AFRICA eHEALTH FOUNDATION

ANNUAL REPORT 2021

Summary of the activities of the Africa eHealth Foundation 2021

Background

The Foundation was established on 27th December 2016 under the name 'Stichting eCareAccess' and later changed to 'Africa eHealth Foundation'. The Foundation was granted an ANBI status on 5th of February 2018 with as effective date on 27th December 2016.

The actual activities of the Foundation started in the course of 2017 with the development of the operationalisation of the objectives and the activities. The point of departure is the vision of 'affordable quality care for all'. The use of digital means combined with change management and best practices is the core of the approach. The key focus areas are:

- Performance improvement for the health facility and referral chain
- Cardio vascular risk management and diabetes mellitus
- Mental health
- Community empowerment (related to the above-mentioned areas)

The target group are NGO hospitals, generally former mission hospitals in Africa. These hospitals are often focussed at the common man, the poor and the vulnerable. Their mission is to create social impact. Within the local context, these hospitals generally deliver quality care. However, they see their support base shrinking with a rapid decline of donors. Government made arrangements that oblige these hospitals to deliver services, while the public contribution significantly lacks behind. Consequently these hospitals risk to enter in a downward spiral. New ways of working are required and new strategic directions in order to assure 'affordable quality care for all', including the disadvantaged. Generally the NGO hospitals lack chronically funds and the ability to come to a mind shift to set out a new course.

The Africa eHealth Foundation provides financial support, coaching and best practices to assist these hospitals to reach a higher level of performance and to become sustainable. From the experience it is clear that to create a lasting impact three conditions are needed:

- a sound business case
- accepted social change
- embedded triggers for continuous improvement.

Information and communication technology (ICT) is the main enabler for the 'renaissance' of the NGO hospitals. Experience learns that more is needed than technology only, as new paradigms and working practices have to be developed.

Activities in 2021

In 2021, a good start was made to further operationalise three fields:

(a) the digital transformation of an African hospital. A modest start was made with using data analysis as a driver for change. This is linked to a change management approach.

(b) the development of empowered community care and connected care as from the individual to the primary health care centres, hospitals and telemedicine services (in Ghana);

(c) performance improvement for the health facility and referral chain with software solutions and best practices with a focus on general hospital management, maternal health care and cardio vascular risk management and diabetes mellitus in Kenya. Two health clinics of the Roman Catholic Church in Kiambu County were enrolled in the program in April 2022. In December 2021, the Githunguri Holy Family Hospital in the same County was enrolled as well.

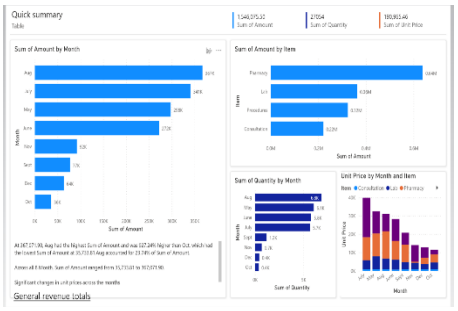
The progress in each field is summarized below. The Covid-19 pandemic was still problematic and slowing down developments, but accelerates the digitization of the health sector.

The digital transformation of an African hospital

The Africa eHealth Foundation wants to achieve the ‘renaissance’ of the NGO hospitals by supporting the existing initiatives of European medical professionals and hospitals that support African NGO hospitals and by providing additional expertise on digital transformation and innovation in health care. A number of experts participated in the development of an approach to digital transformation. The starting point was often; “What is the context, the problems mentioned and what are the questions that I pose”. This hands-on approach combined with scientific insights has grown into a body of knowledge that can be used in the activities of the Foundation in the future. In 2021, a start was made to test a tool to make a quick scan of

the hospital performance according to five dimensions: patient satisfaction, quality of (clinical) care, costs of care, performance of health professionals, (financial) performance of the health facility. The Penta Aim concept provides a balanced view on health care from the perspective of the main stakeholders involved.

A second activity was the development of the concept of 'Continuous Improvement Cycles' (CIC) for a health facility, including outreach staff. It is a gradual improvement programme based on the principles of Kaizen and adapted to the relevant context. This concept was applied in Kenya. How does it work to upgrade the performance? An example from real life can illustrate.
Clinic Yaya (real case, fictive name) was spiralling down. Due to Covid-19 less patients dared to come, debts were built and staff had to be laid off. Yaya is a rural clinic- not so far from a big town. Yaya is a trusted point of care for the community. Poverty, drugs, domestic violence is the environment in which the clinic plays a critical role to care, counselling and be open to the poor and vulnerable. After full digitization, the Africa eHealth Team worked together with staff and management and using 'performance booster' as their guiding tool and set of principles. As a result the revenues increased by one third, and improvements and new services were implemented. The staff discovered the joy and the strength of own initiative. The clinic is now sustainable and continuously increasing the quality of care.
These encouraging results stimulate the further development of the CIC tool. This is planned for 2022.



Empowered Community Care (Ghana)

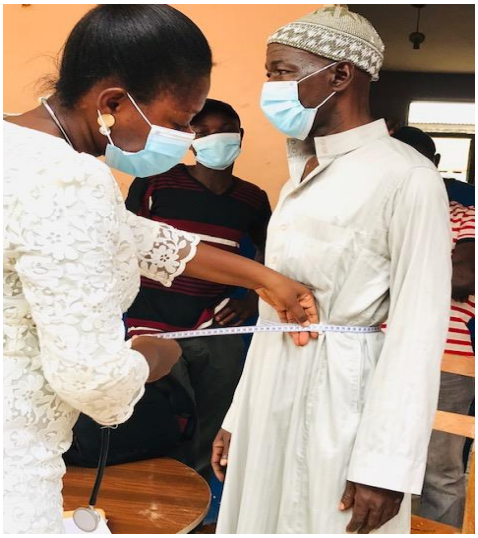
The Smart Community Empowerment project in Ghana is implemented in collaboration with the Phillips Foundation. The project is implemented at two sites; Madina (on the outskirts of greater Accra) and Holy Family Hospital in the rural areas.

Diabetes and hypertension are growing in epidemic proportions and disproportionately affects lower income, diverse countries. The prevalence of diabetes has been increasing worldwide in the past two decades, however the use of effective methods to provide self-management and behavioural change of the patient is lagging behind and greatly needed.
Empowerment was applied, for the first time in health issues as part of health promotion programs. It was accepted as powerlessness in risk factor for having an adverse outcome for almost every disease; therefore, empowerment arises as a health-enhancing strategy. empowerment was later used to increase the autonomy and participation of patients in the adoption of a healthy lifestyle.

Our approach is through facilitations and support; this include using the health care providers to stimulate support and management of patients/participants. We also use the diabetes self-management education support (DSMES) module to promote factors that will enhance patient's self-reflection process (healthy diet and safe practices to control sugar and Bp).

The contents is focused on:

- Identifying areas of priorities with patients' needs and care
- Education based on identified problems
- Education for participants to self-reflect on their problems
- Health providers involvement to support patients/participants in managing their condition
- Involving doctors to help patients /participants make informed decisions/choices about their health
- To also involve participants in the process to actively control and make decisions to support self-management practices such as reporting early to the facility when they detect complications, practice safe ways to control their sugar and blood pressure



Participants became competent in accepting that diabetes /hypertension is a self-managed disease and to identify and implement their own treatment goals which should have real impact on their lives.

The key lessons learnt include:

- Effective learning process (Full knowledge about diabetes/hypertension should be delivered in a way that it affects participants personally to change),
- To set personal goals and draw a personal self-plan and how to implement (weight loss, blood sugar etc.)

In the case of the Madina hospital for example, two different community groups are created (one Mosque group and one Pentecost Group) who meet on a regular basis since April 2019, led by a facilitation leader/ M&E specialist. The groups are divided into both diabetic or hypertensive. The link was strengthened with the Community health care workers and dietician from the facility. They have been facilitating and supporting patients through education to reflect on their experiences and set targets to achieve their set goals. The community nurses took charge of regular home visit s that really improved patient quality of life; improved greatly medication intake, good diet plan, lifestyle, and exercise. For patients, improvement cycles had been initiated by which by the following were measure weight, blood pressure, sugar and diet

was the key issue among patience. These improvement cycles were particularly to stabilize the glucose levels of patients. Regular home visits were done by the community health workers to teach these patients how to measure their blood glucose with a glucometer and teach them on self-management skills at home to prevent severe complications ‘and also guide them through a proper diet plan.

Key indicators of concern include:

- Reduce waiting time to see a doctor/treatment
- Improve sugar control/blood pressure
- Minimize cost of treatment
- Changing attitude and practices of health-care providers
- Decrease in number of hospital attendance
- Diet plan improvement for DM/ hypertensives
- Creating a reliable environment for care
- Doctor–patient relationship
- Average cost of treatment and medications
- Provider performance
- Utilization of services
- Continuous and reliable information
- Staff performance
- Patient adherence.

Holy family hospital – Community Empowerment Session

Primary Health Care Kenya

This project started in Kenya in 2020. The purpose is to demonstrate the easiness of use, the cost effectiveness and the health outcomes of a comprehensive set of digital solutions and related best practices for Primary Heath Care in Kenya. The project includes the digitization of four health facilities in Kiambu County. Both the public sectors and the RC health facilities participate in the project. The desired results are:

1. Three fully digitized Primary Health Centre and one Hospital including reporting in DHIS2, which is the public health reporting system.

2. Strengthening cardio/ diabetes/hypertension care through use of a supportive mobile App. And to have an eCare possibility (i.e. supporting patients from distance through a call centre at a diabetes clinic at a convenient location to be decided in mutual consultation).

3. Strengthening maternal health care by using the Mobile Obstetrics Monitoring (MOM). This is a software solution (by Philips Innovation Centre) that allows community healthcare workers to perform antenatal risk stratification, receive diagnostic assistance, and assess a patient's progress via a mobile device to enhance maternal care in community settings. With MOM, ObGyns and midwives jointly review and manage each case. The MOM application is integrated in AfyaPro.

4. Assist the health facility in continuously improving their performance at the pace indicated by the health facility. This called Continuous Improvement Cycles. The CICs follow a simple Plan-Do-Check- Adjust (PDA) cycle of two months. This will be guided by the change team and coordinated by the process owner at health facility level. The analysis of the current situation and setting the targets is done in a participatory manner with at all relevant actors involved. The first CIC session will take about one and a half day, next sessions will be within a day. The core tenets of CIC are:

(a) Standardizing a process so that it's repeatable and organized,
(b) Focusing on measurability and evaluating progress using data,
(c) Comparing results against the goals set (i.e. 80% adherence to the care programme),
(d) Innovating new and better ways to achieve similar results,
(e) Responding to changing circumstance and (reflexive) learning to continuously improve the PDA cycles.

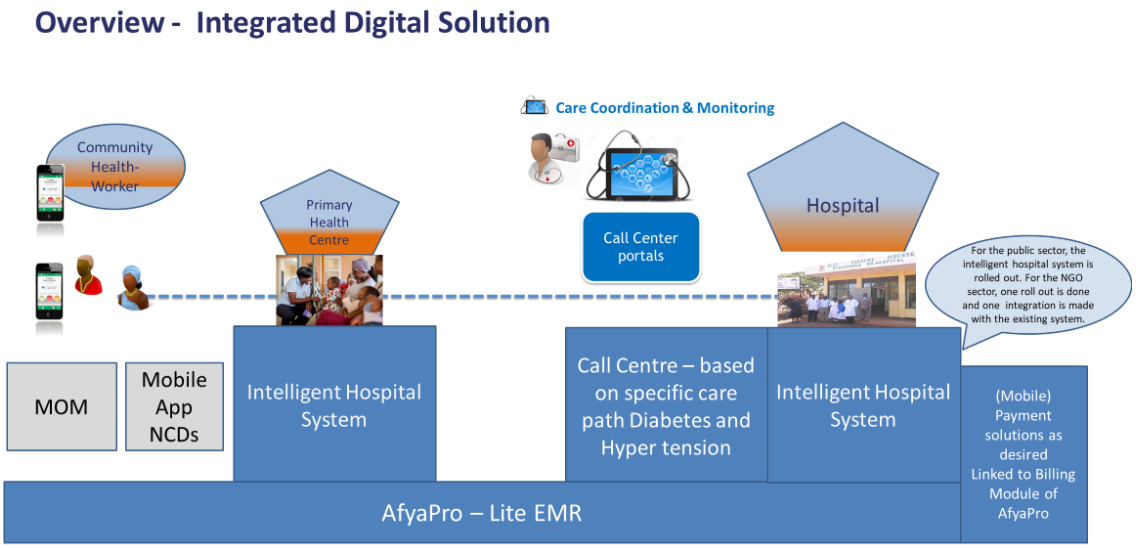
5. Research on results and impact for (1) patient satisfaction, (2) clinical outcomes, (3) costs of care, For this purpose a base line survey has to be made prior to start-up of the project.

6. Organise knowledge sharing around engagement/adoption, results, impact and attributes/relevant processes for scaling for both the technology as well as the related performance improvement practices.

The project was delayed due to COVID-19 and the time consuming process of obtaining all required research permits. In 2020, the integration MOM with AfyaPro was completed. The baseline survey started in February 2021 as well the implementation on two sites. The third site was added in December 2021. The fourth site was planned to be a public site. The intended public hospital was exchanged for another public hospital and unfortunately the administrative procedures involved delayed implementation beyond the time horizon of the project.

The Research is carried out jointly with the University of Nairobi and Erasmus University Rotterdam.

The overall system is sketched below.



Support

The PR activities and fundraising activities have been halted in 2020 and 2021. A gift has been received to assist the development of another objective of the Africa eHealth Foundation i.e. the strengthening and digital support for mental health care.

Outlook

In 2022,the three key activities will be further pursued. A more active use of business information should contribute to performance improvement of the health facilities.

As of the end of 2021, the field of eMental Health has been explored. Trauma and well-being are central points. The latter is linking to cardio vascular and diabetes as chronic patients often experience depression and other mental problems.

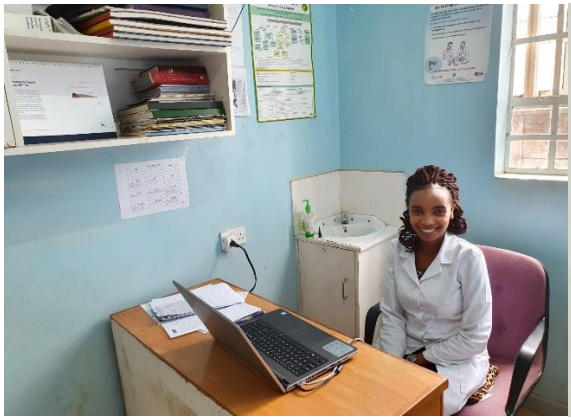
The linkage with universities and research will be further strengthened in 2022. Presently, Pearl Aovare pursues PhD research on the community empowerment approach for cardio vascular and diabetes at the Amsterdam Medical Centre. For the Kenya project, the collaboration exists between the University of Nairobi and the Erasmus University Rotterdam.

Veenendaal, 10th March 2022

The Board,

(was signed by)

Dr. Ir. N.P. Moens Dr. H. Vergunst A. Fieret RA RB



Balance sheet as at 3 December 2021

		31-12-2021		31-12-2020
Actifs				
Tangible assets				
Shares in related companies		40		40
Current assets				
Debtors and short term receivables	7.218		0	
Cash at bank and at hand	85.391		109.654	
		92.609		109.654
Total actif		**92.649**		**109.694**
Passifs				
Capital and reserves				
Continuity reserve	11.845		5.737	
Designated funds	4.500		4.500	
		16.345		10.237
Current liabilities				
Creditors and short term payables		76.304		99.457
Total passif		**92.649**		**109.694**

Statement of income and expenditure 2021

	2021 Actual	2020 Actual
Income		
Income from fundraising	277.241	330.207
Total income	**277.241**	**330.207**
Expenditure		
Achievement of foundation goals	269.986	329.207
Fundraising	0	0
Salary costs	0	0
Management and administration	1.147	1.137
Total expenditure	**271.133**	**330.344**
Profit/loss of the year	**6.108**	**-137**
Allocation of the annual result		
Continuity reserve	6.108	-1.137
Designated funds	0	1.000
Profit/loss of the year	**6.108**	**-137**

Cash flow statement 2021

	2021 Actual	2020 Actual
Profit/loss of the year	6.108	-137
Movement in short term receivables	-7.218	0
Movement in short term payables	-23.153	-21.057
Cashflow from operations	**-24.263**	**-21.194**
Cash flow from investment activities	**0**	**0**
Financial cash flow	**0**	**0**
Cashflow of the year	**-24.263**	**-21.194**
Cash at bank and in hand at 1 January	109.654	130.848
Cash at bank and in hand at 31 December	**85.391**	**109.654**

Accounting principles for the preparation of the financial statements

General

The financial statements have been prepared in accordance with Title 9, Book 2 of the Netherlands Civil Code and with the guidelines RJ650 for fundraising organisations.

Valuation of assets and liabilities and determination of the result takes place under the historical cost convention. Unless presented otherwise, the relevant principle for the specific balance sheet item, assets and liabilities are presented at face value.
Income and expenses are accounted for on accrual basis. Profit is only included when realized on balance sheet date. Losses originating before the end of the financial year are taken into account if they have become known before preparation of the financial statements.

Principles of valuation of assets and liabilities

Financial fixed assets
Participations are valued at historical cost. The result represents the dividend declared in the reporting year, whereby dividend not distributed in cash is valued at fair value.

The participation consists of 29% in Africa eHealth Solution International B.V.

Receivables
Receivables are included at face value, less any provision for doubtful accounts. These provisions are determined by individual assessment of the receivables.

Cash at banks and in hand
Cash at banks and in hand represent cash in hand, bank balances and deposits with terms of less than twelve months. Overdrafts at banks are recognised as part of debts to lending institutions under current liabilities. Cash at banks and in hand is carried at nominal value.

Principles for the determination of the result

Income
Received income are recorded as income in the income statement in the year in which the subsidised costs were incurred or income was lost or when there was a subsidised operating deficit. Income is recognised when it is probable that it will be received.

Financial result
The interest income and expenses regards the interest income and expenses of the loans and loan credits of the financial year.