



Guinea-Bissau:

An Ideal Pilot Country for eHealth in Sub-Saharan Africa?





Table of Contents (ToC)

Topic	Slide number
Demographics	3
Access to Healthcare	4
Top 10 Mortality Causes	5
Healthcare Spending	6
Digital Literacy	7
Digitisation and Milestones	8
eHealth Solutions	9
eHealth SWOT	10
Why Invest in eHealth in Guinea-Bissau	11

Overview

- 1 *Opportunity for growth and healthcare access*
- 2 *Openness to digital and high adoption rates*
- 3 *Space for ground-breaking grassroots innovation*
- 4 *Scalability to address regional (ECOWAS) eHealth issues*
- 5 *Opportunity to integrate digitisation to infrastructure development*
- 6 *Increased exposure to international NGOs*



Demographics

Guinea-Bissau's demographics are homogeneous to the trends in Africa's population growth, birth rates and median age



2M

Population (2021)



3.3M

Population (e2050)



4.0

Fertility Rate (2019)

6.9 in 1990



18.8

Median Age (2020)



Guinea-Bissau (GW) is a country rich in untapped natural resources, located in West-Africa's North Atlantic Coast, bordering with Senegal to the north and Guinea to the South-East.



1.4B

Population (2021)



2.5B

Population (e2050)



4.3

Fertility Rate (2019)



19.7

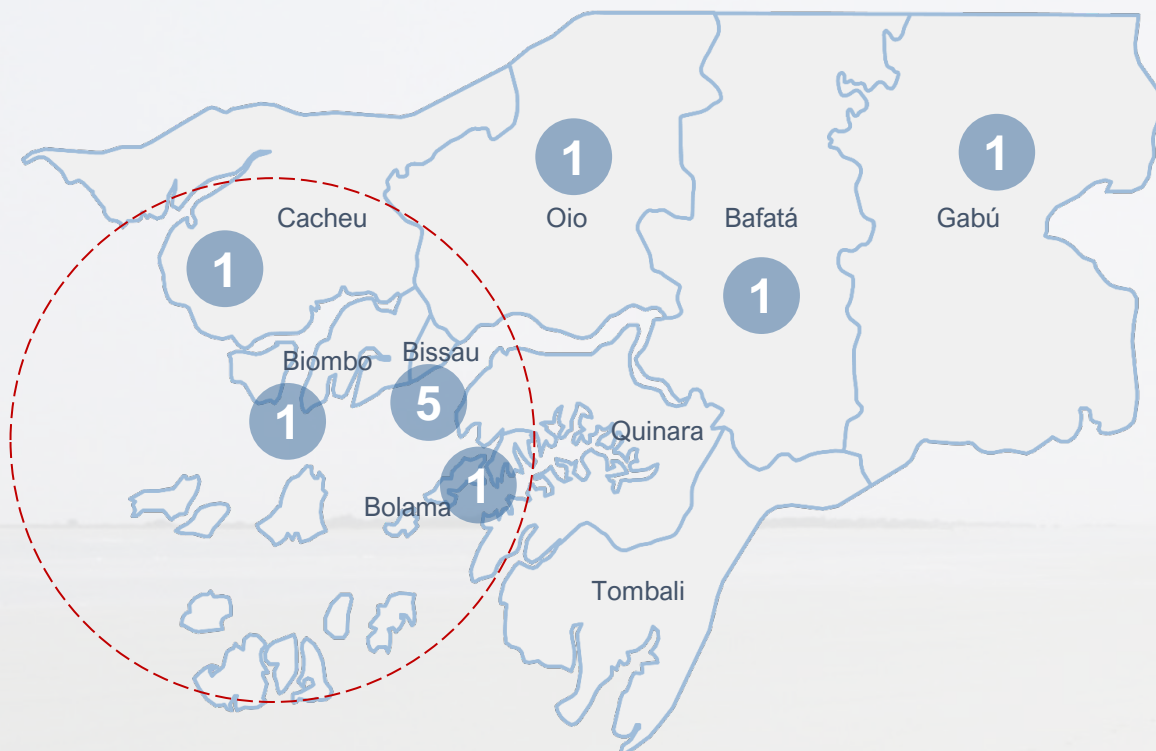
Median Age (2020)



Access to Healthcare

Guinea-Bissau's healthcare is fragmented with limited reach in remote, rural areas

Major Hospitals in Guinea-Bissau



Access to healthcare is **more common in the Western and coastal regions** of Guinea-Bissau where the population is concentrated



66% of the country's population lives more than 5 km from a health centre



More than **4,000 community health workers provide access** to basic health services in rural areas



Each community health worker is responsible for **~350 inhabitants or ~50 households**



The national average is **one health centre for 13,500 inhabitants**

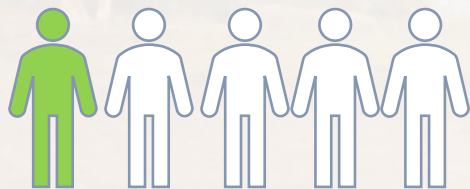


Top 10 Mortality Causes

The top mortality causes in the country are from communicable diseases, preventable neonatal deaths and nutritional diseases



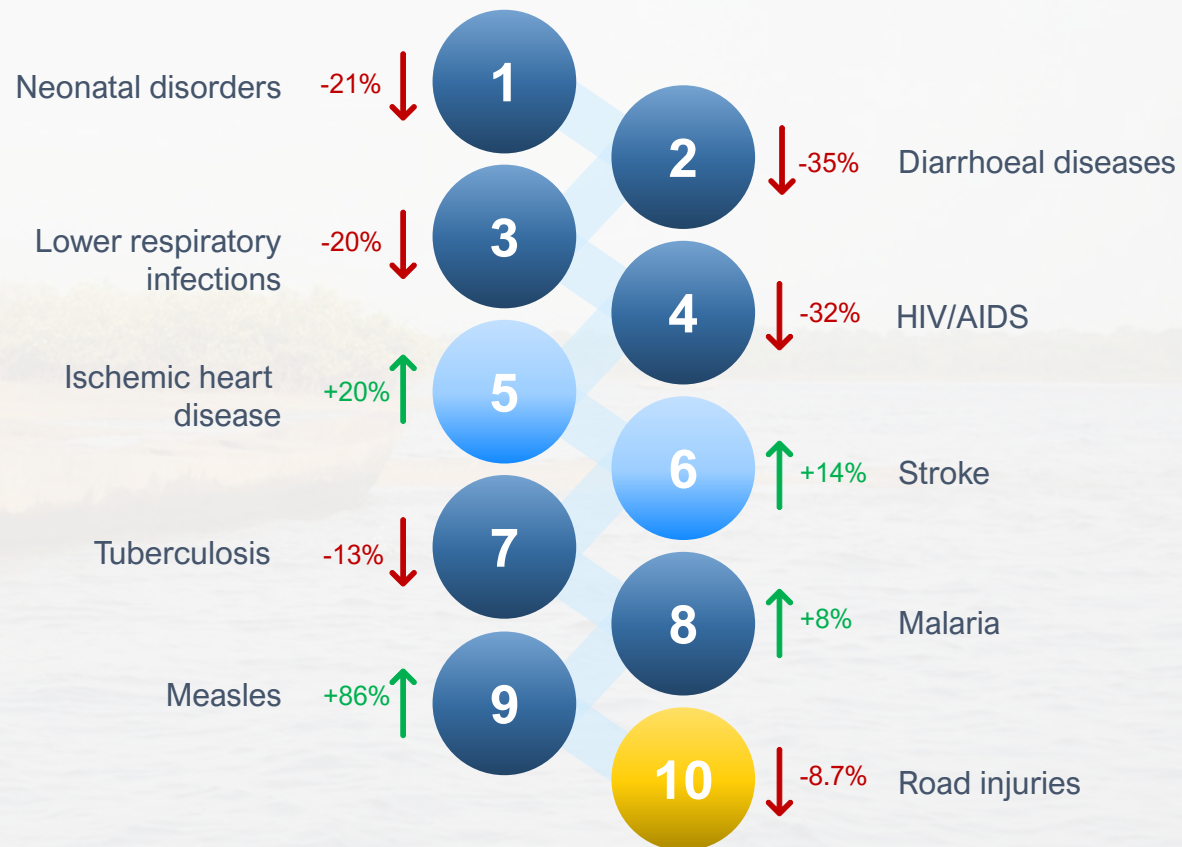
70% of mortality causes are attributable to communicable, maternal, neonatal and nutritional diseases.



20% of mortality causes are attributable to non-communicable diseases. The percentage of non-communicable diseases is expected to increase in the subsequent decades.

90%

of the top 10 mortality causes in Guinea-Bissau can be reduced or managed by implementation of eHealth initiatives.

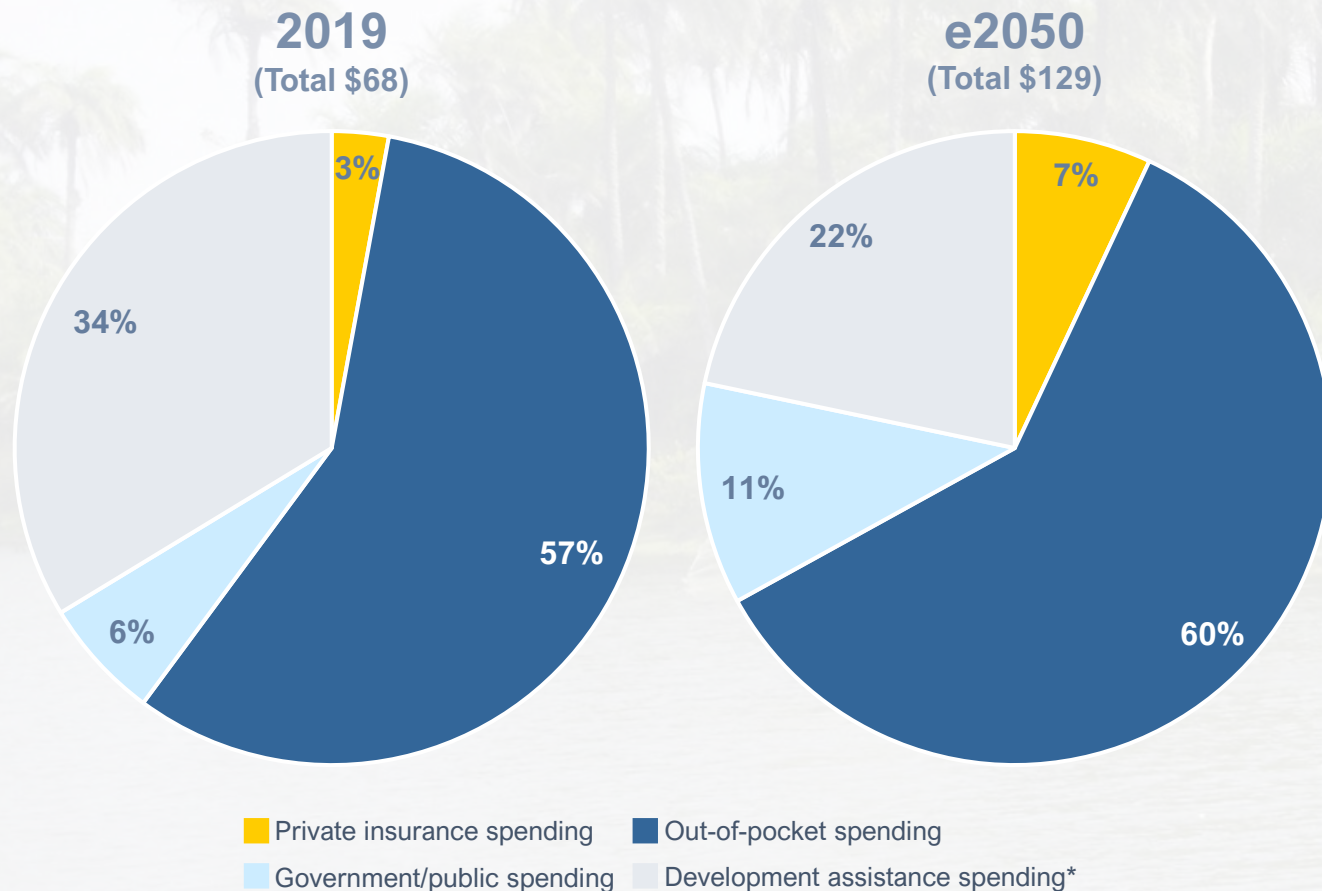


Arrows show % changes in mortality from 2009 to 2019



Healthcare Spending per Person in \$ (USD)

Out-of-pocket spending dominates access to healthcare in Guinea-Bissau. Total spending value is expected to almost double by 2050 by comparison to 2019



Out-of-pocket spending is expected to dominate the long-term healthcare spending landscape in Guinea-Bissau



Government spending is expected to increase by 2050



International assistance spending is forecasted to decrease by 2050



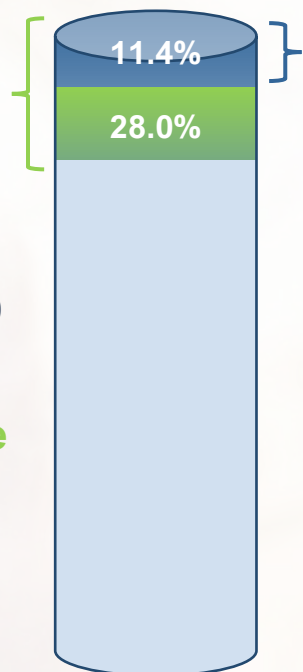
Digital Literacy

Guinea-Bissau's government is in the early stages of implementing policies, which may enable widespread adoption of digital technologies

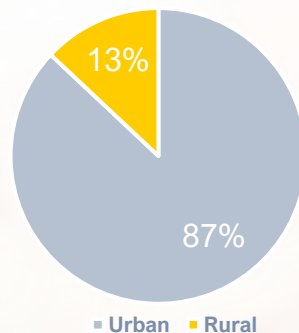
% of Internet Users (2022)

The number of internet users in Guinea-Bissau **increased by 153,000 (62%)** between 2020 and 2021.

At the start of 2022, **28% of the population had access** to the internet.



% of Households with a Computer (2019)



Digital literacy is low due to limited access to internet, high-level education and devices such as laptops and smartphones

Internet access and use in Guinea-Bissau is expanding rapidly

The country is in **early stages of societal change fuelled, in part, by digital technologies** and consistent access to electricity



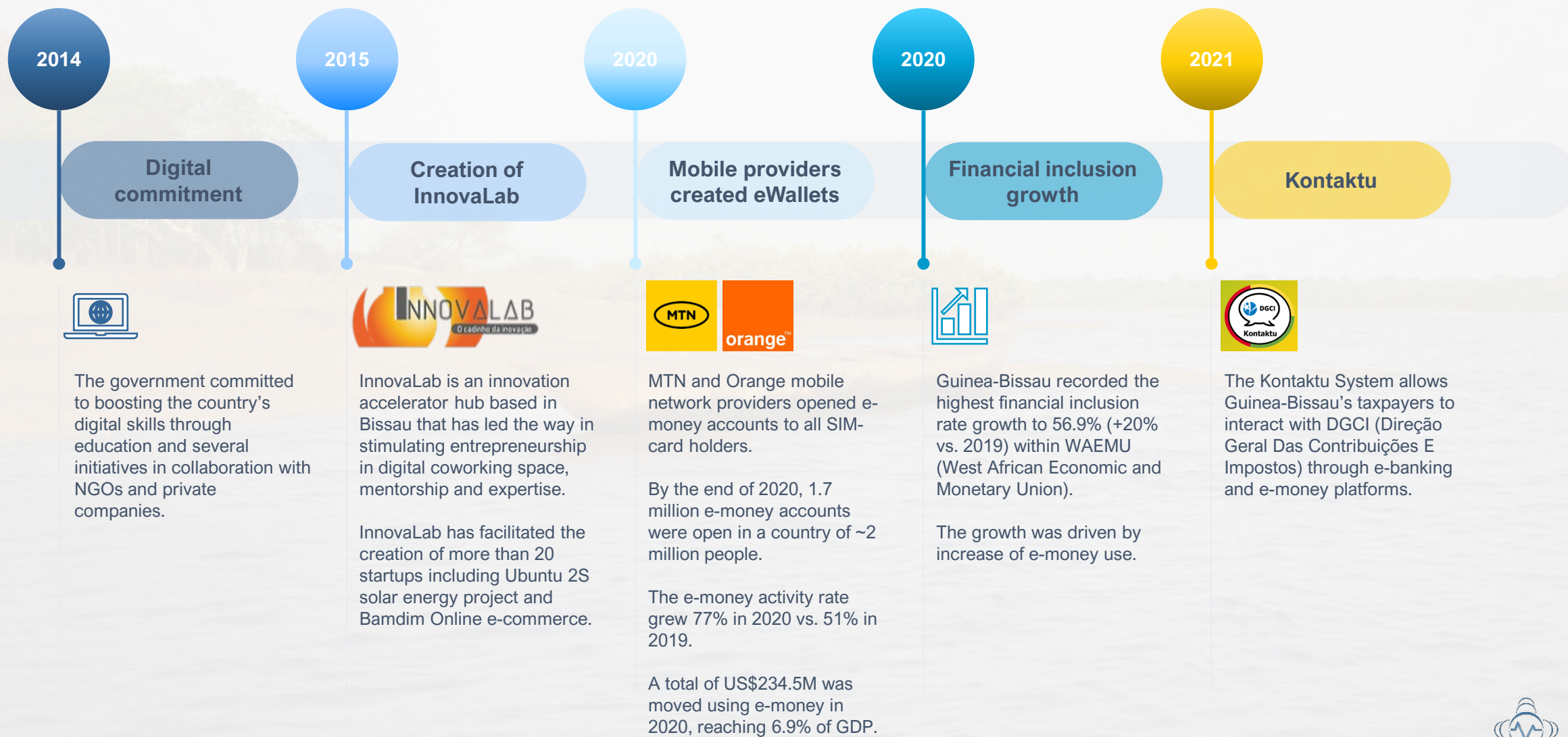
Continental average:

- 7.7% of households have a computer (2019)
- 43% of the population has access to the internet (2021)



Digitisation and Milestones

Guinea-Bissau is eager to adopt digital solutions as they are seen as catalysts for development and economic growth





eHealth Solutions

Guinea-Bissau's eHealth initiatives aim to facilitate real-time monitoring of communicable diseases, ensure healthcare access in rural areas of the country and to collect patient data



Saudigitus is collaborating with UNDP and the Global Fund to integrate Guinea-Bissau's health data into the DHIS2/ Real Time Monitoring (RTM) software and subsequently train health technicians.



Over 145 health facilities (public and private sector) in the country are being digitised to improve the mapping, tracking, prevention, and treatment of communicable diseases in real-time.



The core healthcare areas for the DHIS2/RTM software are **immunisation, HIV, tuberculosis and malaria.**



Guinea-Bissau was one of the **first countries to adopt the DHIS2 COVID-19 Surveillance** packages in 2020, which shows the country's willingness to adopt digital solutions.

Other eHealth Solutions



Saúde na Hora is a digital solution which enables remote medical monitoring and treatment of patients in rural areas.

The solution collects health data, compiles medical history and provides information on chronic diseases.

Nha Saúde

A solution that enables remote medical care, provides information on known diseases and directions to the nearest treatment facilities based on described symptoms.



A solution that provides telemedicine, nutritional and imaging services in Guinea-Bissau.



eHealth SWOT

Guinea-Bissau's infrastructure requires significant investment. However, there is enormous potential for the implementation of solutions driven by digital technology in several sectors

STRENGTHS



- Guinea-Bissau is a small country thus the **impact of digital solutions can be observed and measured rapidly**
- The country can serve as a **pilot for private industry** since it has similar problems as other Sub-Saharan African countries, but at smaller scale
- The population is young, **becoming digitally literate** and with increasing **access to the internet**
- The **cost of implementation of digital solutions will be relatively lower** when compared to other Sub-Saharan African countries

WEAKNESSES



- Healthcare **access is fragmented** and requires infrastructure strengthening/overhaul
- Healthcare professionals require **extensive training** and patients require **education**
- The **literacy rate in GW is lower than Africa's average** although it is increasing at a higher rate than continental average
- There is **no existing framework for data sharing, security and management**

OPPORTUNITIES



- Healthcare access is fragmented and **provides opportunity for infrastructure strengthening/overhaul**
- There is limited presence from Tech and Pharma industries, which may provide **first-movers within the space with a competitive advantage**
- UNICEF, UNDP, World Bank and WHO are **supporting the country's infrastructure development**
- The **government is open to collaboration** with private industry sees digital technologies. It sees digital tech as a transition to a period of growth

THREATS



- **Political instability** may be a risk to business, yet GW has been on a positive and stable democratic path
- GW has **one of the lowest GDPs** in the world
- A **significant investment in the healthcare infrastructure** would be required
- Access to electricity is becoming consistent; however, there is the **need for better energy network and infrastructure**



Why Invest in eHealth in Guinea-Bissau?

Guinea-Bissau could be a pilot country for eHealth initiatives since it has similar problems to larger African countries, but where solutions would require significantly less financial resources

STRONG COLLABORATIONS

Several international organisations and NGOs are collaborating with GW's startups and government to improve digitisation



PRO-DIGITAL GOVERNMENT

Guinea-Bissau's government is open to adopting digital solutions to solve its infrastructure and healthcare problems

DIGITAL ACCESS AND LITERACY

Digital literacy, access to internet and e-money use are increasing rapidly



ACCELERATE GROWTH VIA DIGITAL

There is opportunity for digital to “leapfrog” stages of GW's development and accelerate growth in all sectors

PROJECT SCALABILITY

GW can be home to small-scale pilot eHealth solutions before they are employed in larger African countries

PRIVATE COMPANY INFLUENCE

Private industry can have a strong influence in how eHealth is regulated in GW by supporting infrastructure development



velametis

THANK YOU

Contact us here:

info@velametis.com | Support desk

