International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
Vol. 5 Issue 12, December-2016

Evolving Effective Healthcare System through Public Private Partnership

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Abstract **--This paper reviews the state of Public Healthcare Infrastructure in Nigeria and the potentiality of PUBLIC PRIVATE PARTNERSHIP as a financing model towards resuscitating the Healthcare delivery system. First, we reviewed vital documents on Healthcare delivery and Public Private Partnership(PPP) models of delivering public infrastructure projects. The provisions of the National Health Act 2014, the Infrastructure Concession and Regulatory Commission (establishment) Act 2005, and the National Health Policy were examined respectively. The review showed that poor healthcare infrastructure had persisted over decades owing to neglect, poor government funding and a myriad of other factors. Accordingly, having regard to health financing, we examined all PPP-based healthcare projects vis-a-vis that in other segments of the economy. Though the PPP model appears to be a more prospective model for healthcare infrastructure procurement it is yet to be exploited by the public authorities. Our findings showed that Nigeria has the potential to enthrone effective and efficient healthcare delivery through the PPP platform.**

Keywords--Health Policy, Health Act, Public Private Partnership

I. INTRODUCTION

A Healthcare delivery system is a composite of two distinct parts: the technology of healthcare and the financial arrangements accompanying the organization and delivery of care. The implication is that like other projects, a healthcare delivery system must be planned, procured, organized and delivered according to requirements.

The first attempt at health planning and development in Nigeria's health sector took place in 1946, producing the 10-year development plan which covered all facets of governmental activities in the country. The second National Development Plan (1970-1974) clearly defined its health objectives of improvement in health manpower to achieve a 1:20,000 physician-population ratio. The Third National Development Plan (1975-1980) was designed to meet the WHO standards of 1:10,000 physician-population ratios. The Fourth National Plan attempted at designing a framework for preventive medicine. In achieving its international obligations, Nigeria embarked upon projects and policy decisions to buttress its commitments to the realization of the right to health. The organizational structure of healthcare delivery system in Nigeria is governed by the National Health Policy designed to achieve health for all Nigerians. The National Health Policy was adopted in 1988 and reviewed in 2004[1] and recently. The National Health Policy 'serves as the point of reference in providing a sound foundation for the planning, organization and management of the overall health system of the country [2]. The Policy provides that health access to quality and affordable health care is a human right [2]. To drive the National Health Policy, National Health Bill was enacted in 2014 and signed into law same year by the former president of Nigeria Dr. Goodluck Jonathan.

In Nigeria, Public financing of health services derives basically from budgetary allocation which in turn is largely determined by the revenue accruing from the crude oil exports. National income from oil sales accounts for about 30% of GDP and in some years, over 70% of foreign exchange earnings. However, since the beginning of 2016, the oil industry, which is the mainstay of the Nigerian economy, is facing its deepest downturn in more than two decades. Global oil prices have been unstable and constantly nose-diving; currently it fluctuates between $40 per barrel and $55 dollar per barrel. This fall has in no small measure exerted a devastating effect on the Nigerian economy. Nigeria's excess crude account (ECA), which usually acts as a buffer and countercyclical reserve against exogenous shock, is currently below the World Bank's recommended mark. It is also reported that there is a serious dip in the foreign reserve which stands at $28.87 billion as at 31st March 2016, an indication of unfavourable forecast [3]. Nigeria has had to enter into talks with the World Bank for support for strained state finances [4]. The impact of lesser revenue from oil and gas exports has affected both recurrent and capital expenditure, increase in price of goods, layoffs and lower standard of living [5].

Public Private Partnership (PPP) is a financing model that continues to evolve round the world. Simply put, PPP is a contractual relationship that involves the public and the private sector for the purpose of delivering facilities and/or operation of service traditionally provided by the public sector. It provides the private sector partner the opportunity to participate in the design, financing, construction, ownership and/or operation of public infrastructure. Public Private Partnerships have been regarded as the best alternative to the highhandedness of privatization or the negative effect of exclusive public ownership. The use of PPPs to meet a wide variety of public needs dates back centuries in the United States. One of the first examples was the Lancaster Turnpike, a toll road built by the private sector with public sector oversight and rights-of-way. It was opened in 1793, connecting Pennsylvania farmers with the Philadelphia market and drastically reducing the travel times. The Erie Canal, completed in 1825, and the first Transcontinental Railroad finished in 1869 are two other early examples of PPPs [6]. Today, partnerships are used not only in transportation projects but also for water and waste water systems, delivery of social services, building schools, and a wide range of other

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
Vol. 5 Issue 12, December-2016

applications. Governments and agencies have continued to apply the experiences with PPPs in the past on how to most effectively combine the strengths and resources of both the public and private sectors. Significant refinements in the PPP process resulted from these experiences. Although PPPs can be more difficult to execute than other types of procurement, the reward can be worth the extra effort. It has been shown in many instances that PPPs make possible the completion of projects that would be impossible using more traditional methods of economic development.

PPPs are not new in Nigeria though they have not been in the public glare. It is notable that prior to the enactment of the Infrastructure Concession Regulatory Commission (Establishment) Act 2005 which is a major legislation for regulating public private partnership projects, various laudable projects have been executed many years earlier using requisite models of PPPs. The establishment of a regulatory authority has indeed formalized government's understanding on the need to partner with and harness the resources from the private sector in order to provide vital social amenities for its citizenry. There is no doubt that the government through this platform has executed laudable projects, however, the issue is: "to what extent has the PPPs benefitted the health care sector?" This study will among other things provide an answer to this important question as well as expose some of the bottlenecks in the system.

II. PROBLEM STATEMENT

Succinctly put, the problem in this study is that the Federal government of Nigeria has suffered decades of misery in fulfilling its constitutional obligation to provide affordable health and medical facilities to its teeming population due to inadequate budgetary allocation, governance, corruption and other vices; and though the right mix of public private partnership frameworks could see Nigeria build and enjoy effective and efficient healthcare delivery infrastructure, there are attendant legal and socioeconomic issues which must be remedied prior to having a sustainable healthcare delivery infrastructure. Healthcare delivery in Nigeria is fraught with myriads of problems including poor physical infrastructure often resulting to wrong diagnosis, deficiencies in human resources, lack of access to hospitals and adequate treatment; clinical inefficiency; scarce financial resources, socio-cultural and behavioral issues, disease control failures, stock-outs of essential drugs and vaccines, and poor management. There is no gainsaying that the state of health care delivery in Nigeria has continued to deteriorate irrespective of the large number of medical schools in the country and unparalleled advances in medical and biomedical technology. The precarious situation in the health sector in Nigeria may be expressed in terms of three main factors: *funding/financing; governance; and legal framework*.

At the core of a healthcare delivery system is funding. Funding to a large extent determines the outlook of a healthcare system such as the structure, human and material resources, and the extent of care. Funding to a large extent determines the quality of healthcare. Quality itself comprises three elements: Structure (infrastructure, tools, technology, staffing, incentives, etc.); Process (interaction between patients and healthcare personnel); and Outcomes (measurable statistic such as mortality and morbidity rates, health status, disabilities, patient satisfaction and responsiveness to the healthcare system). The expansion of tertiary and modern curative facilities needs considerable resources [7]. An examination of Nigeria's annual budgets over the last decade often reveals a major chunk of the budget being allocated to meeting recurrent expenditure such as paying wages and servicing debts while capital expenditure such as that on the health sector is not often encouraging. Health expenditures are a significant policy issue in many countries [8], as it is in Nigeria.

The following may be deduced from the state of the Nigerian health sector:

a. Uncontrolled birthrate and advent of new health challenges and epidemics push up the demand for health care;
b. Technology drives up the cost of health care: Technological advances have gone a long way in providing solutions to healthcare challenges at different levels such as: diagnosis, treatment and management of hitherto difficult health problems;
c. A significant proportion of funding for healthcare in Nigeria comes from the health facility users (patients) rather than as a public service;
d. There are various health and public private partnership laws and policies that are aimed at developing, regulating and controlling the healthcare delivery system and infrastructure however these laws and policies do not appear to be having the requisite impact on the public healthcare delivery system;
e. The yearly national budget on healthcare delivery is grossly inadequate to provide quality healthcare to its citizens;
f. The near-comatose state of the Nigerian health sector is connected to the increasing medical tourism for those that can afford it; while leaving others with no option than to face the consequences of a failed health delivery system which often results to low life expectancy and high mortality rates among the low and middle class citizens.

III. OBJECTIVES OF THE STUDY

Funding is critical to building effective achieving success as to the goals of a healthcare project. This does not however downplay the role of the vital factors such as governance and legal framework. In the realm of healthcare financing, Shanker and Len have identified economics and labour conditions as difficult barriers to financing public works and expansive projects [9]. They observed that public private partnerships are moving forward [9]. Marie, et al[10] have observed that in the United States, thousands of partnerships have developed around health, fueled by investments of hundreds of millions of dollars from both governmental and non-governmental sources. Marie et al. specifically posited that a synergy between the public and private will mobilize additional funds for new challenges, stimulate research and development, strengthen national health policy processes and content, augment health service

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delivery capacity and establish international norms and standard.

Based on the foregoing, the objectives of this study are:

a. To examine the state of affairs and dominant practices in the public healthcare delivery system in Nigeria, legislations and policies since independence in order to identify the attendant socio-economic problems;
b. To ascertain what would constitute effective health care delivery in Nigeria having regard to funding, legislations and the Public Private Partnership financing.

IV. LITERATURE REVIEW

In pursuit of optimal healthcare and efficient health delivery system, there has been an increasing health spending in many countries. However, there is a wide gap between developed countries and low income countries in terms of governmental spending on health. Current spending on health is estimated to be $4.1trillion, out of which 80% is borne by member countries of the Organization for Economic Co-operation and Development (OECD). Low income countries, especially countries in the Sub-Saharan Africa, of which Nigeria is one, have the lowest per capita in the world [11].

The current health care delivery system in Nigeria is a conglomerate of hundreds of thousands of more or less independent public and private providers of care. The public and private providers run along parallel lines. The public constitute a large and important source of health care. The public sector health care delivery is funded by the Federal, State and Local Government authorities. Currently, there are about 23 Federal Teaching hospitals in Nigeria, 13 Specialty Hospitals, 19 Federal Medical Centers, 18 State governments funded hospitals as well as several community primary health centres in different localities across Nigeria. Funding is mainly provided by the government while consumers pay a minimized sum for the provision of health care services. The private sector, on the other hand, includes sole practitioners, joint-partnerships, non-governmental organizations, missionary hospitals, religious and/or indigenous care providers or traditional healers.

A. History of Healthcare Delivery In Nigeria

There is no gainsaying the fact that healthcare delivery system in Nigeria and its future prospects require a good understanding of the evolution of healthcare delivery in Nigeria though the history of healthcare delivery in Nigeria is rather a tortuous one. In this discourse, we have tried to break these developments into three periods having regard to history and evolution of the entity known as Nigeria.

- *Pre-colonial healthcare delivery*

The pre-colonial period refers to the period before the British annexed Lagos in 1861 and the period before its full occupation or rule over the geographical area now known as Nigeria, in 1885.

Pre-colonial Nigeria is made up of at least 250 ethnic groups with peculiar socio-cultural characteristics. Though these groups share common major macro-culture and macro-traditions, each evolved its own micro-culture and micro-traditions in response to prevailing environmental circumstances [12]. During this era, the prevailing perception of illness or disease by natives could be regarded as that of the supernatural view. The supernatural view regards diseases as being caused by agents and factors such as gods, spirits, retribution for sins and taboos, witchcraft and sorcery by fellow natives. Thus, when a person is ill, it is perceived that it either a witch or wizard had cast a spell on the person in question or that he is being punished by divine powers for his sins. Due to the prevailing crude system of interpreting sicknesses and diseases by natives only traditional medicine and healing constituted the system of healthcare. It is worthy of note that this supernatural perception of disease was prevalent across the different ethnic groups across Africa. The Traditional medicine and healing providers included herbalists, divine healers, soothsayers, midwives, spiritualists, bone-setters, mental health therapists and traditional surgeons. It should be acknowledged that though the traditional health delivery system lacked scientific basis, the care providers prospered in their craft as there were relative success in the cure they administered to remedy ailments. To this end, traditional healing and medical practices remain viable option in the modern complex health care system in Nigeria and should be strengthened or reformed.

The first record of modern medical services in Nigeria within this period was that introduced by European explorers in the early-to mid-nineteenth century. It is on record that during the expedition of 1854, Dr. Baikie introduced the use of quinine, which greatly decreased mortality and morbidity among the expeditioners. These services, however, were meant to cater for the well-being of the explorers [13] and were not available to the natives. The advent of the church missionaries helped extend modern health care services to the natives [14]. Three notable missionary groups were prominent during this era, the Roman Catholic mission, the Church Missionary Society (Anglican) and the American Baptist Mission. It is often stated that the first health care facility in Nigeria was a dispensary opened in 1880 by the Church Missionary Society in Obosi.

- *Colonial era*

Modern healthcare delivery was not formally introduced into Nigeria until the 1860s, when the Roman Catholic missionaries established the Sacred Heart Hospital in Abeokuta in the present day Ogun State, in 1885[14]. Throughout the ensuing colonial period, the religious missions played a major role in the supply of modern health care facilities in Nigeria. The Roman Catholic missions predominated, consisting about 40 percent of the total number of mission-based hospital beds by 1960. By that time, mission hospitals somewhat exceeded government hospitals in number: 118 mission hospitals, compared with 101 government hospitals [14]. Mission-based facilities were concentrated in certain areas, depending on the religious and other activities of the missions. Roman Catholic hospitals in particular were concentrated in the southeastern and mid-western areas; and by 1954 almost all the hospitals in the mid-western part of the country were operated by Roman Catholic missions followed by the Sudan United Mission, which concentrated on middle belt, and the Sudan Interior Mission, which worked in the Islamic north; all numbering

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ISSN: 2278-0181
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about twenty-five hospitals [15]. The missionaries not only provided the facilities but also provided medical training and education for nurses and paramedical personnel; and sponsorships for advanced medical training, often in Europe. Majority of Nigeria's first generation of Western-trained doctors were beneficiaries of these noble projects by the missions. It is a known fact that the general education provided by the missions for many Nigerians assisted to a great extent in laying the groundwork for a wider distribution and acceptance of modern health care system.

The British colonial government's intervention in the health care delivery started with the construction of health facilities for its military personnel, then in Lokoja which was the military headquarters under the Governor, Lord Lugard, in 1900. The colonial government also established civilian health facilities among which are St. Margaret's Hospital, Calabar in 1889, and other facilities in Lagos. Unlike the missionary facilities, these facilities established by the colonial government at this time were, at least initially, solely for the use of Europeans. Health care services were later extended to African employees of European concerns. Government hospitals and clinics expanded to other areas of the country as European activity increased there, for instance, the hospital in Jos, was founded in 1912 after the initiation there of tin mining [15].

The trend in healthcare delivery received a great blow during the World War I owing to the large number of medical personnel, both European and African, who were taken out of the local health care system to serve in Europe. After the war, medical facilities were expanded substantially, and a number of government-sponsored schools for the training of Nigerian medical assistants were established. Nigerian physicians, even if trained in Europe, were, however, generally prohibited from practicing in government hospitals unless they were serving African patients. This practice led to protests and to frequent involvement by doctors and other medical personnel in the nationalist movements of the period [15].

Advancement in organization of healthcare delivery during the colonial era saw the merger and centralization in the control of healthcare delivery in the British-controlled West Africa, i.e. The Gambia, Sierra Leone, Ghana (then Gold Coast) and Nigeria. The centre of control was the Colonial Office in London. This office was responsible for specifying the services to be provided across the region as well as the manpower. The complexity of care management later led to regionalization in 1954, whereas common West African facilities such as the West African Council for Medical Research were maintained.

Nigeria's healthcare delivery within this period improved and expanded with industrialization, as many medical doctors were civil servants, except those working for missionary hospital. Then the organization of control among health personnel commenced with the appointment of the Chief Medical Officer, who became the principal executor of local health care policies. With other medical personnel, the ministry of health was formed and had its office then in Lagos.

The First colonial health plan

After World War II, in a bid to respond to nationalist agitation, the colonial government tried to extend modern health and education facilities to much of the Nigerian population. This was through the drafting of the first ever health care plan in Nigeria in 1946, a ten-year health development plan. The University of Ibadan was later established in 1948 to include the nation's first faculty of medicine and university hospital, the University College Hospital; a number of nursing schools and two schools of pharmacy. The 1946 health plan established the Ministry of Health to coordinate health services throughout the country, including those provided by the government, by private companies, and by the missions. The plan also budgeted funds for hospitals and clinics, most of which were concentrated in the main cities; little funding was allocated for rural health centers. There was also a strong imbalance between the appropriations of facilities to southern areas, compared with those in the north [15]. The trend in the control of healthcare changed between 1952 and 1954 as a result of the transfer of the control of medical services to the then three regional governments--Western, Eastern, and Northern regions. Consequently, each of the regions set up their own Ministries of Health, in addition to the Federal Ministry of Health at the centre. Healthcare delivery at that point has two public institutions, Federal Ministry of Health, an agency of the Federal Government through which it exercised its responsibility for most of the health budget across the States; and the State Ministry of health, an agency of the State government which was independent as to the allocation of health care budget as they deemed fit.

The Second colonial development plan

The Second Colonial Development plan was drafted in 1956 and was meant to drive health development through 1962. This plan had as its aim, the provisioning of national health services to all. The plan expressed the government's intention to expand rural services. The rural services would be in the form of rural hospitals of 20-24 beds, supervised by a medical officer, who would also supervise dispensaries, maternal and child welfare clinics and preventive work (such as sanitation workers). The policy made local governments contribute to the cost of developing and maintaining such rural services, with grants-in-aid from the regional government. This policy was in force during Independence.

- *Post-colonial healthcare delivery developments*

At independence, Nigeria has had two healthcare development plans. By independence in1960 there were sixty-five (65) government nursing or midwifery training schools. The objective of the second colonial development plan was still being pursued but under a new plan, the first national plan not meant specifically for healthcare but included it.

The First National Development Plan (1962-1968)

This plan was a re-adaptation of the second colonial health plan Nigeria having attained independence. Among other things, the objectives of the plan were to increase the standard of living of the masses particularly in respect of food, housing, health and clothing and to develop the

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infrastructure of the nation [16]. The realization of this plan was cut short by the political upheaval in the country which resulted in 30 month civil war.

The Second National Development Plan (1970- 1975)

This plan incorporated development programs outlined in the earlier plan. By this time, the health sector had suffered a great neglect. The health component of this plan was aimed at correcting some of the deficiencies of the health sector carried over from the first national plan. As at 1973, there were only five University Teaching Hospitals located at Lagos, Ibadan, Benin, Zaria and Enugu respectively for the training of doctors, medical technologist, nurses and other medical personnel[17]. This period also planned the establishment a teaching hospital at the University of Ife.

The Third National development plan (1975-1980)

The Third National Development Plan came into effect in 1975 during the General Yakubu Gowon's regime. Prior to the third development plan, not much had been done to achieve the goals of the Nationwide Health Care Services policy as provided in the second health development plan. The third development plan, however, focused on the improvement of the numerical strength of existing health facilities rather than evolving a clear health care policy. The Plan had the following policy guidelines and objectives: Federal and state governments were to resolve the main identified health problems of inadequacy, misdistribution and poor utilization of health facilities, institutions and establishing comprehensive facilities for curative and preventive care for the population[18]. The plan had the following objectives:

a. To undertake medical research;
b. To control communicable diseases and establish planning units, equipped to collect, process and publish data on major health problems.

Other provisions for the health sector in the plan were:

a. Expansion of Federal teaching hospitals;
b. Provision of incentives for doctors to relocate;
c. Creation of a cadre of workers called medical assistants;
d. Production of nurses, midwives and technicians;
e. Establishment of state schools of health technology;
f. Expansion of basic health services;
g. Establishment of health management boards and the zoning of the state;
h. Creation of council of medical research;
i. Establishment of the Federal health planning and research unit.

Consequent upon this plan[18], by 1979, the nation had 562 general hospitals, 16 maternity / pediatric hospitals, 11 armed forces hospitals, 6 teaching hospitals, and 3 prison hospitals. Altogether they accounted for about 44,600 hospital beds. In addition, general health centers were estimated to total slightly less than 600; general clinics 2,740; maternity homes 930; and maternal health centers 1,240. Within this period, ownership of health establishments devolved around Federal, State, Local governments, and private individuals. However, majority of health establishments were public, though the number of private-owned facilities had started increasing.

By 1980, the problems of health inequities arising from the geographic maldistribution of health facilities among the regions and of the inadequacy of rural facilities had become so obvious. The ratios were an estimated 3,800 people per hospital bed in the Northern States (Borno, Kaduna, Kano, Niger, and Sokoto states); 2,200 per bed in the middle belt (Bauchi, Benue, Gongola, Kwara, and Plateau states); 1,300 per bed in the southeast (Anambra, Cross River, Imo, and Rivers states); and 800 per bed in the southwest (Bendel, Lagos, Ogun, Ondo, and Oyo states). There were also significant disparities within each of the regions. For example, there were an estimated 2,600 people per physician in Lagos State, compared to 38,000 per physician in Ondo State.

In his study on the distribution of hospitals between urban and rural areas in 1980, Dennis Ityavyar found that whereas approximately 80 percent of the population of those states lived in rural regions, only 42 percent of hospitals were located in those areas [19]. The maldistribution of physicians was even more marked because few trained doctors who had a choice wanted to live in rural areas, and many of the doctors who did work in rural areas were there as part of their required service in the National Youth Service Corps, established in 1973[19].

Hospitals were divided into general wards, which provided both outpatient and inpatient care for a small fee, and amenity wards, which charged higher fees but provided better conditions. The general wards were usually very crowded, and there were long waits for registration as well as for treatment. Patients frequently did not see a doctor, but only a nurse or other practitioner. Many types of drugs were not available at the hospital pharmacy; those that were available were usually dispensed without containers, meaning the patients had to provide their own. The inpatient wards were extremely crowded; beds were in corridors and even consisted of mattresses on floors. The amenity wards were available to wealthier or elite patients, food and better care were provided, and drug availability was greater[19]. The highest level of the Nigerian elite frequently traveled abroad for medical care, particularly when a serious medical problem existed.

The Fourth National Development Plan (1981-1985)

The Fourth National Development plan addressed the issue of preventive health services for the first time. The major policy objectives and programmes were:

a. Establishment of 3-tier comprehensive health system (primary, secondary and tertiary);
b. Concurrent health care responsibility from 3 levels of government;
c. Establishment of Basic Health Services Scheme (BHSS) and of primary health care for all;
d. Establishment of Local Government Areas (LGAs) as basic implementation unit;
e. Establishment of BHSS for a population of 50,000;
f. Establishment of 4 categories of community health workers;
g. Utilization of village voluntary traditional practitioners and leaders;
h. Discouragement of expensive construction;

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i. Decentralization of decision-making; and
j. More balanced expenditure between hospitals and BHSS.

The BHSS would provide for the establishment of three levels of health care facilities namely: Comprehensive Health Centers (CHC) to serve communities of more than 20, 000 people; Primary Health Centers (PHC) to serve communities of 5000 to 20, 000 persons; and Health Clinics (HC) to serve 2000 to 5000 persons. Thus, a CHC would have at least one PHC in its catchment area and a PHC would have at least one HC in its catchment area. The policy stipulated that these institutions were to be built and operated by state and local governments with financial aid from the Federal government. By the provisions of this policy, the provision of health services would be the joint responsibility of the Federal, state and local governments. Having regard to the content of this plan, it was seen to exhibit same content as that published by the then Eastern Regional Government in 1954[12]. In line with the scheme in the Fourth National Development plan, each local government area in the country would have a minimum of seven Primary Health Centers and thirty health clinics with at least one Comprehensive Health Center. The larger local government areas would each have, at least twelve PHCs and 50 HCs feeding into one or more CHCs [20].

The then Military Government of General Muhammadu Buhari on coming to power in the last day of 1983 gave as one of the reasons for its Military intervention, the poor state of health services in the country. It never minced words in stating the absolute that "our teaching hospitals have been reduced to mere consulting clinics [21]". The Government's readiness to change the trend was evidenced by revision of the Fourth National Development Plan. The health strategy under the revised plan shifted emphasis to primary health care. Although primary health care was already the ultimate goal of the plan, there was no obvious political will to implement it. The adoption of the WHO target of Health for All by the Year 2000 by the Federal government was marked by shifts in emphasis and structural changes in health care administration. The healthcare dream of the Government was cut short with the overthrow of the Military Government of General Buhari by General Ibrahim Babangida.

By 1985, during the administration of General Ibrahim Babangida, there were 84 health establishments owned by the Federal government (accounting for 13 percent of hospital beds); 3,023 owned by State governments (47 percent of hospital beds); 6,331 owned by local governments (11 percent of hospital beds); and 1,436 privately owned establishments (providing 14 percent of hospital beds).
However, the state of healthcare was markedly worsened by government economic policies during this era. Two of these policies were the currency devaluation and Structural Adjustment Programme which began in 1986. The prices of imported goods escalated and government and public health care facilities were severely affected by rising costs, government budget cuts, and materials shortages. These developments saw the marked rise of privately owned health facilities in late 1980s. The demand for modern medical care far outstripped its availability. Medical personnel, drugs, and equipment were increasingly diverted to the private sector as government hospitals deteriorated. At this time Government health policies had become an issue of policy debate and public contention. The issue emerged during the Constituent Assembly held in 1989 to draft a proposed Constitution. The original draft reported by the assembly included a clause specifying that free and adequate health care was to be available as a matter of right to all Nigerians within certain categories. The categories included all children younger than eighteen; all people sixty-five and older; and all those physically disabled or handicapped. This provision was, however, deleted by the president and the governing council when they reviewed the draft constitution.

The Fifth National Development Plan

The objectives of this plan were: (i) diversification of the nation's economy away from the monoculture to which it has been pushed by the fortunes of the oil sector; (ii) revitalization of the agricultural sector with a view to achieving thorough integrated rural development programmes; (iii) domestic production of raw materials for local industries in order to reduce the importation of locally manufactured goods and (iv) promotion of employment opportunities in order to arrest the deteriorating mass unemployment. The primary focus of the plan was to correct the structural defects in the economy and create a more self-reliant economy that would largely be regulated by market forces. The economy was therefore expected to be restructured in favour of the production sector especially those of agriculture and manufacturing. Regrettably, this plan never saw the light of the day as it was later incorporated in the Structural Adjustment Programme (SAP). The two year SAP brought to an end the five year planning model in Nigeria. The Federal government changed the two year model to three year rolling plans. In the health sector, this period saw the promulgation in 1988, the National Health Policy and Strategy to Achieve Health for All Nigerians, the first comprehensive national health policy.

The Perspective Plan and Rolling Plans (1990-1998)

The administration of General Ibrahim Babangida replaced the fixed five year development plans with two types of national plans: perspective plan which covered a period of 15-20 years meant to afford the government the opportunity to realize long-term objectives and the rolling plan which had a span of three years and subject to review yearly[22]. The perspective plan which was to start from 1990 together with rolling plans did not take off until 1996 when Abacha set-up the Vision 2010 Committee. The Vision was the first perspective plan for the country though it failed to proceed beyond Abacha's death in 1998. The three year rolling plan became operational from 1990 with the introduction of the First National Rolling Plan (1990-1992) and its primary objective was to enable the country to make revision in the "midst of increasing socio-political and economic uncertainties". Regrettably, these rolling plans were never better than the fixed term plans [23].
A remarkable event in 1995 was the National Health Summit where experts, leaders, policy makers, providers, planners and administrators in health and other relevant sectors, and the international agencies convened to examine the factors

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
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that have militated against improvement in national health status. The recommendations from the summit and other subsequent relevant activities culminated into a critical examination of the National Health Policy, with a view to effecting those changes that would enhance the relevance of the policy to the national health development efforts. Though in response to the summit, the Federal Ministry of Health organized the review of the policy during 1996 – 1997, the revised policy was never endorsed by the Government.

Nigeria's Five year Strategic Health Plan (2004 – 2008)

In a bid to reform the ailing health sector, the Federal Government through the Federal Ministry of Health initiated a health sector reform which it defined as a sustained process of fundamental change in policy, regulation, financing, provision of health services, re-organization, management and institutional arrangements that is led by government, and designed to improve the performance of the health system for better health status of the population [24]. This plan provided the tempo and direction for strategic reforms and investment in key areas of the national health system, within the context of the overall government macroeconomic framework, the New Economic Empowerment and Development Strategy (NEEDS)[25]. During this period, the Federal Ministry of Health under Professor Eyitayo Lambo, produced the Revised National Health Policy in 2004.

National Strategic Health Development Plan (2010-2015)

The National Strategic Health Development Plan (National Health Plan) was a culmination of shared aspiration to strengthen the national health system and to vastly improve the health status of Nigerians. The plan was perceived as the overarching reference health development document for all actors toward delivery on a shared results framework, to which each and every one will be held accountable for achieving the goals and targets as contained in the results framework [26]. The health plan, which was also developed in tandem to the guidelines of the National Planning Commission -Vision 20:2020 process (including the V20:2020 implementation plan), is the compass or reference for the health sector Medium Term Sector Strategy and annual operational plans and budgets at all levels. The overall goal is to ensure that adequate and sustainable funds are available and allocated for accessible, affordable, efficient, and equitable health care provision and consumption at local, state and Federal levels. The strategic objectives of this development plan are [27]:

a. To develop and implement health financing strategies at Federal, State, and Local levels consistent with the National Health Financing Policy;
b. To ensure that people are protected from financial catastrophe and impoverishment as a result of using health services;
c. To secure a level of funding needed to achieve desired health development goals and objectives at all levels in a sustainable manner.
d. To ensure efficiency and equity in the allocation and use of health sector resources at all levels.

B. *National Health System in Nigeria*

Health care delivery in Nigeria is the responsibility of the three-tier or levels of government, that is, Federal, State and Local governments. The Federal Ministry of Health and the National Council on Health bear the responsibility of healthcare administration and policy making at the Federal level, whereas the State Ministry of Health undertakes the management and control of health care at the various States. The Local council health authorities in the 774 local government areas control and manage public healthcare delivery at the local council level. Section 1(1)[28] of the National Health Act 2015 provides:

"There is hereby established for the Federation the National Health System which shall define and provide a framework for standards and regulation of health services and which shall:

a. encompass public and private providers of health services;
b. promote a spirit of cooperation and shared responsibility among all providers of health services in the Federation and any part thereof;
c. provide for persons living in Nigeria the best possible health services within the limits of available resources;
d. set out the rights and obligations of health care providers, health workers, health establishments and users; and
e. protect promote and fulfil the rights of the people of Nigeria to have access to health care services.

The National health system comprises several components as provided by the Health Act [28]. These components include:

a. The Federal Ministry of Health;
b. The Ministry of Health in every state and the Federal Capital Territory Department responsible for Health;
c. Parastatals under the Federal and state ministries of health;
d. All local government health authorities;
e. The ward health committees;
f. The village health committees;
g. The private health care providers;
h. Traditional health care providers; and
i. Alternative healthcare providers

C. *Healthcare Financing*

Healthcare financing system may be described as a process through which revenues are collected from primary and secondary sources, e.g., out-of-pocket payments (OOPs), indirect and direct taxes, donor funding, co-payment, voluntary prepayments, mandatory prepayment, which are accumulated in fund pools[29] so as to share risk across large population groups and using the revenues to purchase goods and services from public and private providers[30] for identified needs of the population, e.g., fee for service, capitation, budgeting and salaries[31]. Majority of health care in Nigeria is privately financed. Private expenditure on health as a percentage of total health expenditure was 63.3%[32].

It is concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people, individually and collectively in the health system[32]. A healthcare financing mechanism should provide sufficient financial protection so that no household is impoverished

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because of a need to use health services. One-way of providing such protection is by incorporating a risk-sharing plan in the health care financing mechanism, whereby the risk of incurring unexpected health care expenditure does not fall solely on an individual or household[33]. The Federal Ministry of Health is saddled with the planning and coordination of national health services issues. The state governments through their Ministries of Health implement national programs and run state health institutions while the local governments ensure the delivery of health care to the masses. Currently, over 90% of the money for funding public health care services comes directly or indirectly from the Federal government. Public healthcare funding is recognized as one of the perennial problems of effective healthcare delivery in Nigeria. Public expenditure on health is less than $8 per capita, compared to the $34 recommended internationally. Private expenditures are estimated to be over 70% of total health expenditure with most of it coming from out-of-pocket expenditures in spite of the endemic nature of poverty[34]. Considering the provision of health care financing in the national Health Act 2015 and the Revised National Health policy which solicits for funding from diverse sources, the old trend in public healthcare funding is about to be changed.

V. METHODOLOGY

In this study, a desk research methodology was adopted. Regard was also had to descriptive and analytical approaches (where necessary) including sociological enquiries and review of relevant legislations using a phased method. First, a search was made on Medline, PubMed, The Cochrane Library, Popline, Science Direct and WHO Library Database using search terms such as health care delivery in Nigeria, Health policies, Health financing in Nigeria, public health financing, public private partnerships, public private partnership models in health financing, socioeconomic problems in public health delivery, problems of public private partnership in healthcare. We also reviewed a bunch of relevant literature and documentation on the following:

a. Health care developments in Nigeria
b. Constitution of the Federal Republic of Nigeria 1999[as amended]
c. Health Policy documents and guidelines
d. Federal Ministry of Health
e. Federal commissions on Concession and Public Procurement

Second, basic sociological inquiry was made to obtain a firsthand data on the various public healthcare facilities provided by the Federal government within the scope of this study. Visits were made to some of the relevant public agencies whose authorities are within the scope of this study. The concerned agencies in this context are:

a. Infrastructure Concession Regulatory Commission
b. Federal Ministry of Health

Thirdly, an analysis of documents containing the relevant local legislations and policies on healthcare shall be made. The review will be restricted to the following:

a. The National Health Act 2014
b. The Infrastructure Concession Regulatory Commission (Establishment) Act 2005
c. The Revised National Health Policy;
d. Constitution of the Federal Republic of Nigeria 1999 [as amended]

The result of the analysis at the second and third phases led to making prompt conclusions.

VI. DISCUSSIONS

A. Status of Public Health Infrastructure in Nigeria

The World Health Organization (WHO) in 2015 reported that 50 to 80 per cent of medical equipment in low-income countries, including Nigeria, is out of service.

The poor health infrastructure in Nigeria is mix of so many factors ranging from corruption, poor governance and leadership, poor funding, negligence, poor maintenance culture to mention but a few.

Regard may be had to President Muhammadu Buhari, in his first coming as a military head of State in 1983, when he described the nation's hospitals as mere consulting clinics. The same statement was re-echoed by General Sani Abacha more than a decade later when he took over. Not much has changed till date. It could be categorically averred that the spate of things are even worse presently because as at the time those statements were made, the so-called consulting clinics were managed by more committed and experienced medical personnel. The trend is different currently as not only that the hospitals are not well funded; the hospital personnel also contribute to the poverty in healthcare delivery. It is a known fact that in most public hospitals, hospital materials are even diverted for personal use without conscience leading to what is fast becoming customary i.e. the "out-of-stock syndrome", and the preference by the hospital management to patronize fake and substandard pharmaceutical products from companies abroad. The problem is worsened by under-funding and, in some areas, misapplication of available funds, ill-trained personnel as well as a misplacement of priorities.

To worsen an already bad case, we note with regret that corruption has permeated the system and is threatening to suffocate what is left of the rot. Most of the equipment classified as unserviceable were, indeed, discarded as scrap in foreign countries. Unfortunately, some corrupt Nigerian officials will travel there, at State expense, to pay for them to be refurbished and then bring them into the country as new. The situation would have been more tolerable if human lives were not at stake – the lives of the poor masses that mostly depend on public health institutions as they cannot afford the huge bills of private hospitals. Ironically, those behind this mess are usually sponsored by government to get medical treatment abroad, their families inclusive, whenever the need arises, in what is offhandedly referred to as medical tourism.

Unfortunately, with the unserviceable equipment, doctors are misled to inaccurate, or even wrong, diagnosis of cases and, of course, ineffective treatment.

B. Access to Health infrastructure

Effectiveness in healthcare delivery is a function of accessibility of users to a functional health facility as at when needed. Access to healthcare in Nigeria is fraught with complexities. The following were found to contribute to these complexities:

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a. Massive localization of healthcare facilities in the urban areas: the distribution of public health facilities is grossly skewed. Majority of the secondary and tertiary health facilities are located in the urban areas hence those in the rural areas are deprived of access to these facilities.
b. Inequitable distribution of facilities: having regard to the spread of secondary and tertiary health facilities in some states across Nigeria, it is very obvious that the health facilities are not equitably distributed. For instance, States in Nigeria with urban status like Lagos, Abuja etc. enjoy more patronage than more rural states like Jigawa, Bauchi, Ebonyi, etc. Consequently, majority of the private hospitals are located in these urban centres where the owners of these facilities can maximize their profits as they are in most cases not meant for the poor or average salary earner.
c. Cost of access to health facilities: majority of Nigerians including the poor pay for healthcare from their private pockets. With a per capita health expenditure of $10 and about 70% Out-Of Pocket Expenditure, health financing in Nigeria has remained unpredictable, insufficient and uncoordinated with limited attempts to provide safety nets for vulnerable populations towards achieving universal access to health care[35].

C. Concession policies and Legislation in Nigeria

Infrastructure concession allows participation of the private sector in financing the construction, development, operation and maintenance of public infrastructure, development project or network for a stated period. The concession process allows private investors and operators to inject much needed capital into upgrading and maintaining infrastructure. In Nigeria, infrastructure concession is governed by two principal legislations namely:

- The Infrastructure Concession and Regulatory Commission(ICRC) Act 2005
- The Public Procurement Act 2007

We shall restrict our discussion to the ICRC Act which is the key legislation on PPP.

The ICRC Act 2005 defines infrastructure *concession* as "*a contractual arrangement whereby the project proponent or contractor undertakes the construction, including financing of any infrastructure facility and the operation and maintenance thereof and shall include the supply of any equipment and machinery for any infrastructure and the provision of any services*"

The ICRC Act 2005 is the principal legislation on Infrastructure procurement contracts based on Concession arrangements in Nigeria. This clearly indicated by in its explanatory memorandum which states: "*This Act provides for the participation of private sector in financing the construction, development, operation, or maintenance of infrastructure or development projects of the Federal Government through concession or contractual arrangements; and the establishment of the infrastructure Concession Regulatory Commission to regulate, monitor and supervise the contracts on infrastructure or development projects* ". The ICRC Act is a national legislation that operates mainly at the Federal government level. This could be averred from its provisions in Section 1 which declares as follows:

"*(1) As from the commencement of this Act, any Federal Government Ministry, Agency,*
Corporation or body involved in the financing, construction, operation or maintenance of
Infrastructure, by whatever name called, may enter into a contract with or grant concession to any duly pre-qualified project proponent in the private sector for the financing, construction, operation or maintenance of any infrastructure that is financially viable or any development facility of the Federal Government in accordance with the provisions of this Act.
(2) This Act applies to investment and development projects relating to any infrastructure of any Federal Government ministry, agency, corporation or body."

- *Infrastructure Concession Regulatory Commission (ICRC)*

The ICRC is the regulator of infrastructure concessions in Nigeria. It is established by virtue of the provisions of Section 14 of the ICRC Act 2005. The Commission was set up in 2008 with its Board consisting of one member from each of Nigeria's six geopolitical zones. The ex– officio members on the Board include the Secretary to the Government of the Federation, the Attorney General of the Federation, the Minister of Finance, the Governor of the Central Bank, and the Director-General of ICRC.

- Powers of the ICRC

The ICRC Act 2005 empowers the ICRC to:

- Take custody of every concession agreement made under the enabling Act and monitor compliance with the terms and conditions of such agreement;
- Ensure efficient execution of any concession agreement or contract entered into by the Federal Government;
- Ensure compliance with the provisions of the ICRC Act;
- Perform such other duties as may be directed by the President, from time to time, and as are necessary or expedient to ensure the efficient performance of the functions of the Commission under the ICRC Act.

The enabling Act therefore mandates the Commission to manage the complex arrangements that the PPP process entails, as well as build capacity within Ministries, Departments and Agencies (MDAs) to handle such arrangements themselves, subsequently. The ICRC is also expected to monitor the implementation of such arrangements according to best practice, ensuring that the desired service standards are attained and maintained, value for money is assured and that the private sector operators are in a position to recoup their investment in a fair and equitable manner.

D. Scope of Concessions

Under the ICRC Act 2005, the scope of opportunities for investment in infrastructure in Nigeria exists in virtually every sector of the economy. Table I presents the areas that are covered by concession arrangements.

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TABLE I. AREAS OF CONCESSION

Power plants	Industrial estates or township development
Highways	Housing
Seaports	Government buildings
Airports	Tourism development
Canals	Trade fair complexes
Dams	Warehouses
Hydroelectric power projects	Solid waste management
Water supply	Satellite and ground receiving stations
Irrigation	ICT networks and database infrastructure
Telecommunications	Education facilities
Railways	Health facilities
Land reclamation	Sewerage
Environmental remediation and clean up projects	Drainage
Interstate transport systems	Dredging
other infrastructure and development projects as may be approved, from time to time, by the Federal Executive Council	

E. Critical Success factors for Projects under PPP arrangements

PPP projects are driven by government's desire to resolve financial insufficiency by collaborating with the private sector partners to increase efficiency and effectiveness in the delivery of Public Services and facilities, whilst ensuring better risk control and management and increasing certainty of outcomes with ultimate aim of accelerating economic growth, development and infrastructure delivery; and achieving quality service delivery and good governance. It may be safely said that a PPP project no matter how realistic it sounds is bound to fail if appropriate procedures are not followed in the process. However, it has been noted that project success is a subjective assessment [38]. For example, the private sector partner in PPP arrangement may express its success in terms of the profit realized whereas the Public Partner may measure the success of the engagement by commendations they received and the level of acceptance and popularity the project so executed earned them from the society.

Prefontaine et al have earlier identified six critical success factors[39] for the new collaborative models used for Public Service delivery namely: project macro or micro environment, partners involved, collaboration process; project development process; governance methods used for organizing and managing the project, and the performance metrics employed for organizing and managing the project, and the performance level of the collaboration and the service delivery programme that operates.

It has been shown through an exploratory survey [40] conducted in 2006 that the three most important success factors of PPP projects in Nigeria are: *favourable legal framework*, *well-organized Public Agency to negotiate on behalf of government*, and *strong private consortium*.

The Infrastructure Concession Regulatory Commission has listed the following as grounds for PPP project failure:

i. Information asymmetry between the public and private sector; leading to PPP contract terms that the public sector will in due course find difficult to accept or enforce.
ii. Poor feasibility analysis, particularly in terms of forecasting demand for the infrastructure service; A number of PPP contracts have also failed because revenues have fallen well short of projections. In some cases this is the result of inadequate feasibility analysis or aggressive bidding.
iii. Inexperienced or weak private sector sponsor in terms of lack of skills and experience to deliver the infrastructure service;
iv. Inappropriate enabling environment in terms of poor legal and regulatory framework, as well as weak enforcement capacity of the public sector;
v. Lack of a proper contract management and monitoring framework by the public sector, from the initial project development and procurement stages through the post financial close phases of construction and operation;
vi. Political pressure and issues related to the application or increase of tariffs for use of infrastructure services to make them cost reflective. This has been the case for the water and electricity sector projects in many developing countries.
vii. Macroeconomic shocks such as the world financial crises or foreign exchange fluctuations may reduce the revenues and profitability of a PPP project and lead to its ultimate failure.

F. Public Private Partnerships in Healthcare delivery

A health services PPP is a long-term contract between a public-sector authority and one or more private sector companies operating as a legal entity. The government provides the strength of its purchasing power, outlines goals for an optimal health system, and empowers private enterprise to innovate, build, maintain and/or manage delivery of agreed-upon services over the term of the contract [36]. The private sector receives payment for its services and assumes substantial financial, technical and operational risk while benefitting from the upside potential of shared cost savings.

The private entity is made up of any combination of participants who have a vested interested in working together to provide core competencies in operations, technology, funding and technical expertise. The opportunity for multi-sector market participants includes hospital providers and physician groups, technology companies, pharmaceutical and medical device companies, private health insurers, facilities managers and construction firms. Funding sources could include banks, private equity firms, philanthropists and pension fund managers. For more than two decades public private partnerships have been used to finance health infrastructure around the world but not much impact has been made in Nigeria in the area of Health Infrastructure development. Governments are increasingly looking to the PPP-model to solve larger problems in healthcare delivery [37].

In Nigeria, laudable projects have been executed under the PPP arrangement. A total of 40 Federal government projects classified as legacy projects by the Infrastructure Concession and Regulatory Commission have been commissioned though

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some are ongoing (See Table II) whereas other 60 projects are under development.

Regrettably, only one out of the 60 ongoing PPP projects is a healthcare infrastructure development project that is, the Development of Abuja Medical Mall/City. It is doubtful if this PPP based health facility, "Abuja Medical Mall/City" would be able to alleviate the sufferings of millions of Nigeria who have no access to healthcare.

TABLE II. LEGACY PROJECTS UNDER ICRC CUSTODY

NO	PROJECT	GOVT AGENCY	CONCESSIONAIRE	DURATION	STATUS
1	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Apapa)	Nigerian Ports Authority (NPA)	Apapa Bulk Terminal Ltd "A"	25years October 2005 – October 2030	Under implementation.
2	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Apapa)	Nigerian Ports Authority (NPA)	Apapa Bulk Terminal Ltd "B"	25years October 2005 – 2030	Under implementation.
3	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Apapa)	Nigerian Ports Authority (NPA)	ENL Consortium Ltd (Terminal C)	10 years (Initially) June 2005 – June 2015 * Extension of additional 5 years granted to expire in 2020 (to cover period of litigation without operation)	Under implementation.
4	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Apapa)	Nigerian Ports Authority (NPA)	ENL Consortium Ltd (Terminal D)	10 years (Initially) June 2005 – June 2015 * Extension of additional 5 years granted to expire in 2020 (to cover period of litigation without operation)	Under implementation.
5	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Apapa)	Nigerian Ports Authority (NPA)	Greenview Development Nigeria Ltd (Terminal E)	25 years October 2005 – October 2030	Under implementation.
6	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Apapa)	Nigerian Ports Authority (NPA)	APM Terminals Apapa Ltd	25years September 2005 – September 2030	Under implementation.
7	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Ijora)	Nigerian Ports Authority (NPA)	AP Moller Finance/Lilypond Container Depot Nigeria Ltd	10 years December 2006 – December 2016	Under implementation.
8	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Tincan Island)	Nigerian Ports Authority (NPA)	Five Star Logistics Ltd	15 years (Initially) May 2006 – May 2021 Extension of additional 5yrs granted.	Under implementation.
9	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Tincan Island)	Nigerian Ports Authority (NPA)	Ports And Terminal Multi-Service Ltd	25 years February 2005 – February 2030	Under implementation.
10	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Tincan Island)	Nigerian Ports Authority (NPA)	Ports And Cargo Handlings Services Ltd	10 years May 2006 – May 2016 * Extension of additional 5 years granted to expire in 2021	Under implementation.
11	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Tincan Island)	Nigerian Ports Authority (NPA)	Tincan Island Container Terminal Ltd	15 years May 2006 – May 2021 * Extension of additional 5 years granted to expire in 2026	Under implementation.
12.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Tincan Island)	Nigerian Ports Authority (NPA)	Josepdam Ports Services Nig Ltd	10 years (Initially) May 2006 – May 2016 Extension of additional 5yrs granted.	Under implementation.
13.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Onne)	Nigerian Ports Authority (NPA)	Brawal Oil Services Ltd	25 years (May 2006 – May 2031)	Under implementation.
14.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port	Nigerian Ports	BUA Ports And Terminals Ltd	20 years May 2006 – 2026	Under implementation.

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	Terminal (Portharcourt)	Authority (NPA)			
15.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Onne)	Nigerian Ports Authority (NPA)	Intels Nigeria Ltd (Onne- FLT)	25 years October 2005 – October 2030	Under implementation.
16.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Onne)	Nigerian Ports Authority (NPA)	Intels Nigeria Ltd (Onne – FOT)	25 years October 2005 – October 2030	Under implementation.
17.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Calabar)	Nigerian Ports Authority (NPA)	Intels Nigeria Ltd (Calabar)	25 years October 2005 – October 2030	Under implementation.
18.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Warri)	Nigerian Ports Authority (NPA)	Intels Nigeria Ltd (Terminal A -Warri)	25 years October 2005 – October 2030	Under implementation.
19.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Warri)	Nigerian Ports Authority (NPA)	Intels Nigeria Ltd (Terminal B -Warri)	25 years October 2005 – October 2030	Under implementation.
20.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Portharcourt)	Nigerian Ports Authority (NPA)	Port and Terminal Operators Nig Ltd	15 years May 2006 – May 2021 * Extension of additional 5 years granted to expire in 2026	Under implementation.
21.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Calabar)	Nigerian Ports Authority (NPA)	Shoreline Logistics Nigeria Ltd	25 years October 2006 – October 2031	Under implementation.
22.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Calabar)	Nigerian Ports Authority (NPA)	ECM Terminals Ltd	25 years May 2007 – May 2032 * Extension of additional 5 years granted to expire in 2037.	Under implementation.
23.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Warri)	Nigerian Ports Authority (NPA)	Associated Maritime Services Ltd	10 years August 2006 – August 2016 * Extension of additional 5 years granted to expire in 2021.	Under implementation.
24.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Warri)	Nigerian Ports Authority (NPA)	Julius Berger Services Nigeria Ltd	25 years December 2006 – December 2031	Under implementation.
25.	Concession for the Development, Finance, Maintenance, Operate and Transfer of Port Terminal (Warri)	Nigerian Ports Authority (NPA)	Greenleigh Ports Ltd	10 years December 2006 – December 2016	Terminated due to none compliance with financial obligations, etc.
26.	Concession for the Operation, Management and Provision of Primary, Secondary and Tertiary Health Care at the Garki Hospital Abuja	FCTA	NISA Premier Hospital Ltd	15 Years from 20th March 2007	Under Implementation
27.	Concession for the Lease of real property, Purchase of moveable Assets, Improvements to leased Property and Performance of Operations and Maintenance of the Building Complex/Trade Centre (Lagos) Tafawa Balewa Square (TBS):	Tafawa Balewa Square Management Board	BHS International Limited	30 years 29June 2007 – 29June 2037	Under Implementation, though with court cases .
28.	Building Complex/Trade Centre– Finance, Maintain and Development Contract (Lagos) Lagos International Trade Fair Complex (LITFC): 322 Hectares landed Property	Lagos International Trade Fair Management Board	Aulic Nigeria Limited	30 years June 2007 – June 2037	Under Implementation, though with dispute
29.	Concession for Build, Own, and Operate a Container Freight Station of Inland Container Depot (Abia State)	Nigerian Shippers Council (NSC)	Eastgate Inland Container Depot Ltd	30 Years from 2007	Implementation yet to commence due to absence of acceptable Outline Business Case (OBC).
30.	Concession for Build, Own, and Operate a Container Freight Station of Inland Container Depot (Oyo State)	Nigerian Shippers Council (NSC)	Catamaran Logistics Ltd	25 Years from 2007	Implementation yet to commence due to absence of acceptable

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					Outline Business Case (OBC).
31.	Concession for Build, Own, and Operate a Container Freight Station of Inland Container Depot (Plateau State)	Nigerian Shippers Council (NSC)	Duncan Maritime Ventures Nigeria Ltd	25 Years from 2007	Implementation yet to commence due to absence of acceptable Outline Business Case (OBC).
32.	Concession for Build, Own, and Operate a Container Freight Station of Inland Container Depot (Kano State)	Nigerian Shippers Council (NSC)	Dala Inland Dry Port Nigeria Ltd	25 Years from 2007	Implementation yet to commence due to absence of acceptable Outline Business Case (OBC).
33.	Concession for Build, Own, and Operate a Container Freight Station of Inland Container Depot (Katsina State)	Nigerian Shippers Council (NSC)	Equatorial Marine Oil and Gas Company Ltd	25 Years from 2007	Implementation yet to commence due to absence of acceptable Outline Business Case (OBC).
34.	Concession for Build, Own, and Operate a Container Freight Station of Inland Container Depot (Borno State)	Nigerian Shippers Council (NSC)	Migfo Nigeria Limited	25 Years from 2007	Implementation yet to commence due to absence of acceptable Outline Business Case (OBC).
35.	Provision of data capture services, personalization, issuance and distribution of general multi-purpose cards (GMPC), deployment of card acceptances devices (CADs) – Nationwide	National Identity Management Commission (NIMC)	Chams Nigeria Ltd	10 Years from 2007	In dispute, matter before arbitration.
36.	Provision of data capture services, personalization, issuance and distribution of general multi-purpose cards (GMPC), deployment of card acceptances devices (CADs) – Nationwide	National Identity Management Commission (NIMC)	Onesecurecard Limited	10 Years from 2007	In dispute, matter before arbitration.
37.	Concession Agreement for the Design, Build, Finance, Operate TCN's Fibre Optic Cable Telecommunications Infrastructure for the Western part of Nigeria	Transmission Company of Nigeria	Phase 3 Telecom Ltd	15 Years from March 2006	Under implementation, however, the Commission is facilitating a mediation process to resolve some outstanding issues.
38.	Concession Agreement for the Design, Build, Finance, Operate TCN's Fibre Optic Cable Telecommunications Infrastructure for the Eastern part of Nigeria.	Transmission Company of Nigeria	Alheri Engineering Services L td	15 Years from March 2006	Under implementation, however, the Commission is facilitating a mediation process to resolve some outstanding issues.
39.	Concession to Design, Develop, Finance, Construct, Complete, Test, Commission, Operate, Manage, Maintain and Transfer of the MMA2 Terminal (Lagos)	The Federal Airports Authority of Nigeria (FAAN)	Bi -Courtney Ltd	36 years November 2006 – November 2042	Under Implementation though with dispute. Case in court.
40.	Concession for the Acquisition, Installation, Operation and Management of World Class Integrated System in Designated Airports (MMA –Lagos, Abuja & Kano)	The Federal Airports Authority of Nigeria	Meavis Nigeria Ltd	10 years October 2007 – October 2017	Terminated. Case in court

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G. The Abuja Medical Mall facility

In line with the transformation agenda of the then President Goodluck Jonathan, the Federal Government conceived and began the $650 million Abuja medical facility in the Federal Capital Territory in 2013. This project was slated for completion within two or three years. At the time of its conception, it was planned to have 1,687 beds which would include 763 beds for Trauma Centre; 300 beds for Amenities care pavilion; 524 beds for Pediatric section and 100 beds for Physiotherapy and Rehabilitation section; and thus accommodate at least 2,040,000 at a time. The project is undertaken by IBT Group (alongside Sumolex and KMD Architects) in partnership with the Federal Government. This project it must be noted was later abandoned. The Federal Government under the then Ministry of Health thereafter inaugurated two committees[41], a Project Delivery Committee and a Steering Committee for the development the facility through a public-private partnership under the then minister of health, Professor Onyebuchi Chukwu. In the words of the Minister, "*there is the need to harness resources, both within the public realm, as well as in the private sector to develop world-class medical facilities that will help to stem the rather frequent travel of Nigerians outside the country; who seek high-end medical services. There is also the need that in building such facility within the Federal Capital Territory, we should also look at the issue of sustainability, the issues of adequate funding and efficiency in the management of such facilities. The Project Delivery Committee, according to the Minister, is the technical committee that will ensure the delivery of the project through effective monitoring of work at the site, while the Steering Committee is to provide political leadership for the project.*"

H. The National Health Insurance Scheme(NHIS)

The NHIS has as its main goal, the provision of affordable healthcare to all Nigerians. The NHIS, though a novel project has had its challenges which are not much different from the perennial problems confronting the health sector. However, it should be noted that the NHIS foreran the ICRC Act and though it is a public private arrangement does not receive inputs from the ICRC unlike the Abuja medical mall as both operate under different legislations.

VII. CONCLUSION

Having regard to the foregoing it could be deduced that the PPP arrangement could actually drive the effective healthcare delivery system in Nigeria though there may be obvious prevailing issues of concern which should be adequately tackled prior to evolving feasible and working partnerships.

Access to health care is a fundamental right of every member of the Nigerian society. According to the popular saying, "health is wealth and a healthy nation is a wealthy nation". Due to the fundamental role of health as a precondition for economic productivity and development, it is often given priority globally. This could not be said to be true in the Nigerian context. This is obvious from the review of our health plans and the implemented health projects by successive Federal governments since independence. However, this tradition could be changed by a committed and politically willed government.

In this study we began with the review of the history of Nigeria's healthcare delivery system including with emphasis on the national plans, health laws and policies, health agencies, and infrastructure, to reveal the perennial problems preventing efficient and effective healthcare delivery, one of which is government funding. In a bid to proffer solution to this menace of health infrastructure deficits, we discussed the evolving public procurement model, that is, public private partnership as well as the regulatory laws and agencies in Nigeria. PPP is globally acknowledged model for government financing of large infrastructural projects such as health infrastructure, Based on the foregoing the following conclusions are made:

- The Nigerian government since the nation's independence has not fulfilled its constitutional mandate of providing access to cheap and affordable health facilities for its citizenry;
- There is absolutely no probability that the Federal government would at any time provide adequate funding for the public healthcare delivery;
- In the light of Nigeria's economic uncertainties, PPP is a more realistic option for procuring public infrastructure if properly planned and executed under a good legal framework that is structured to promote accountability, governance and transparency;
- The success or failure of PPP projects is dependent on some social, legal and economic factors which were not discussed in details in this article;
- Public interest has not been considered in the implementation of PPP-projects in Nigeria. The interest of the majority should prevail in matters relating to health care delivery in Nigeria otherwise, health inequities would continue.
- Effective and efficient healthcare delivery is possible through a carefully planned PPP.

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