**A mobile based application for patients to confirm the authenticity of their health care providers.**

# 1.1 Background Information

The state of health care in Kenya presents both challenges and opportunities. The public health system has grappled with underfunding and low staffing ratios, but there is hope that the ongoing devolution of services will improve the equitable delivery of quality health care, alongside the roll out of more private sector services. The government has committed KSh38bn ($418m) to the sector under the Healthcare Transformation Programme as part of its wider Vision 2030 plan.

A country of approximately 37 million people, Kenya has struggled to build a health system that can effectively deliver quality health services to its population. Access to health care varies widely throughout the country and is determined on numerous factors, though in particular, major divides exist between rural and urban communities, and between the moneyed elite and the poorer masses. In Kenya, the poorer masses—those living below the national poverty line—constitute approximately 52% of the population

Healthcare is one of the most essential human requirements, and its disbursement should be addressed with the requisite sensitivity to prevent loss of life and decrease in human capital. Governments, healthcare agencies and non-governmental organizations have collegial and tremendous opportunity and have addressed quality healthcare in a bid to transform the sector for enhanced efficiency and sustainability. However, sub-Saharan Africa has had numerous problems that have maimed and compromised the quality of health care service delivery process, availability, accessibility and affordability. Some of the issues affecting healthcare in the Sub-Saharan Africa includes lack of infrastructures, poor management of healthcare facilities, lack of essential equipment, shortages of drugs, affordability, accessibility and unqualified staffs.

The Medical Practitioners and Dentists Board is a statutory authority established under Cap 253 Laws of Kenya to regulate the practice of medicine and dentistry in the country. The organization rely on our Strategic Plan and the Client’s Service Charter to drive our vision and mission hence delivering our core mandate as per Cap 253 Laws of Kenya. Over the years signed and implemented performance contracts as a tool of Monitoring & Evaluating Service Delivery

Over 2,000 doctors have left the national healthcare system this year alone. A doctor’s salary in Kenya is now less than the price of a wheelbarrow. A desperate need for more doctors in many regions results in insufficient checks on their background or even that they have any medical training at all, he believes. At present, just 4.6 per cent of the country’s GDP is invested in the healthcare system and experts say any reforms cannot be truly successful with funding at this rate.

Patients at the hospital have been complaining of seemingly unqualified doctors attending to them at the casualty department, claims that forced the hospital administration to launch investigations.  “There have been complaints from patients that some doctors were collecting blood samples and other tests outside the consultation rooms which are against our policy,”

Mr. Wairimu is facing one count of rape and 10 counts of operating unlicensed clinics, but his highly publicized arrest appears not to have deterred the myriad illegal clinics operating in the area a pointer to a wider regulatory problem in the country.

Poor oversight of medical professionals and facilities caused a recent spate of human rights violations, including the death of two babies in Elgeyo-Marakwet County who were given measles vaccines by a housekeeper allowed to operate as a medical professional; the paralysis of more than 20 children in Busia County after improperly administered malaria shots; and the horrific sexual assaults of women seeking care in Mugo Wairimu's illegal clinics in Nairobi. These are just a few examples of the inadequate regulation of medical care in Kenya that's putting patients' health and safety at grave risk.

Patients under the care of any unlicensed medical practitioner face the risk of being misdiagnosed or contracting a new infection altogether.

Crackdowns by the government seem to be doing very little to regulate an industry driven by greed rather than care for the sick with the Kenya Medical Practitioners and Dentist's Board (KMPDB) statistics now showing that the situation is dire. "Every year there is a crackdown across the country and we close an average of 800 to 1,000 illegally operating facilities," (Daniel Yumbya,) With no public hospital in the whole of Githurai, Zimmerman or neighboring Kasarani and Roysambu, residents continue to throng illegal private clinics in spite of the dangers they may be exposing themselves to -- since there is no way of telling which is licensed and which is not. Here, the wheat and the chaff thrive

## 1.2 Problem statement

Five years ago, reports of people masquerading as doctors were common in Kenya. It became so 'normal' that such stories either never made it into the media or if they did, they appeared as briefs in the newspapers and never made a blip on radio or television.

Today, that situation has dramatically changed. There are still cases where unqualified people try to pass themselves off as doctors. Last September, in a case so awful that it was widely reported, a man pretending to be a gynecologist was arrested for drugging and sexually assaulting his female patients.

Kenya's acute doctor shortage creates an ample opening for quacks to operate. With only 11,500 doctors to serve a population of 44 million, it's no wonder that there are some people who see this as a chance for self-enrichment. Many public health care facilities are far from home, congested, ill-equipped and sometimes lacking medicines. Sick Kenyans are forced to turn to the person nearest to them who claims to be knowledgeable, sometimes with deadly results.

Some 90 per cent of Kenya's clinics are run by unqualified people, according to the Kenya Medical Practitioners, Pharmacists and Dentists Union (KMPPDU).

## 1.3 Research Objectives

1. To understand the challenges faced by patients in identifying a genuine doctor and health facilities.
2. To review the architecture, significance and application currently in place.
3. To design, develop and test the viability of the system
4. To validate the solution

## 1.4 Research Questions

1. What challenges do patients face while accessing medical health care?
2. What are the existing platforms already being used?
3. How to develop, implement and test the viability of the solution?
4. How can the solution be validated?

## 1.5 Justification of study

The application will enable users to report any unregistered facilities and Practioners which will be displayed on Google maps hence creating awareness to the public and the Kenya Medical Practioners and Dentistry Board of quacks and unlicensed facilities.

These research will have a great impact on society because it will at least removes from the equation the hopelessness and helplessness that citizens feel when it comes to confirming the authenticity of their health care providers. The target market of the application will be patients trying to access health care.

# 1.6 Scope and Limitation

This research is focused on confirming the authenticity of health care providers by the citizen and how the citizens can report incase of any unregistered facilities and malpractice encountered.

A mobile application that runs on the android platform since the target users are patients in urban areas and have phones running on the android platform.

Attention of this research will be limited to patients who visit clinics in Nairobi area. Nairobi County being the most affected area with quackery and unlicensed clinics in most building.