

TOWARDS SUSTAINABLE FINANCING OF CRITICAL BASIC INFRASTRUCTURE FOR HEALTHCARE SYSTEM IN NIGERIA

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Abstract

Reliable and dependable infrastructure is always at the heart of economic growth and sectoral development. The Covid – 19 pandemic has underscored the need for a resilient health system and the shortcomings of Nigeria’s health sector. To date, the Nigerian health the sector is characterised by inefficiencies and low government spending. In its road to economic recovery, Nigeria adopted a sustainable and inclusive approach. Its strategy identified health as a priority sector. No doubt, it had been undergoing reforms with few milestones to celebrate, such as eradication of polio. On the other hand, malaria, maternal and infant mortality persist. Viewing good health as enhancer of productivity and growth may have influenced the government’s decisions. Given the financing constraint within which the health system’s transformation is expected to occur, this paper explores and analysis Nigeria’s sustainable financing of critical basic infrastructure such as power, road, transportation and water for the healthcare sector. The paper identified that Nigeria struggles with funding challenges that exasperates the country’s infrastructure deficit which the traditional financing approach cannot address given the paucity of funds. It explores financing potentials of the Nigerian Economic and Sustainability Plan 2020 and the National Development Plan 2021 – 2025; and recommend possible financing options to address the critical infrastructure deficit in the healthcare sector.

Keywords: Infrastructure financing, Sustainable financing, Health system, Nigeria.

Introduction

Similar to many countries across the world,¹ for many years, the Nigerian healthcare system had been characterised by gross inefficiencies, leading to the high cost of health services, poor performance, lack of data and underinvestment.² The inefficiencies, such as poor planning, lack of capacity, lack of strategic direction, and funding delays. Misalignment and disconnect between sectoral policy-makers and budget managers exacerbate the inefficiencies,³ and hamper the sector’s ability to attract the necessary investment that is needed to transform the healthcare sector.⁴ Over the years, Nigeria’s spending on its healthcare system has been abysmal.⁵

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¹ Madu AC, Osborne K.. ‘Healthcare Financing in Nigeria: A Policy Review’. (2023) International Journal of Social Determinants of Health and Health Services.

² Reem Hafez, Nigeria Health Financing System Assessment, (2018) DISCUSSION PAPER (The International Bank for Reconstruction and Development / The World Bank, 2018) available at ><https://documents1.worldbank.org/curated/en/782821529683086336/pdf/127519-WP-PUBLIC-add-series-NigeriaHFSFINAL.pdf>< accessed 31 October 2023.

³ Uzochukwu BS, Ughasoro MD, Etiaba E, Okwuosa C, Envuladu E, Onwujekwe OE, ‘Health care financing in Nigeria: Implications for Achieving Universal Health Coverage.’ (2015) 18 (4) Niger J Clin Pract.:437-44.

⁴ Federal Ministry of Health, Nigeria Health Financing Policy and Strategy 2017 Achieving Universal Health Coverage and Rebuilding Nigeria’s Economy through Efficient Health Investments, avilabe at ><https://www.health.gov.ng/doc/Nigeria-Health-Financing-Policy-Strategy-21032019.pdf>< accessed 22 October 2021

⁵ *Ibid* 8

At the African Union Summit held in April 2001 in Abuja, in a Declaration,⁶ member states pledged to spend 15% of their budgets on health. Ten years after the declaration, only about 8 countries were able to meet the commitment as demonstrated below:

| Table 1. Abuja Declaration and Health MDG Status Indicators, After 10 years | | | | | | | |
|---|--|---------------------|--|-----------------------------|--|--------------------------|---------------------|
| | 2009**>2000 health share of total spending of government as a source | | 2009**=2000 health share of total spending of government as a source | | 2009**<2000 health share of total spending of government as a source | | |
| | per capita >33US\$ | per capita =<33US\$ | per capita >33US\$ | per capita =<33US\$ | per capita >33US\$ | per capita =<33US\$ | Number of countries |
| | Seychelles (MIC)*** | Eritrea | Algeria (MIC) | Madagascar | | | |
| | | Rwanda | Egypt (MIC) | | | | |
| | | | Tunisia (MIC) | | | | |
| | | | Cape Verde | | | | |
| | | | | | | | |
| On track health MDGs | 1 | 2 | 4 | 1 | 0 | 0 | 8 |
| | | | | | | | |
| | | | | | | | |
| Off track health MDGs | 7 | 17 | 2 | 5 | 0 | 7 | 38 |
| | | | | | | | |
| | Botswana (MIC) | Burkina Faso | Mauritius (MIC) | Dem Rep Congo | | Benin | |
| | Gabon (MIC) | Burundi | Namibia (MIC) | Ethiopia | | Central African Republic | |
| | South Africa (MIC) | Cameroon | | Kenya | | Gambia | |
| | Swaziland (MIC) | Chad | | Niger | | Guinea | |
| | Angola | Comoros | | United Republic of Tanzania | | Malawi | |
| | Sao Tome and Principe | Congo | | | | Mauritania | |
| | Lesotho | Côte d'Ivoire | | | | Togo | |
| | | Djibouti | | | | | |
| | | Ghana | | | | | |
| | | Guinea Bissau | | | | | |

⁶ African Union: African Union Summit on HIV/AIDS, TUBERCULOSIS and other related INFECTIOUS DISEASES ABUJA, NIGERIA, 24 – 27 April 2001, available at ><https://au.int/sites/default/files/pages/32894-file-2001-abuja-declaration.pdf>< accessed 31 October 2023. 5

| | | | | | | | |
|----------------------------|---|------------|---|---|---|---|----|
| | | Liberia | | | | | |
| | | Mali | | | | | |
| | | Mozambique | | | | | |
| | | Nigeria | | | | | |
| | | Senegal | | | | | |
| | | Uganda | | | | | |
| | | Zambia | | | | | |
| | | | | | | | |
| Number of countries | 8 | 19 | 6 | 6 | 0 | 7 | 46 |

Fig.1 Source: WHO

Nineteen years later, it was observed that between 2001 – 2015, government spending on health in about 21 countries had decreased and that African countries presently spend between \$8 - \$ 129 per capita when compared to their high-income country counterparts who spend around \$4,000 per capita.⁷ The table above indicates that Nigeria was among the countries that pledged to increase its health spending to 15%, and is among the 38 countries that were off track on health SDGs. The table below illustrates the Nigerian government’s spending on health over a 17-year period. It had not spent much on health, and its expenditure per GDP continue to decline with a 3.8% expenditure in 2016.⁸ In the 2022 budget, health received an allocation of 5%,⁹ which matches its 5% General Government Expenditure target.¹⁰

| Indicator | General government expenditure on health as a percentage of total government expenditure | | | | | | | | | | | | | | | | |
|-----------|--|------|------|------|------|------|------|------|------|-----|------|------|------|-----|------|------|------|
| Location | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | |
| | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | |
| | 4 | 3 | 2 | 1 | 0 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 9 | 8 |
| Nigeria | 8.17 | 6.48 | 7.43 | 7.42 | 5.72 | 7.37 | 7.63 | 9.19 | 8.65 | 7.3 | 8.82 | 5.89 | 3.73 | 4.5 | 5.93 | 4.46 | 6.09 |

Fig.2 Source: WHO Global Health Observatory

Like many other African countries, Nigeria is grappling with several challenges which militate against its ability to increase its health spending or meet its target. Even the dismal resources allocated get spent on recurrent expenditure and curative drugs, leaving little to address other efficiency-inducing measures.¹¹ For instance, since 2010, 90% of health spending had been expended on recurrent expenditure, 20% on primary healthcare in 2014, and 80% on curative

⁷ Agnes Gatome-Munyua and Nkechi Olalere, ‘Public Financing for Health in Africa: 15% of an Elephant is not 15% of a Chicken Dr. Nkechi Olalere and Ms. Agnes Gatome-Munyua on the African Union’s 2001 Abuja Declaration on funding national health budgets’, *Africa Renewal* (UN, 13 October 2020) available at ><https://www.un.org/africarenewal/magazine/october-2020/public-financing-health-africa-when-15-elephant-not-15-chicken>< accessed 31 October 2023.

⁸ Reem Hafez, Nigeria Health Financing System Assessment, (2018) DISCUSSION PAPER (The International Bank for Reconstruction and Development / The World Bank, 2018) available at ><https://documents1.worldbank.org/curated/en/782821529683086336/pdf/127519-WP-PUBLIC-add-series-NigeriaHFSFINAL.pdf>< accessed 31 October 2023.

⁹ Budget Office of the Federation, Public Presentation of 2022 FGN Budget, available at ><https://www.budgetoffice.gov.ng/index.php/resources/internal-resources/budget-documents/2022-budget>< accessed 31 October 2023.

¹⁰ *Ibid* note 1. 9

¹¹ *Ibid* 8

care.¹² A key reason behind the government’s dismal spending on health is fiscal constraints resulting from low tax/ other revenues among others.¹³ Limited government spending resulted in high cost of health services given its burden of high Out of Pocket Expenditure (OOPE),¹⁴ high spending by the private sector¹⁵ and high dependence on aid/assistance.¹⁶ The percentage of public versus private spending in Nigeria’s health system is illustrated below:

Nigeria: health expenditure: % of GDP

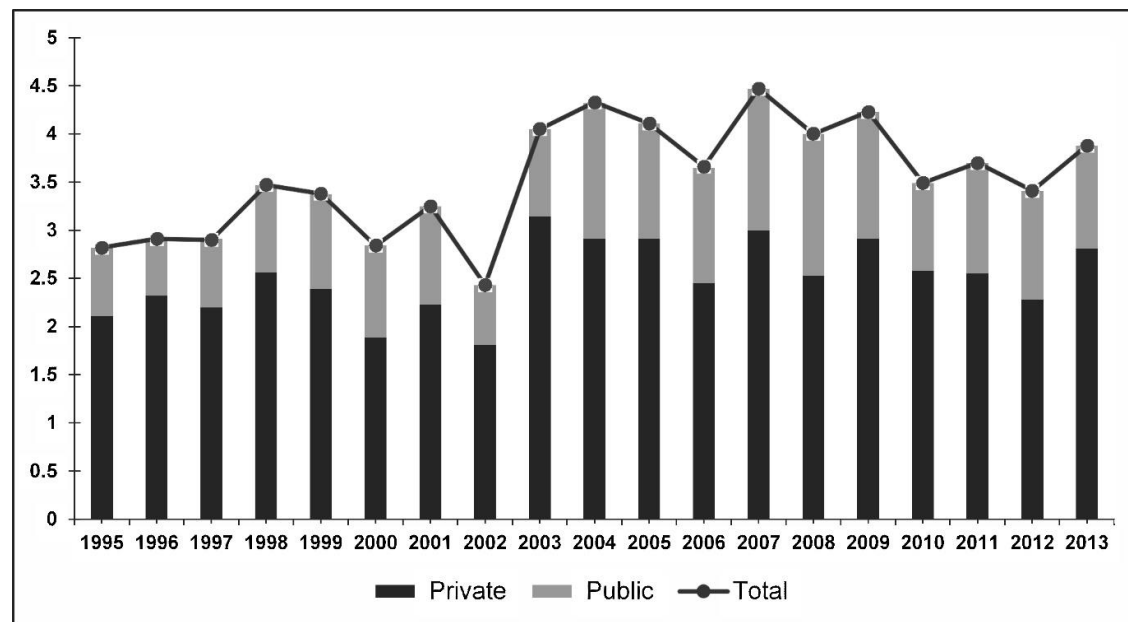


Fig.3 Source: Nigeria Bureau for Statistics

In its effort to address the healthcare challenges and fulfil its commitments both to increase health spending and to realise Sustainable Development Goals, Nigeria embarked on a reform of its healthcare system. The reform is focused on providing Universal Health Coverage (UHC) and ensuring quality and efficient healthcare service delivery to provide sustainable health security. This resulted in three National Health Policies between 1999 and 2016, enactment of the National Health Act 2014, the National Health ICT Strategic Framework 2015 – 2020, Nigeria Healthcare Financing Policy and Strategy 2017, and the Nigeria Economic Sustainability Plan (ESP) 2020, the National Development Plan (NDP) 2021 - 2025 among several other instruments that.

Nigeria’s development strategy hinges on inclusive and sustainable growth.¹⁷ It is also aware that women and children who form part of this strategy suffer disproportionately from the burden of disease which can prevent them from being part of the workforce.¹⁸ The interconnectedness between good health, productivity and economic growth is glaring. In recognition of this

¹² Ibid 8

¹³ Ibid note 5

¹⁴ Ibid note 5. 24

¹⁵ See Fig.3 below

¹⁶ Ibid note 5

¹⁷ Bouncing Back: Nigeria Economic and Sustainability Plan 2020, available at ><https://nipc.gov.ng/wp-content/uploads/2020/09/NG-Economic-Sustainability-Plan-2020.pdf>< , accessed 31 October 2023 ;I bid note 1

¹⁸ Ibid note 1.18

interdependence, the NDP 2021 - 2025 has set healthcare as a priority.¹⁹ To achieve inclusive and sustainable growth, it could be anticipated that Primary Health Centres (PHCs) will play a key role in providing inclusive healthcare services, particularly in underserved areas.²⁰

However, the PHCs endure some of the harshest operating conditions with little to no funds to cover their operating costs, they suffer long salary delays and operate from facilities that lack basic amenities including equipment, water, power, drugs, and diagnostic capacity.²¹ These are the facilities that are expected to play a crucial role in Nigeria's inclusive and sustainable growth. Although efforts are being made to transform healthcare delivery in Nigeria, the success of these reforms hinges largely on critical infrastructures such as power, roads, water, and information technology/digital infrastructure especially given the limited fiscal space, poor funding, and ongoing reforms. This paper seeks to analyse the sustainable financing options that can develop binding infrastructure for the healthcare system as Nigeria transitions to a sustainable healthcare system. Its focal point is how to strategically channel infrastructure finance for power, housing, financial services, Information Technology, Water resources and transportation system to sustainably finance and develop healthcare infrastructure. Therefore, in addition to high cost, the lack of infrastructure also creates further barrier to accessing healthcare for many Nigerians.

Some key healthcare infrastructure includes the built/ physical environment, power, access to healthcare facilities i.e., transportation system, Information Technology (IT), medical equipment, and water.²² Many PHCs lack basic amenities that provide the foundation for health services. Given all the challenges mentioned, the question becomes - can Nigeria sustainably finance its healthcare infrastructure? if yes, how can the Nigerian government harness the potential of sustainable finance to develop infrastructure for the healthcare sector? this paper seeks to examine how sustainable financing can be strategically deployed to develop critical infrastructure for the healthcare sector.

When analysing sustainable financing of infrastructure for the healthcare system, certain factors should be borne in mind. Firstly, health infrastructure is being developed within a financing-constrained environment as both governments and international/development Finance Institutions are also struggling. Secondly, health infrastructure development will also occur as the country recovers from the impact of the Corona Virus (Covid - 19) pandemic. Thirdly, there is a global shift in international infrastructure financing towards sustainable financing which is evident in private investment funds seeking sustainable long-term projects to invest in, thereby giving Sustainable Development Goals (SDGs) a crucial role to play.²³ Fourthly, some governments in Africa are looking inwards to finance infrastructure development. Finally, the private sector has a huge role to play in financing healthcare infrastructure,²⁴ hence the need to de-risk the environment and crowd them in.

This paper gives an overview of the Nigerian Healthcare regime and its supporting infrastructure; it analyses the legal regime for financing the healthcare system, highlights challenges and prospects facing healthcare financing, and made some recommendations on how to sustainably finance infrastructure for the healthcare system before ending with a conclusion.

¹⁹ ESP2020 note 15

²⁰ NDP p.120

²¹ *Ibid* note1. 37 - 38

²² Linda Luxon, 'Infrastructure – the key to healthcare improvement'(2015) 2(1) Future Hospital Journal, available at ><https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6465866/pdf/futurehosp-2-1-4.pdf>< accessed 31 October 2023.

²³ Robert G. Eccles and Svetlana Klimenko, The Investor Revolution 2019 <Harvard Business Review>

²⁴ See Fig.3

Policies and Plans in Place for Financing Critical Basic Infrastructure for the Healthcare System in Nigeria

The policy framework for providing infrastructure for the health sector in Nigeria includes the NDP 2021 – 2025 which cuts across all sectors and sectoral policies such as the energy policy, the National Electric Power Policy (NEPP) 2001, National Energy Policy (NEP), Renewable Electricity Policy Guidelines (REPG) 2006, National Biofuel Policy and Incentives (2007), National Renewable Energy and Energy Efficiency Policy (NREEEP), 2015, National Digital Economy Policy and Strategy (2020 - 2030), the National Renewable Energy Action Plan, 2015-2030, Nigeria National Broadband Plan 2020 – 2025, and the National Policy in Public Private Partnership (PPP) among others.

The NDP identified financing both digital and physical infrastructure as critical to facilitating the movement of goods and services, business operations and livelihoods, etc; and facilitating innovation and efficiency.²⁵ It prioritised five key sectors which include power, digital economy, transportation, and capital market. Hence, sectoral policies also apply to these priority areas in addition to national policy. The plan will prioritise the implementation of strategic and critical projects that will raise production and productivity such as agriculture, manufacturing, services sector and MSMEs.²⁶ It is envisaged that all the prioritised sectoral strategies will be aligned with the NDP and the National Integrated Infrastructure Master Plan for seamless implementation.

On the health sector, the objective of the NDP is to create an integrated healthcare system that can provide quality healthcare to all through UHC while promoting healthy habits and curbing maternal and infant mortality.²⁷ The strategy developed in the plan to realise these objectives depend on the deployment of both physical and digital infrastructure such as transportation, energy, and information technology. Therefore, their sectoral policies, and the integrated infrastructure master plan will also be aligned with the NDP to make it happen.

Nigeria's Healthcare System and Infrastructure

The healthcare system in Nigeria is a mix of public and private healthcare facilities, with more private facilities providing services than public facilities. These private facilities play a vital role in covering the healthcare service gap in the country. The implication of private sector provision outweighing public healthcare services is the high cost of OoPE which creates a barrier to access to health services for many Nigerians living in poverty. Financing for the system is a mix of government budgetary allocation, private funds, and donor funds. Poor government funding resulted in the system being highly dependent on donor funding with the country receiving the equivalent of around 7.6% of its total health expenditure in external funds in 2016.²⁸

These funding mostly come from Institutions, including the United States Agency for International Development (USAID), the Global Fund to Fight AIDS and Tuberculosis, Global Vaccine Alliance and International Development Association.²⁹ The external funding is expected to dwindle as Nigeria commences its health financing transition for several reasons, including being considered an IDA – IBRD hybrid country after having transitioned to a lower-middle-income country.³⁰ The impact of such funds is that they crowded out government funds which resulted in significant dependence on them.³¹ This demonstrates the competing funding needs between

²⁵ NDP p.30

²⁶ *Ibid* p.32

²⁷ NDP p.120 - 122

²⁸ *Ibid* note 1. 25

²⁹ *Ibid* note 1. 25

³⁰ *Ibid* note 1. 25

³¹ *Ibid* note 5

financing healthcare and financing the critical infrastructure that is required to support them. Therefore, there is a need to explore the innovative use of these funds as Nigeria's health finance transition continues particularly as it impacts the government's ability to fund critical infrastructure.

Legal Regime for Sustainable Financing of Infrastructure for the Healthcare System in Nigeria

There is a need to briefly highlight health financing before delving into infrastructure financing. This deals with funding the purchase of health services, while health financing strategies deal with how to mobilise and pool funds to purchase health services, expand the coverage of health services, generate data, and build institutional and workforce capacity in a way that facilitates universal coverage.³² In 2016, Nigeria developed its Healthcare Financing Policy and Strategy with technical assistance being given to it by USAID in collaboration with the WHO and the World Bank on how to define its health financing theory of change and governance framework.³³ The strategy is designed to mobilise funds, expand coverage, provide protection, ensure accountability and engender research and innovation.

The legal regime for financing these aspects mentioned above include the Health Policy 2016, Health Financing Policy and Strategies 2016, National HIS Strategic Plan (2014- 2018), Operations Manual- Basic Healthcare Provision Fund of Basic Healthcare Provision Funds,, Guidelines for the Administration, Disbursement, Monitoring and Fund Management, National Standards and Guidelines for the Conduct of Medical/ Health Missions in Nigeria 2016, National Strategy for Scale – up of Medical Oxygen 2017 – 2022, Digital Health Inventory, National Health ICT Strategic Framework 2016, Standard Operating Procedure for Data Management, National Drug Policy, National Guideline for Quantification of Narcotic Medicine 2017, National Quality Assurance for Medicines and Other Health Products 2015, National Policy on Food Safety and its Implementation Strategy, Nigeria Standard for Drinking Water Quality 2007, National Drug Policy, Nigeria Family Planning Blueprint (2020 - 2024), Nigeria Every Newborn Action Plan, National Strategy For Scale-Up Of Chlorhexidine In Nigeria, Accelerated Reduction of Maternal and Newborn Mortality in Nigeria. Roadmap for Action. 2019 - 2021, National Integrated Pneumonia Control Strategy and Action Plan, National Health Promotion Policy, The Green Dot Brand Guideline, AYPHS Guidelines For Promoting Access In Nigeria, National Strategic Framework For the Elimination of Obstetric Fistula, National Reproductive Health Policy 2017, National Family Planning Comm Plan (Sept 2017), Nigeria Family Planning Blueprint (Scale Up Plan), National Strategy Framework for the elimination of Obstetric Fistula in Nigeria, National Policy on Infant and Young Child Feeding in Nigeria - 2010, National Guidelines for Promoting Access of Young People to Adolescent and Youth-Friendly Services in Primary Health Care Facilities in Nigeria - 2014, National Strategic Plan of Action for Nutrition (2014 - 2019), National Health Act 2014, National Insurance Scheme (NHIS) Act. Within these and many more health instruments lie opportunities for innovation, fund mobilisation, inclusivity, and sustainable growth. Nevertheless, the success or failure of the framework for health financing in funding the system is outside the scope of this paper. The focus is on sustainably finance infrastructure for the healthcare system therefore, this paper will not dwell on health financing.

The legal regime for sustainable finance includes the Nigeria Economic Sustainability Plan 2020, the Nigeria Green Bond Framework 2017, Nigeria Stock Exchange Sustainability Disclosure

³² Marty Makinen, Jonathan Cali, Yann Derriennic, Developing & Implementing Health Financing Strategies What have we learned about cross-country exchange and use of data? (USAID), available at >https://pdf.usaid.gov/pdf_docs/PA00SWJP.pdf< accessed 31 October 2023.

³³ *Ibid.* 2

Guidelines, recovery bonds,³⁴Sustainable Banking Principles,³⁵Infrastructure Concession Regulatory Commission (Establishment, etc) Act, 2005, National Policy for Public Private Partnerships, National Integrated Infrastructure Master-plan 2015, Nigeria Open Data Policy 2018, National Strategic Health Development Plan 2018 – 2022, National Digital Economy Policy and Strategy 2020 – 2030, Nigeria Cloud Computing Policy 2029, National ICT Policy 2012, National Policy for the Promotion of Indigenous Content 2021, Nigeria ICT Innovation and Entrepreneurship Vision (NIIEV) 2019, Nigerian Sovereign Investment Authority (Establishment etc) Act, Nigerian Communications Act 2003 (NCA 2003), Infrastructure Fund Investment Policy Statement 2019, Pension Reform Act 2014, Regulation on investment of Pension Funds Asset 2019 (as amended), Implementation Guidelines on RSA Multi – Fund Structure (Addendum) 2018, National Water Resources Policy 2016,Infrastructure Development In The Water Sector (2016-2021). Many of these instruments can be strategically tailored towards providing incentive to private parties to crowd-in private participation in the healthcare system.

The legal regime is Made up of multi – sectoral legal instruments and policies that are put in place to implement development and growth strategies and ensure effective governance. When analysing sustainable financing of infrastructure for the healthcare system, certain factors should be borne in mind. Firstly, health infrastructure is being developed within a financing constrained environment as both governments and international/development Finance Institutions are also struggling. Secondly, health infrastructure development will also occur as the country recovers from the impact of the Corona Virus (Covid - 19) pandemic. Thirdly, there is a global shift in international infrastructure financing towards sustainable financing which is evident in private investment funds seeking sustainable long-term projects to invest in, thereby giving Sustainable Development Goals (SDGs) a crucial role to play.³⁶ Fourthly, some governments in Africa are looking inwards to finance infrastructure development. Finally, the private sector has a huge role to play in financing infrastructure development for healthcare,³⁷ hence the need to de – risk the environment and crowd them in.

Financing Option, Approach and Strategies for Infrastructure Development for The Healthcare System in Nigeria

To achieve the goal of providing universal health for all and meet the SDG, a lot needs to be done to Nigeria’s health system in terms of health financing, providing protection and health infrastructure development.

Financing options for sustainable infrastructure development:

- i. Bonds: which is borrowing that allows the issuing agency to save money from its current customers to pay for future needs.³⁸ Where the bonds are for instance renewable energy bonds are issued, they will provide the issuer with the funds to invest in renewable energy infrastructure.

³⁴ Green Finance Platform, available at ><https://www.greenfinanceplatform.org/search/site?keyword=innovative+sovereign+bond+structure+financing+sustainable+recovery>< accessed 31 October 2023.

³⁵ Central Bank of Nigeria, available at ><https://www.cbn.gov.ng/out/2012/ccd/circular-nsbp.pdf>< accessed 31 October 2023.

³⁶ Robert G. Eccles and Svetlana Klimenko, *The Investor Revolution 2019*, available at >Harvard Business Review< accessed 12/04/2023

³⁷ See Fig.3

³⁸ Neil S. Grigg, *Infrastructure Financing: The Business of Infrastructure for a Sustainable Future* (John Wiley & Sons Inc, 2010)

- ii. Counterpart funding by multilateral development agencies. Several of such agencies have packages that are tailored towards financing sustainable development goals.³⁹ When it comes to financing resilient blended approach is adopted whereby the multilateral agencies collaborate with local businesses or institutions.⁴⁰
- iii. Co- investing directly into project equity by public and private actors.⁴¹
- iv. Co – investment in in equity fund as a limited partner by co – capitalising unlisted fund by both public and private parties. Also applicable to debt funds which provides debts to projects.⁴²
- v. Co – financing where a public party provides debts directly to the project alongside a private party.⁴³
- vi. Cornerstone stake where a public party invests in a fund and become a majority stakeholder to attract other investors.⁴⁴
- vii. Subordinate equity is where a public party provide junior debt.⁴⁵
- viii. Anchor investments in collateralised debt obligations is where a majority of stake in securitised loan is extended to infrastructure projects.⁴⁶
- ix. Loan through public actor debt issuance.⁴⁷
- x. Loan guarantee by a public actor to pay in the event of default by a private actor.⁴⁸

Some de-risking instruments include Shareholder loan, Public seed capital or grants, Revenue guarantee, Back-stop guarantee, Credit facility, Liquidity facility, Investment Insurance, Political risk insurance, and Tax credit.⁴⁹ In 2020, the Nigerian government provided a ₦ 100 billion credit support facility to the health sector with the view to providing low-cost loans to support healthcare services.⁵⁰

Approaches to sustainable financing for infrastructure development

- i. **Blended Financing:** the Nigeria Sovereign Wealth Fund, a public sector financier invests in transportation network infrastructure through the Nigeria Infrastructure Fund, with a view to stimulating growth, diversify the economy, attract FDI and create jobs.⁵¹ Under this initiative, the Nigeria Sovereign Investment Authority entered a Public – Private – Partnership with Julius Berger to finance, construct, operate and maintain the second Niger Bridge, a critical transportation infrastructure

³⁹ AIIB: Financing the Sustainable Development Goals the Contributions of the Multilateral Development Banks-Decade, available at >https://www.aiib.org/en/about-aiib/who-we-are/partnership/_download/MDBs-Report-on-Financing-the-Sustainable-Development-Goals_SDGs_vf_print.pdf< accessed 31 October 2023.

⁴⁰ *Ibid*

⁴¹ OECD: De- Risking Institutional Investment in Green Infrastructure: 2021 Progress Update: Policy Perspectives OECD Environment Policy Paper No.28, available at ><https://www.oecd-ilibrary.org/docserver/357c027een.pdf?expires=1635144703&id=id&accname=guest&checksum=ED309309E199EBEE29064C2E3DE80B9C>< accessed 31 October 2023. 6

⁴² *Ibid*

⁴³ *Ibid*

⁴⁴ *Ibid*

⁴⁵ *Ibid*

⁴⁶ *Ibid*

⁴⁷ *Ibid*

⁴⁸ *Ibid*

⁴⁹ *Ibid.* 8

⁵⁰ Guidelines for the Operations of the N100 Billion Credit Support for the Healthcare Sector, available at ><https://www.cbn.gov.ng/Out/2020/FPRD/healthcareintervention.pdf>< accessed 25 October 2021.

⁵¹ Nigeria Sovereign Investment Authority.

which connects the Southern and Eastern Regions of the Country.⁵² The Pension Funds will also be invested in transportation network infrastructure development.⁵³

- ii. **Concession:** A Highway Development Management Initiative was developed by the government to concession economically viable routes to private companies and consortiums that have been noted to have established the necessary technical and financial capability that is necessary for the development and management of road pavement and right of way.⁵⁴ Under this initiative, twelve priority federal routes were identified for phase one projects. The initiative also established the Unbundled Assets Approval Scheme through which permits, and approvals will be given directly to companies by the Federal Ministry of Works and Housing to Build, Operate and Maintain individual revenue generating assets along Highway right of way.⁵⁵ The initiative seeks to crowd – in private finance for transportation network infrastructure development. It is expected to generate over 1 trillion Naira in private sector sustainable financing, generate over 50, 000 direct jobs and 200,000 indirect jobs along the twelve priority federal routes selected for phase one project, and secure investment through law and guarantees.⁵⁶

Strategies for financing infrastructure development

Some barriers to attracting private finance into long term infrastructure development projects include low and long tenure of return on investment, and high risk/ risk perception. To eliminate some of these risks, especially political, currency and repatriation risks, the financing options highlighted above are used to indicate government commitment and reduce the risk profile of the project. This is usually done by using public capital either for counterpart funding, or co – investment with private funds. An illustration of this is the use of Nigeria Infrastructure Funds (NIF) from the Sovereign Wealth Fund (SWF) to build the second Niger Bridge in a Public–Private-Public Partnership with Julius Berger.

Therefore, for Nigeria to deploy the options described above to de – risk healthcare infrastructure development, there is a need to be strategic, taking the following into consideration:

1. Strategically identify the SDG applicable to the project or sector for which financing is sought (in this case health related SDGs infrastructure).
2. Strategically determine what intervention is suitable to crowd in private finance/investment.
3. Strategically determine what tools/instruments to use in providing incentive to crowd in private finance/investment.
4. Strategically identify the options and approaches that can effectively crowd in private capital to finance the project/ sector.

For consideration (1) above, given that the paper addresses healthcare infrastructure, it is clear that SDG 3 and other health related SDGs are involved. On condition (2),

For consideration (1) above, given that the paper addresses healthcare infrastructure, SDG 3, and other health related SDGs are involved. On condition (2). When it comes to Nigeria’s healthcare

⁵² Sovereign Investment Fund.

⁵³ ESP 2020.

⁵⁴ Highway Development Management Initiative: Benefits and Opportunities, available at >https://hdmi.worksandhousing.gov.ng/sub_sectors< Accessed 01/09/2021.

⁵⁵ Highway Development Management Initiative: Benefits and Opportunities, available at >https://hdmi.worksandhousing.gov.ng/sub_sectors< Accessed 01/09/2021

⁵⁶ Highway Development Management Initiative: Value Added Concession, available at ><https://hdmi.worksandhousing.gov.ng/vac>< accessed 31 October 2023.

system, the ₦ 100 billion credit facility can provide the crucial finance needed by some service providers to purchase equipment, and purchase/ restore some built environment. The facilities are provided through financial instruments administered by Participating Financial Institutions (PFIs) such as commercial banks. However, the facility may not be suitable for addressing other infrastructure development needs of the sector such as power, road, core IT infrastructure and water. On (3) consideration, the credit facility illustrates that it was considered as an efficient way to crown in private finance for crowding in the private sector in the provision of several healthcare services. When it comes to power, road and water for instance, environmental impact and other factors may play a role in the financing instruments to be deployed. They may require the use of carefully selected green finance options. On (4), there is the need to consider whether to opt for blended financing, concession, or other approaches.

In this section, financing options and approaches have been highlighted. Within this discourse, financing for the critical infrastructure development for the healthcare system is discussed in detail below.

Financing power infrastructure for the healthcare system:

When it comes to power, solar power has been strategically adopted under the ESP 2020 as the energy source of choice that is projected to impact 25 million beneficiaries, support 250,00 jobs, and power 5 million solar home systems. The healthcare sector is considered a priority to ensure reliable electricity is provided to health clinics.⁵⁷ Of interest to this paper is the project elements that seek to collaborate with states to identify the locations where solar installations will be placed and seeks to identify prospective beneficiaries.⁵⁸ This provides an opportunity for the Federal Ministry of Health to determine the locations of all PHCs and include them in the plan as beneficiaries. It also seeks to encourage private sector participation in providing solar power and deploying them to household.⁵⁹ Government can, in collaboration Federal Ministry of Health, States, and other relevant agencies and stakeholders create incentive around this to crowd such providers through green financing (including community cooperatives) to ensure resilient and sustainable provision of power to PHCs.

Sourcing of green financing to support this strategy is realisable as Nigeria a pioneer in this area.⁶⁰ It is greening its financial sector by being the first in Africa to establish and issue green bonds a capital market debt, and among the few pioneers worldwide.⁶¹ It has been used to crowd in private investment in renewable energy deployment and can be used to support the deployment of renewable energy to PHCs as part of health clinics.

Financing road infrastructure for the healthcare system:

Efficient transportation system can only be ensured by putting in place the necessary critical infrastructure. Providing the infrastructure will provide access to healthcare facilities and remove barrier to access to health services. In Nigeria, access to many of the PHCs is through road networks. The deplorable state of many roads in Nigeria, or its non – existence, creates barrier and suggests denial of access to health services to many Nigerians, include vulnerable groups.

⁵⁷ ESP 2020 note 15. 48.

⁵⁸ ESP 2020 note 15. 45.

⁵⁹ ESP 2020 note 15. 45.

⁶⁰ Julia Chen, 'Financing the Sustainable Development Goals: The Role of African Sovereign Wealth Funds' (2019) 51 NYU J Int'l L & Pol 1259;

⁶¹ For more on Nigeria's green bond market, see, State of the Market Report: The Nigerian Green Bond Market Development Programme, 2019, available at ><https://www.climatebonds.net/files/reports/nigerian-green-bond-market-development-programme-state-of-the-market-final.pdf>< accessed 31 October 2023.

Providing them access entails bridging the road infrastructure gap in Nigeria. The government has adopted several mechanisms to incentivise investment and bridge the gap.

In bridging the infrastructure gap, Nigeria is looking inward by raising domestic funds (with counterpart funding from the AfDB) through the Sovereign Wealth Fund's NIF⁶² that has been used to co-finance some road infrastructure. The government has also channelled Pension Funds (PFs) to provide housing. What the use of these funds does is to repurpose public capital to infrastructure development. This presents an opportunity to apply the Environmental, Social and Corporate Governance principle to further green infrastructure financing. Using the SWF and PFs works as catalyst to de-risk the identified infrastructure development and crowd in private finance. This approach can be strategically used to develop some road networks that link other roads to PHCs.

An interesting approach to bridging infrastructure gap is the direct labour approach adopted by the ESG 2020. It plans to use local raw materials to construct or rehabilitate roads through the construction and maintenance approach. It seeks to map roads requiring repair and intervention hence the need to include access roads to PHCs in the map to strategically provide access to PHCs.

Financing water infrastructure for the healthcare system:

Provision of water is another priority of the ESP 2020 with focus on WASH emergency Covid – 19 responses. It also seeks to harness renewable energy to supply water to facilities. In collaboration with states and other stakeholders, the government can provide water to PHCs. The government seeks to provide water to all public places, and adopt Partnership for expanded Water Supply, Sanitation and Hygiene (PEWASH) to improve WASH activities in rural areas. This presents an opportunity for government to collaborate with relevant agencies, communities, and other stakeholders to strategically develop PHCs and deploy water and other critical infrastructure.

Financing physical building infrastructure for the healthcare system:

As the Nigerian population increases, there is a need to build more healthcare facilities to universal basic healthcare provision to all. In the ESG 2020, the government seeks to start off by building 300,000 homes across the country.⁶³ It seeks to work with states to identify where the houses will be located. This provides an opportunity for government to incorporate the building of PHCs into all the locations that those houses will be built. Given that critical infrastructure will be provided for such locations, incorporating PHC facilities into Nigeria's housing strategy will remove barrier and provide the needed transportation infrastructure that enables people to access health services.

Financing information technology infrastructure for the healthcare system:

Nigeria's transition towards a digital economy⁶⁴ and the pandemic makes it pertinent to deploy IT across the healthcare system. In addition to providing the critical infrastructure, there is also the need for capacity building to enable service providers to effectively utilise IT in service delivery. The ESP 2020 seeks to develop digital infrastructure in strategic locations and gap fillers in difficult to reach locations. The health sector has an IT policy hence, in establishing priorities and collaborations, in developing the digital infrastructure, the sectoral policy, universal access and strategies to invigorate PHCs should inform the development of these infrastructure to better integrate it into PHCs services.

⁶² *Ibid* note 46

⁶³ ESP 2020 note 15. 42

⁶⁴ ESP 2020 note 15.

Challenges and Prospects for Healthcare Infrastructure Sustainable Financing in Nigeria

Challenges facing financing of critical basic infrastructure for the healthcare system in Nigeria

Conceptually, sustainability can be historically traced to its modern roots in *The Limits of Growth* published in 1972, all the way to its older root in German dictionary published in Brunswick in 1809⁶⁵ before taking centre stage and becoming a guiding concept since 1992⁶⁶ in the field of development under the auspice of Sustainable Development Goals. Furthermore, there is no universally accepted definition of sustainability albeit being central to development.⁶⁷ While the theoretical sphere is still unsettled, the practical implementation is more straight forward, flexible, and adaptable. Some of the challenges envisaged are as follows:

1. **Policy stability:** Lack of data and other data gathering, management and analysis culture could impact the needs assessment for health infrastructure deployment.
2. **Political will:** Sustaining the momentum that has been set by the ESP 2020 may be a challenge.
3. **Continuity:** this is closely related to political will because if the will is not there, the likelihood of continuity diminishes.

Challenges facing financing of critical basic infrastructure for the healthcare system in Nigeria

Although the health system in Nigeria faces numerous challenges that require urgent action to address. They could be resolved through short-, medium- and long-term action. Some require capacity building, some inter – agency collaboration and coordination, some diligence and discipline, while others require infrastructure restoration/provision. Despite these challenges, there are opportunities for Nigeria to turn its fortune around and create a resilient health system that can ensure its health security. This can be done through research, informed decision making, innovation and self-reliance. As external funding dwindles, Nigeria can look towards domestic funding to finance its health system transformation in a sustainable manner as follows:

1. To achieve the goal of providing universal health for all and meet the SDG, a lot needs to be done to Nigeria's health system in terms of health financing, providing protection and health infrastructure development. Nigeria's approach to health financing involves budgetary allocation and spending which is insufficient to meet the needs of the health system. A comparison with the approaches adopted by other countries may provide Nigeria with options on financing healthcare. Countries such as South Africa, Kenya and Morocco for instance expanded their policy space through more efficient tax collection.⁶⁸ Whether that is an option that Nigeria can consider remains to be seen especially when Nigeria, with one of the highest populations living in poverty is just recovering from a recession. Tanzania is focusing on more efficient resourcing of health facilities, while Rwanda and Ethiopia focused on the social protection system to remove barrier and provide access to health services.⁶⁹ Nigeria has had the NHIS for some time now but is yet to fully realise

⁶⁵ Judith C. Enders and Moritz Remig, Theories of sustainable development An introduction in Judith C. Enders and Moritz Remig (eds), *Theories of Sustainable Development* 2015 (Routledge), 1- 5

⁶⁶ Ulrich Grober 'The Discovery of Sustainability The Genealogy of a Term' in Judith C. Enders and Moritz Remig (eds), *Theories of Sustainable Development* (Routledge, 2015), 6- 15

⁶⁷ For more on Sustainability and the conceptual background of sustainable development, see John Blewitt, *Understanding Sustainable Development* 2018, 3rd edition (Routledge); Petra Kuenkel *Stewarding Sustainability Transformations An Emerging Theory and Practice of SDG Implementation* Springer Nature Switzerland AG 2019; George Niculescu, 'Rethinking of the Sustainable Development' (2016) 2016 *Annals Constantin Brancusi U Targu Jiu, Letters & Soc Sci Series* 2; Neuro Jose Zambam and Salet Oro Boff, 'The Sustainability Comprehension for a Development Policy from the Theory of Rawls' (2013) 106 *Revista Brasileira Estudos Politicos* 215; Mihaela Elvira Gherasim and Gheorghe Tanase, 'The Fundamentals of Sustainable Development' (2012) 4 *Contemp Readings L & Soc Just* 446; Carl J Circo, 'Does Sustainability Require a New Theory of Property Rights' (2009) 58 *U Kan L Rev* 91.

⁶⁸ *Ibid* note 46

⁶⁹ *Ibid* note 46

its benefits. Learning from these countries could assist Nigeria. Nigeria can learn from other countries to possibly adopt a hybrid approach that can enable it to harness the resources to efficiently utilise its protection mechanism in a way that removes barriers and provide access to care for more Nigerians.

2. **Power:** Government should collaborate with Federal Ministry of Health and states to identify the locations where solar installations will be placed and seeks to identify prospective beneficiaries. Government can, in collaboration Federal Ministry of Health, States, and other relevant agencies and stakeholders create incentive around this to crowd such providers through green financing (including community cooperatives) to ensure resilient and sustainable provision of power to PHCs. Private investment in renewable energy deployment and can be used to support the deployment of renewable energy to PHCs as part of health clinics.

3. **Water:** Using the ESP 2020 strategy for WASH emergency Covid – 19 responses, PEWASH, on harnessing renewable energy to supply water to facilities, collaborations with states and other stakeholders, the government can provide water to PHCs and the provision of water to all public places, government should explore collaboration with relevant agencies, communities, and other stakeholders to strategically develop PHCs and deploy water and other critical infrastructure.

4. **Health facilities:** Building PHCs should be incorporated into the housing component of NDP 2021 - 2025. In building the 300,000 homes as envisaged by the ESG 2020 and reiterated by the NDP, government should incorporate the building of PHCs into all the locations that those houses will be built. Given that critical infrastructure will be provided for such locations, incorporating PHC facilities into Nigeria's housing strategy will remove barrier and provide the needed transportation infrastructure that enables people to access health services.

5. **Information Technology:** Relying on the ESP 2020 development of digital infrastructure in strategic locations and gap fillers in difficult to reach locations, the health sector IT policy hence, strategic priorities and collaborations should be established in developing the digital infrastructure, the sectoral policy, universal access, and strategies to invigorate PHCs should also inform the development of these infrastructure to better integrate it into PHCs services

6. **Road:** In repurposing SWF and PF, government should apply the Environmental, Social and Corporate Governance principle to further green infrastructure financing and strategically use same to develop some road networks that link other roads to PHCs. In using direct labour and mapping roads, intervention should include access roads to PHCs in the map to strategically provide access to PHCs.

Conclusion

In developing critical infrastructure for the healthcare system and meeting health related SDGs, the ESP provides a strong starting point and springboard for sustainable financing of critical basic infrastructure for Nigeria's healthcare system as the country embark on sustainable recovery. This is further entrenched into the NDP 2021 – 2025. Realising the potentials that the recovery plan must develop healthcare infrastructure and undergird a resilient health requires strategy, innovation, collaboration, cooperation, and transparent/ objective implementation. Through strategic sustainable financing, Nigeria can develop its health infrastructure.