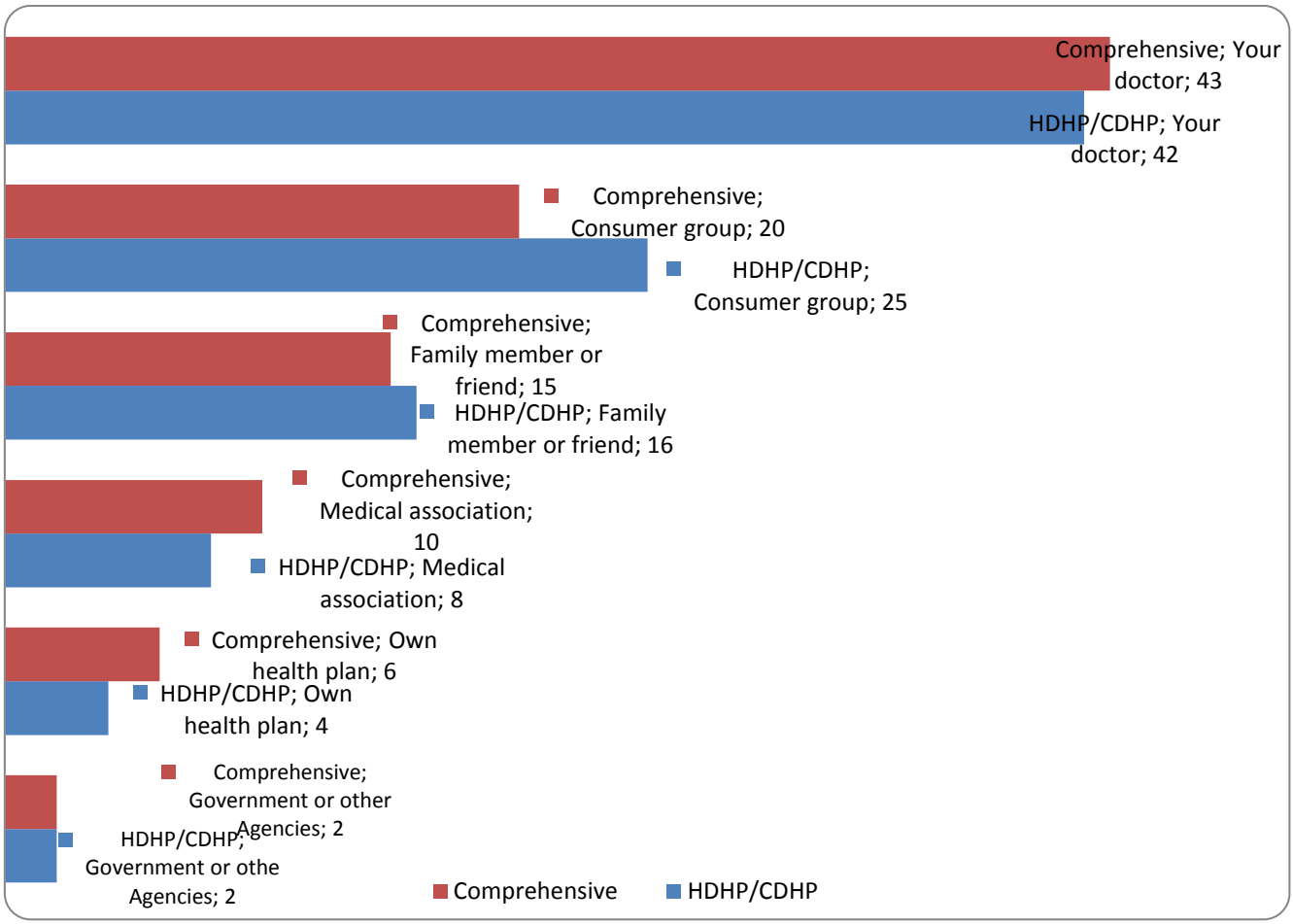

Figure 6: Most Trusted Sources for Information on Health Care Providers, by Insurance Source

Most health care costs are incurred by very sick patients- patients with HIV/ AIDS, heart attacks, strokes, cancer, malaria, tuberculosis, mental illness, fractures, and injuries- often under emergency conditions like road accidents.

Generally, about 10% of the sickest patients account for 70% of all health care costs and fees. Shopping for the best physicians or hospital is impractical in such circumstances. (Collins, Davis, 2006 pg.11)

5.5 High-Deductible Health Plans and Health Savings Accounts

Properties of health savings accounts (HSAs) coupled with high-deductible health plans (HDHPs) say these plans make people better consumers of health care by giving them greater responsibility for the cost of their care. In Kenya, the National Hospital Insurance Fund, (NHIF) has tried to draw up such a beneficial health care plan. Membership to the National Hospital Insurance Fund is compulsory to all salaried employees with voluntary membership to those in self-employment.

Contributions range from Kenyan shilling 160 (about 1,6 €) to a maximum Kenyan shilling 320 (about 3,2 €). For a while now, the government has been planning to compute contributions as a percentage of one's salary. The idea is that the members or the declared dependents fall ill and are admitted in accredited government hospitals, they are only required to pay the balance of the bill after the rebate has been calculated. This is in attempt to avoid overdue hospital stays or corruption in the treatment of the sick.

The rebate varies depending on the hospital status and ranges from Kenyan shilling 400 (about 4 €) to Kenyan shilling 2,000 (about 20 €) per day. Consumer–driven health plans have always been a matter of mass interest and the press constantly addresses the high rates of dissatisfaction with the cost of consumer-driven plans which are still quite high in comparison with the lower incomes and the health problems. (Collins, Davis, 2006 pg. 13-14)

Nearly half of adults in consumer-driven plans with lower annual income reported delaying or avoiding care, this rate is also nearly twice that of people in the same income

group in more comprehensive plans. Similarly, people enrolled in high-deductible plans were more likely to skip doses of their medications to make them last longer or not fill their prescriptions at all; the rates of skipped medication were highest among people with health problems. (Collins, Davis, 2006 pg.15)

Here again comes in the theory of witchdoctors or other religious beliefs as the patients really know that they are suffering but because of lack of funds, they believe that the witchdoctors can provide a more affordable solution. Another alternative highly practised in Kenya is believing that God will come and heal the sick in His own time and there is no need to visit the hospital or seek medical care.

Among the really illiterate masses, there is a tendency that people will just discuss their signs and symptoms and ask around for someone who has had the same. They can get medication from each other without the need to confirm from a health centre whether they suffer from the same illness. Sharing of medication is one of the most dangerous practices being practised in Kenya as the illiterate masses also make up a large proportion of the majority poor.

The illustration below shows those who avoid care based on cost:

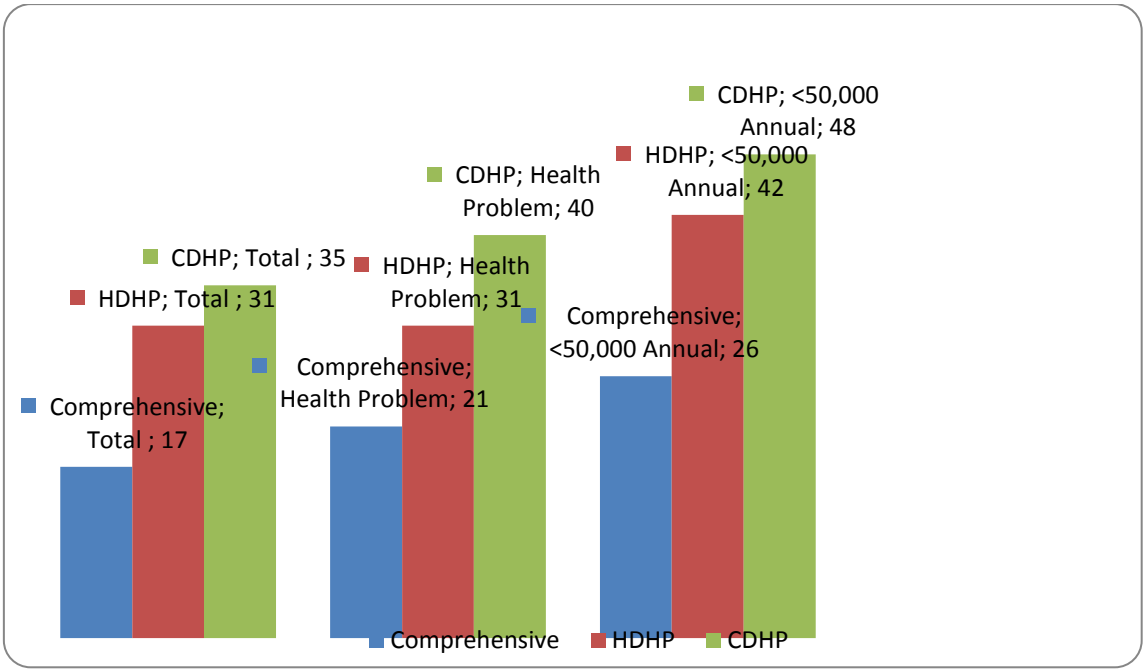

Figure 7: Percent of Adults who have Delayed or Avoided Getting Health Care Due to Cost.

When people with high-deductible health plans do access health care, they are at risk of accumulating medical debt. Medical bill problems include not being able to pay bills, being contacted by a collection agency about medical bills, being held in the health care facility and not getting discharged or having to change your way of life in order to pay bills. (Collins, Davis, 2006 pg.15)

5.6 What Needs To Be Done

Investment in health information technology is essential to ensure the right information is available at the right time to patients, providers, and payers. In Kenya, many have called for such change; the current state of affairs is inadequate. Only the private medical care facilities have been able to get a computerized health care system while the government-owned public hospitals are still struggling with paper-based filing systems. Only about one in 15 physicians have electronic medical records, demonstrating that the benefits of modern information technology (Collins, Davis, 2006 pg.17).

Armed with the access to correct information, patients can monitor their own health and in a way contribute to better health care by getting regular preventive care, becoming educated about the risks and benefits of elective procedures, and sharing medical history with multiple providers, helping to coordinate care and reduce waste and duplication of tests. (Collins, Davis, 2006 pg.17)

The current paper-based is risky in that if the file is misplaced, the patient's complete health care information is lost. Most of the patients can hardly remember all the medication and dosages that has been administered to them. The patient also has to physically avail themselves in the various health care facilities should there be a consultation between the health care personnel, which mostly comprises the doctors.

High-deductible health plans run the risk that patients will fail to get the primary care that could lead to serious complications and lack of proper medical care could directly translate to great risk factors and vast chronic conditions. (Collins, Davis, 2006 pg.17)

Health care costs are high in Kenya because of the fragmented way the government organizes and delivers health care is wrong. The wrong financial incentives are given to the health care centres and all the medical personnel. However, the salary of the medical personnel still remains meagre and the required health care instruments are still missing making health care difficult in the country. The sick patients will have to pay too much to try covering these costs. (Collins, Davis, 2006 pg.18)

Price transparency is a beginning, but is unlikely to have a major impact without making the information easily accessible and without the current corruption being battled by empowering the common Kenyan, especially the poor sand illiterate. There is a need for reviewing the total costs footed by the general public and the government needs to regulate that the public hospitals practice this without bias. Patients suffering from acute and chronic conditions need the government support in order to afford medication and to be able to afford health care. Creating a database with this information is certainly feasible but requires federal leadership. (Collins, Davis, 2006 pg.18)

6 METHODOLOGY

The method of data collection used for this paper was literature review. This was made possible by reading through research conducted mostly within the past decade. The information obtained was carefully read through several times in order to acquire the necessary information best suited for the author's interests. The subject of interest was the access to the Kenyan public health care sector, focusing on the majority citizens who can only afford health care at government-owned hospitals and health care facilities.

Literature by credited researchers and scholars on how the Kenyan health care sector needs revamping in order to alienate the suffering of the Kenyan residents as well as improve their health. Statistical databases, current trends in Kenyan health care are represented in this article with records in the local media in Kenya and books on theories were also useful in writing this paper. Most of the articles used in content analysis of this paper were qualitative but there were a few that were quantitative.

Literature review is an account of what has been published on a topic by accredited researchers and scholars. The purpose of a literature review is to convey to the reader the knowledge and ideas that have been established on a topic and what their strengths and weaknesses are. It must be defined by a guiding concept and not just a descriptive list of material available. (University of Toronto, 2011)

The search results also involved the main observations and experiences of the author as the Kenyan health care system is not a new topic for the author. The author then went through the results to pick the articles that were of relevance to this paper.

No.	**Author**	**Name of article**	**Article's content**	**Method**	**Year**
1.	Mitsuru Toda, Antony Opwora, Evelyn Waweru, Abdisalan Noor, Tansy Edwards, Greg Fegan, Catherine Molyneux, and Catherine Goodman	Analyzing the equity of public primary care provision in Kenya: Variation in facility characteristics by local poverty level	The poor majorities in Kenya pay up more for health care and receive poorer health care quality than the rich. Health care inequity is especially evident in different geographical	Quantitative	2012
2.	Abdisalan M. Noor, Victor A. Alegana, Peter W. Gething,	A spatial national health facility database for public health sector plan-	Kenya's provinces don't always receive equitable distribution and accessibility to health care. North Eastern province repre-	Quantitative	2009

	Robert W. Snow	ning in Kenya in 2008	sents an area where access to health services are deterred by many barriers including the quality of life lived there		
3.	Aruyaru Stanley Mwenda	From a dream to a resounding reality: the inception of a doctors union in Kenya	This article assesses the importance of a union that fosters the issues that doctors in Kenya face	Qualitative	2012
4.	Jacinta Nzinga, Lairumbi Mbaabu, Mike English	Service delivery in Kenyan district hospitals-what can we learn from literature on mid-level managers?	This article highlights the insufficiency in the wards which might render accessibility to healthcare difficult	Qualitative	2013
5.	William R. Hersh	The electronic medical record: Promises and problems	This article highlights the advantages of using computerized medical records as opposed to paper-based filing as well as the concerns (such as security) of computerizing the records	Qualitative	1995
6.	James A. Christopherson	Computerization of medical reasons	This article highlights the advantages, disadvantages as well as laws related to computerizing medical records	Qualitative	2009
7.	Allen Hightower, Carl Kinkade, Patrick M. Nguku, Amwayi Anyangu, David Mutonga, Jar-	Relationship of Climate, Geography and Geology to the incidence of Rift Valley Fever	The article shows the relationship between the geographic location, climate and illnesses. In more specific terms, the article looks at all these aspects in the	Quantitative	2012

	ed Omolo, M. Kariuki Njenga, Daniel R. Feikin, David Schnabel, Maurice Ombok and Robert F. Breiman	in Kenya during the 2006-2007 outbreak	Rift Valley district and shows how these factors are related to the Rift Valley Fever outbreaks in Kenya		
8.	C. Unge, A. Johansson, R. Zachariah, D. Some, I. Van Engelgem, A.M. Ekstrom	Reasons for unsatisfactory acceptance of antiretroviral treatment in the urban Kibera slum	The article analyzes the barriers to acceptance of health care in Kenya's biggest slum dwelling and indicates that illiteracy is one of these barriers	Quantitative	2008
9.	Tierney WM, Rotich JK, Hannan TJ, Siika AM, Biondich PG, Mamlin BW, Nyandiko WM, Kimaiyo S, Wools-Kaloustian K, Sidle JE, Simiyu C, Kigotho E, Musick B, Mamlin JJ, Einterz RM.	The AMPATH medical record system: creating, implementing, and sustaining an electronic medical record system to support HIV/AIDS care in western Kenya.	The system focusses on the importance of electronic medical records as opposed to paper-based records, especially in the care of HIV/AIDS patients in Kenya. The article further states that the electronic records are more organized and easy to follow in comparison to paper-based ones	Quantitative	2007
10.	Pamela M Godia, Joyce M Olenja, Joyce A Lavussa, Deborah Quinney, Jan J Hofman and Nynke van den	Sexual reproductive health service provision to young people in Kenya; health service providers' experience	The personal values instilled to Kenyans through cultural or religious backgrounds are identified as factors that influence the health care decisions they make	Qualitative	2013

	Broek				
11.	Taryn Vian	Review of corruption in the health sector: theory, methods and interventions	The article shows how corruption in the healthcare sector affects the quality of care provided to the patients	Qualitative	2007
12.	Mischa Willis-Shattuck, Posy Bidwell, Steve Thomas, Laura Wyness, Duane Blaauw and Prudence Ditlopo	Motivation and retention of health workers in developing countries: a systematic review	The article highlights the current understaffing in health care centers due to immigration of personnel to greener pastures	Qualitative	2008

Table 1: Articles used in literature review

Content analysis is used during research for compiling all the information gained thus providing awareness through representing the facts. This gives deeper discovered insights through which courses of action can be drawn.

The aim of content analysis is to clearly present all the related data to the research being conducted and analyze the outcome of all the collected data. This helps in proving the relationship between the phenomenon researched and the results attained. (Elo, Kyngäs, 2007)

This method provides a large variety of information from which different facts can be tested and proven. This gives a quantitative measure of the theory at hand. The only drawback of this method is that there is no clearly defined way of carrying out the content analysis so there no exact boundaries when carrying the research out (Elo, Kyngäs, 2007).

The main focus was to point out important and relevant data regarding this topic in accordance to the research questions provided in this paper. Scientific literature as well as

the author's personal experiences and knowledge, journals, educational publications and published articles in the Kenyan media regarding the health care system in Kenya, its accessibility and barriers were all thoroughly analyzed to ensure that the aims and research questions were well covered.

The initial search conducted was a computerized database search in various search portals such as the NCBI, BioMed and Google Scholar and Human Resources for Health. National Central health services, NCBI search portal (especially MEDLINE and Pub Med) was accessed for research of articles related to this article. 'Kenya and health care access' was searched and it gave a total of 521 results. All fields were used and the search was inclusive. The results included combining the terms 'Kenya AND health services accessibility' OR 'health services AND accessibility' OR 'access AND health' or 'access to health care'. The author was only interested in humans under the species classifications and on refining this field, the author had 299 results. The language settings were also filtered so that only text in English was considered for the writing of this paper. This reduced my search to 259 results which were sorted in order of relevance to the aims and research of this paper.

Another search was made in the journalists' collection on health care using my username and passwords in the various media facilities like the websites of the newspapers as well as the video citations given in the newspapers. Through the use of my user codes as the author is a registered member of the Kenyan fourth estate, it was easy to access articles that are stored under health care. The search was very extensive and gave over 500 articles but the validity of time was set to 1990-currently. This gave me about 150 articles and 58 videos. I decided not to use the videos because most of them were in Swahili language and the others had other mother tongues used in Kenya. The same inclusion criteria used for the NCBI portal was employed so that only English language was considered.

The topics of the results were carefully analyzed and chosen in accordance to the inclusion criteria explained below. The chosen articles were highlighted and their relevance according to the different chapters of this paper were taken into account. The data in these articles was represented in the content analysis table (see Table 1: Article list) and

their brief content given to show their relevance in the writing of this paper. The available data was widely used as it was the most relevant method to carry out a proper literature review research on this extensive subject. This made it possible to cover the aims and purpose of this paper.

The inclusion criteria for the articles selected were:

- Articles were published in English language only. No other languages or translations were considered.
- The articles were feely available and the author did not have to subscribe to review the articles.
- The articles were focused on the accessibility to health care especially in Kenya.
- Personal experiences and knowledge of the publish heath sector in Kenya was also used to enhance the aims and research questions of this paper.

The method used in the research involved a thorough analysis of the articles and Analysis of the data was the method that was used in this study. The articles chosen were carefully read and important contents that existed and repeated noted. Contents were then determined and derived the answers and fulfilled the aims of the study.

Data analysis took the following steps:

- Systematic reading of the articles, publications,
- Pointing out the significant concerns, solutions and recommendations
- Determining the core meaning of important content
- Assembling the core meanings of the data from the articles
- Finding measures of promoting sanitation and hygiene

The main category of the content analysis of this paper has been derived from the research questions as presented in the tables below:

Question 1: What is the current situation on healthcare accessibility in Kenya?

Accessibility to healthcare is a crucial factor that unfortunately for many Kenyan citizens is not enjoyed. In the table below, there are nine factors that were found to slow down or hinder accessibility to proper health care. They are shown in the table below:

SUB CATEGORY	GENERIC CATEGORY	MAIN CATEGORY
-Kenya still remains one the world's 30 poorest countries -Almost half of the Kenyan population lives under poverty line and the majority lack extra money to pay for health care.	Poverty	The current situation on healthcare accessibility in Kenya
-There is a shortage of about 40,000-60,000 nurses that the country has to try and actively recruit. -There is always an attachment to salaries and health care personnel.	Salaries of health care personnel	
-Factors like the no reservation systems in hospitals, inequitable hospital resources, and few staff members' leads to queuing. -Most of the physicians practice within the capital city; Nairobi leaving rural	Huge number of patients	

areas rarely covered in the medical field.		
- Some patients with e.g. emergencies, waterborne diseases, and malaria die in hospital queues long before they are attended by a doctor. -Personnel are unable to properly allocate time and guidance to all patients waiting to see the same doctor or nurse.	Major disease outbreaks	
-There are only four government owned hospitals equipped with dialysis equipment. -Kenya has only one MRI machine in the government-owned at the Kenyatta National Hospital and one radiotherapy machine serving the public sector.	Inadequate medical supplies, medical and hospital infrastructure	
-Residents do not fully understand prevention and control of illnesses. -Illiteracy in North Eastern Kenya in Isiolo led resi-	Illiteracy	

dents to wash and hang condoms for re-using to prevent HIV due to lack of money.		
-In Kenya there are over 45 native traditions and cultures that set out how an individual should live their lives. -One common thing in all these is emphasis on continuity of the society.	Cultural and religious beliefs	
-In Kenya people see it necessary to bribe personnel to see a doctor; this undermines prioritizing patient needs greatly. - Sometimes even knowing they are being made to pay more for services they still pay up their health is at risk.	Corruption and nepotism	
- The government hospitals receive lots of aid from WHO, EU, UN, UNAIDS, UNICEF, UNFPA, the Clinton Foundation and the World bank. -Churches contribute fund actively especially during	Donor funds	

natural calamities. -The Kenyan health care ministry sets health care policies and develops standards for health care provision. -Funds set aside annually for health cares are insuffi-cient even for primary care. -Proper policies and quali-fied individuals to spear-head projects and enable proper healthcare for Ken-yan citizens.		

Table 2: Research question 1

Question 2: What are the benefits of introducing a computer-based system in the Kenyan health sector?

The crucial benefits of computer-based healthcare systems were it implemented in the Kenyan health care sector are mainly data quality and accessibility in terms of records. They are explained further in the table below:

SUB CATEGORY	GENERIC CATEGORY	MAIN CATEGORY
-It is almost impossible in the same hospital unless the personnel go and re-trieve the records from storage.	Data quality	

-Computerization would allow for connection between hospitals and save the inaccuracy experienced in health care. -Computerization of health records would greatly save money and time and it makes work a lot easier.		The benefits of introducing a computer-based system in the Kenyan health care sector
-Unlike paper-based records in most Kenyan health care facilities, electronic medical records bear the advantage of being accessible to all the health care personnel at any health care facility in the country. -In paper-based records some information could be missing or there could be a barrier in telephone conversations rendering the process cumbersome.	Accessibility	

Table 3: Research question 2

7 RESULTS

In this chapter, the author further discusses the results that come forth from the articles below. The results are sub-divided in two parts in relation to the two research questions.

The results for the first question of this paper are very extensive as the current situation of the Kenyan health care system is shaped by very different facts that define the 44 million residents. Given other differences like family history, cultural and religious backgrounds as well as the socio-economic ones like poverty and illiteracy, the Kenyan health care system is far from the vision that the government has tried to build.

Results of the second question are very precise to the question about the benefits of computerized health care records.

The results for the research questions, which show the achievement of the aims of this paper are reflected below.

7.1 Question 1: What is the current situation on healthcare accessibility in Kenya?

There are many barriers that deter the citizens of Kenya from receiving proper health care and the main ones that were found to be relevant in the research of this paper are explained below:

***Poverty*:** The poor majority in Kenya lives under the poverty line. They have no extra money and health care is greatly undermined among them. They often have to pay up more to receive the quality care that the rich minorities in Kenya receive. The poor majority often suffer inequity to accessing public health care because their salaries are less and the cost of health care in Kenya raises day by day (Toda et al, 2012)

A research carried out on Kenya n health facilities in 2003 shows that this province recorded the highest increment in public health facilities between 2003 and 2008. Unfortunately, this is indirectly proportional to the accessibility that is witnessed in this area.

The accessibility to health care and quality of care did not necessarily increase with the increment of these health care centers. (Noor et al, 2009)

***Salaries of health care personnel*:** It is clear that the salary of an average nurse in Kenya is about Kenya shilling 20,000 (about €200) per month. Doctors barely earn double this amount in the public sector. There have been numerous strikes by medical personnel and especially the doctors who earn about Kenya shilling 35,000 (about €350) per month as their basic salary (Aruyaru S.M., 2012).

The population living in urban areas is not necessarily comprised of the rich. For instance, the Kibera slum which is the largest slum in Kenya is only a bus ride away from the city center of Nairobi. The large population that lives in this slum cannot afford the medical care offered by the medical staff that prefers to serve the bigger towns (Aruyaru S.M., 2012).

The huge number of patients: The healthcare sector is faced with the problem of well-trained personnel immigrating due to the low salaries and too much work. This leaves fewer personnel to attend the patients increasing the waiting time in outpatient departments. There are very massive numbers of patients in the queues in comparison to the personnel attending them. (Willis-Shattuck et al, 2008)

***Major disease outbreaks*:** According to a research conducted on the Rift Valley Fever outbreak between November 2006 and February 2007, many people were affected. There were 340 cases that were reported in this outbreak. The outbreak is associated to the geographic conditions of the Rift Valley Province (Hightower et al 2012).

***Inadequate medical supplies, medical and hospital infrastructure*:** In Kenyatta hospital, there are 30 beds in the ICU department. Sometimes, the badly wounded patients are made to share hospital beds, regardless of the nature of their wounds and since there are no medical files in the Kenyan hospitals in use, many infections spread killing the patients (Nzinga et al, 2013).

***Illiteracy*:** In a research conducted in Kibera slums, the largest slum dwelling in Kenya, patients suffering from the HIV/AIDS virus were offered antiretroviral treatment. Illit-

eracy was among the barriers that were found during this research. The patients who were illiterate could not undertake the treatment as they were unable to fully comprehend the benefits of the drugs that were portrayed to them and how serious their illness was. (Unge et al, 2008)

***Cultural and religious beliefs*:** In 2012, a research aimed at providing sexual and reproductive health services to the young people of Kenya was carried out but due to the values set out in cultural backgrounds and religious beliefs, contraception was generally a difficult approach for the patients to pursue or the health care personnel to provide (Godia et al, 2013).

Corruption and nepotism: Most patients see it necessary to bribe the personnel so the patient can see a doctor and get proper treatment. This makes health care inaccessible to other patients who are in dire need of health care and makes it impossible to get better treatment for those who are really suffering. Prioritizing the patient's needs is greatly undermined because other people are willing to pay more to get better services, which is tempting for most underpaid health care personnel. (Vian, 2007)

The government's efforts to combat corruption and nepotism are hardly given a chance by the citizens due to the experience they have had with bad governance. The citizens are so used to giving these bribes as it seems to be the fastest way to get proper medical attention from the personnel. (Vian, 2007)

7.2 What are the benefits of introducing a computer-based system in the Kenyan health sector?

The issues that were assessed in the answering of this question are:

Data Quality: A health care research conducted on improving HIV/AIDS care in Kenya revealed that electronic medical records are more effective than paper-based records. The electronic medical records help analyze and organize a patient's data in a timely and manageable manner making records easily comprehensible. (Tierney et al, 2007)

Accessibility: Unlike the current paper-based records in most Kenyan health care facilities, electronic medical records bear the advantage of being accessible to all the health care personnel at any health care facility in the country (Hersh, 1995).

This encourages consultancy among health care personnel instead of just referring the patient to other facilities. In paper-based records, some information could be missing or there could be a barrier in telephone conversations rendering this process cumbersome. (Christopherson, 2009, pg 2-4)

8 FINAL DISCUSSION AND CONCLUSION

The aim of this study was so that the author could acquire data on the transparency and accessibility to the Kenyan government-owned health care system. The author concentrated in researching information that explained in detail the kind of barriers that Kenyans have to face in order to receive this basic right and maybe put a few pointers to how this situation can be solved.

There were two main research questions that the author thought and felt were very relevant in achieving this aim. The questions were:

- What is the current situation on healthcare accessibility in Kenya?
- What are the benefits of introducing a computer -based system in the Kenyan health sector?

As always, the hardest bit in the solution of any problem is accepting that there is a problem. When people accept that there is room for improvement for the Kenyan health care system, then the government can work on tackling the issues at hand to make the system acceptable according the set international standards.

This research of this paper helped to highlight the issues that deter the accessibility to the Kenyan health care system. The author found out that the current situation on

healthcare accessibility in Kenya poses a challenge to the government to do better in provision of funds so as to improve the facilities in the hospitals. It also calls for Kenyans to join hands and fight the vices that render this sector inadequate so as to also improve their well-being and lifestyle.

The current situation in Kenya in terms of accessibility is deterred by corruption, nepotism, poverty, illiteracy, cultural backgrounds, religious backgrounds, major outbreak of diseases, the huge number of patients, salaries of health care personnel, inadequate facilities, medical facilities and infrastructure in the hospitals and the donor funds.

This could be regrouped to show what the government must work on and what the citizens can help improve.

The government can handle and solve the following barriers that resulted from the extensive research conducted for this paper:

- Major outbreak of diseases
- The huge number of patients
- Salaries of health care personnel
- Inadequate facilities, medical facilities and infrastructure in the hospitals
- Donor funds

Throughout the years, most disease outbreaks are repetitive. For instance, between December 2006 and June 2007, there were numerous cases of the rift valley fever which claimed the lives of many humans as well as those of livestock in the North-Eastern region of Kenya. These re-occurrences could simply be handled by the government providing vaccination for the region because the residents herd lots of livestock for a living and the spread of this disease is rapid. The residents could not afford to act fast enough because of the cost of the vaccination. These types of outbreaks can be handled by the government to save the residents and eliminate human suffering. Other major outbreaks have been repetitive cases of water-borne illnesses and the residents cannot afford treatment early enough to save their lives without the government intervention.

Mostly, road accidents are some of the major causes of huge hospital queues in Kenya. Accidents occur too often leaving lots of injured persons and others die instantly. The government has tried to mobilize Kenyans to drive carefully and stop driving under influence but unfortunately, there are always cases of accidents. This campaign for safe driving and building more roads to avoid too much traffic should continue. Some of them result from poor roads where there are too many potholes or because of lack of street lights. The government should put more street lights because after leaving the capital city, Nairobi, street lights are very rare. The last thing that the government can do is eliminate un-roadworthy cars because in some accidents, the car undergoes a mechanical difficulty that the driver cannot control.

The salaries of the health care personnel need a thorough review because these people have too much work in comparison to the money they make out of it. Compared to the WHO standards, the health care system in Kenya is still lacking enough personnel because most doctors or nurses go in search of greener pastures in other countries and the rest who stay in Kenya will only work in the main capital cities where other social amenities are readily available. That deters accessibility of health care in rural areas where majority of the Kenyan population resides.

Lack of medical facilities and infrastructure should be worked on because things like thermometers, blood pressure meters, EKG machines and saturation meters should never lack in any health care facility. This could also be readily availed so that personnel from different departments do not have to share them and in doing so, many lives could be saved. Other facilities like hospital beds and linens should also be improved so that patients do not have to share them because this is unhygienic and the spread of infection is very high. Sometimes, patients from road accidents have to share a single bed in spite of their fractures and their medical history.

Donor funds are very wrongly misallocated which makes them a barrier to accessibility to health care. When donations come, they are not distributed fairly to the patients who need them the most but rather, there is lots of corruption and injustice in sharing them out. This ends up missing the target and the government should ensure that these are

correctly shared out to the whole country, not just to the capital city. The government must ensure that hospitals in rural areas get a fair share too.

The citizens on the other hand can handle and solve the following barriers:

- Corruption and nepotism
- Poverty
- Illiteracy
- Cultural backgrounds
- Religious backgrounds

Corruption is always conducted by two parties. The government has tried to ban corruption in all the public facilities including the health care centers and it's the responsibility of every Kenyan citizen to put an end to it by saying no. The patients should join hands and refuse to pay extra money just to get better treatment because trying to bribe the personnel only serves to make the lives of other citizens who cannot afford to pay extra more difficult and their health care is greatly undermined.

Poverty has led many Kenyans to form an opinion that they can never get treated at the hospitals and so when they fall sick, they wait for the disease to really advance before they go for medical attention. This kind of attitude ends up costing these patients more and the fact that cost was the main reason they did not seek medical attention in the first place means that they get poorer in terms of finances and lifestyle. They should seek medical attention immediately and try to take advantage of the government subsidies on the health care services as well as the free medication, guidance and counseling that is availed at the hospitals.

Illiteracy can also be handled at an individual level where the person puts effort in looking at the updates as provided for by the government. In case the person cannot read or write, there is always a member of the staff and other media like radio and TV that always spread health care information so that people know their rights and why when it comes to their health it's better to prevent than to cure.

Cultural and religious beliefs should also be an individual's efforts because the person can critically think about the impact that these institutions pose on his/ her health. For instance, if the tradition encourages having more than one marital partner in the polygamous family setting and the religion bans all sorts of contraception, the individual must then look at the health risks this poses on them.

They could look whether having too many unplanned for children is healthy for them or having to contract other illnesses in the process. In some religious beliefs in Kenya, some people believe that only God should heal and they cannot go to the hospital. In case of accidents for instance, where the patient has a really big wound, sometimes they have to think of the pain and the risk that the wound poses to him because clearly, it's a call for medical attention and the patient understands that they could die from it.

The second research question about the benefits of creating a computerized filing system in the government-owned hospitals is an effort that the government should carefully allocate funds to as it can end up saving many lives. The personnel would have a proper medical history before devising ways of treating patients that would make their work easier in case the patient does not remember details of his/her health history. Other important information like allergies and other medication in use could also save time and cost because the doctor would have sufficient information regarding the contraindications of medication and thus eliminating unnecessary suffering of the patient.

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