

## **Business plan summary**

### **Hypotheses**

1. Time spent in hospitals can be cut in half by incorporating a more adaptive and flexible management system.
2. The need to physically be in hospitals can be completely eliminated for most minor diseases through an effective system.
3. It is possible for virtual healthcare to cater to all steps of the treatment process, including lab testing which is the loophole observed in most existing systems. This does not imply that all diseases can be treated virtually, there are exceptions based on severity.
4. The greatest deterrent to tele-healthcare is its little benefit to hospitals. By making hospitals and healthcare institutions the primary customer and beneficiary, there is a higher chance of success, and the primary asset, doctors, don't have to be sourced but will be readily available through hospitals.
5. Virtual consultations can be up to 20% more effective than physical consultations in treating certain diseases, based on how fast care is given, convenience, and number of follow ups done on a patient.
6. Tele-healthcare can increase health coverage by up to 30% in Sub-Saharan Africa.

### **Summary**

The proposed solution to finally crack the field of tele-healthcare is AfyaHub technologies. Its most basic concept, while similar to other existing solutions, is different in its implementation as it caters more to the existing flaws that make tele-healthcare less appealing to its target market. There is an overwhelming preference for physical consultations despite inconveniences such as

long queuing times, misdiagnoses, and an inability to get to a healthcare institution in some cases. There is some resistance from healthcare practitioners, too, as it is assumed that virtual care will always be incomplete, due to its inability to facilitate testing. AfyaHub caters to all these.

It is a hospital management system that incorporates virtual communication channels, self-learning intelligence systems, and remote ticketing, registration and payment systems. A patient can queue and pay remotely, consult virtually, get tested in his/her locality, and purchase drugs conveniently. Follow up consultations will also help negate any drawbacks that may arise from virtual consultations. The self-learning system will help ease hospital operations by identifying trends in diseases and adapting the system to make treatment faster, for instance, by queuing patients with similar symptoms into one room or doctor. Our strategic partners include hospitals, clinics, drug delivery companies, and individual partners. The hospitals are essential in providing certified doctors to deliver treatment services to the patients. The clinics, which we will collaborate with all around the country, will have our system incorporated and will act as testing centers for local patients through their equipped laboratories. Their pharmacies will also provide necessary drugs for the patients, on prescription from the doctors. The drug delivery companies will be an alternative for patients, where they can order their prescribed drugs and have them delivered to their location. Individual partners, that is, certified laboratory technicians and pharmacists, will be able to set up remote testing centers and chemists adjacent to them in Afya Hub's name. These testing centers and pharmacies will be run independently, but will also offer localized services to patients referred by doctors from our system. Find attached a separate document describing the working of the entire system.

**Comparison with similar existing systems.**

1. Most consist only of applications, one for patients and the other for doctors, to help facilitate communication and payment. Afya Hub consists of a hospital management system, a self-learning system, a remote ticketing system, remote testing centers, drug delivery services, pharmacies and clinics.
2. Most existing systems, much like our earlier model of Afya Hub, focus on the patient as the primary consumer, and offer little benefit to healthcare institutions. Our system has healthcare institutions as the primary consumer, offering benefits such as reduced traffic in hospitals, flexible options for consultations, reduced time spent in consultations, among others.
3. To a great extent, existing systems completely eliminate the need for physical consultations and, therefore, hospitals, too. Our system marries both physical and virtual consultations, allowing them to work hand in hand, virtual consultations being available only for those ailments that do not require physical consultations.
4. Existing systems have to register doctors on their platform to facilitate treatment, hence verification of certifications is a big issue. Afya Hub readily outsources the needed skill from hospitals.
5. No existing system covers the entire treatment process, more so testing. Afya Hub will make available remote testing centers that can be accessed easily by patients regardless of location, making the treatment process more wholesome. The idea was acquired from the existing M-PESA, which has many individually-owned shops to facilitate transactions. The testing centers will follow the same model, in that they can be owned and run by any qualified practitioner and can even be under AfyaHub, as long as our system is installed.