# Moving Nigeria from low coverage to universal health coverage: health system challenges, equity and the evidence-base.

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#### **Preamble**

Universal health coverage (UHC) or simply universal coverage (UC), comprising of universal financial coverage (UFC) and universal geographic coverage (UGC) implies that everyone should be able to have unhindered access to healthcare services without having to worry about the money needed to pay for the services. The 2005 World Health Assembly (WHA) adopted a resolution calling on Member States to pursue universal coverage for their populations. A major focus of this resolution was to reduce people having to rely on out-of-pocket payments for their healthcare needs, and also to promote pre-payment health care financing mechanisms such as health insurance. Evidence shows that UC interventions lead to improved access, health status and affordability of healthcare services.

Since the 2005 WHA resolution, Nigeria has not made any measurable progress towards achieving UC. Nigeria has very low UFC levels with less than 5% of the population covered by financial risk protection mechanisms (such as health insurance) and coverage with most healthcare services are very low. The achievement of UC is a task that must be accomplished in Nigeria if the health indices are to improve from the current sub-optimal level. It is disheartening that Nigeria will not achieve any of the health-related Millennium Development Goals (MDGs) by 2015 or anytime in the near future, and is currently not primed to achieve UC anytime soon.

The Nigerian health system is markedly weak and this is particularly manifest in the poor maternal and child health indices. The country has a very high maternal mortality ratio (630 per 100,000 live births), 58% ante-natal care (ANC) coverage, 45% delivery by skilled birth attendants, very high under-5 mortality rate (153 per 1000 live births in urban areas and 243 per 1000 live births in rural areas). It is estimated that every day, 2300 children aged less than five years and 145 women of childbearing age, die in Nigeria. To paint a very vivid image, this is like 12 mid-size planes crashing in Nigeria every day with no survivals. Sadly, despite these very poor health indices, the system is not really paying much attention.

UC cannot be achieved by weak health systems, especially in systems such as Nigeria's, where more than 65% of healthcare financing comes from households' out-of-pocket payments. Note, Nigeria has a high level of population poverty, with 63% of Nigerians living on below \$1 a day. The country indeed has all the resources to achieve UC, but it requires the right combination and optimization of the building blocks of the health system. Health systems are the means whereby many programmes and interventions are planned and delivered, and strengthening health systems and making them more equitable have been recognised as key for fighting poverty and fostering development.

Health Policy and Systems Research (HPSR) should be used to generate the needed evidence to achieve UC and Getting Research into Strategies, Plans and Policies (GRISPP) approaches used to get the evidence generated into practice. Health Economics principles and applications should be one of the principal aspect of HPSR that is used to get Nigeria on the right track to achieving UC. Health systems research can significantly contribute to the development of useful and effective health policies and programmes. Lack of research and application on the other hand can lead to undesirable results.

This lecture examines the evidence that has been produced over the years by Professor Obinna Onwujekwe and his research team, other associates and eminent researchers, and how this evidence can be used to put Nigeria firmly on the road to strengthening the very weak Nigerian health system and achieving universal coverage. It examines the evidence from both equity and UC frameworks and provides some recommendations on the way forward for the country in the quest to achieve UC.

#### **SECTION 1: INTRODUCTION**

Every country in the world is now striving to achieve Universal Health Coverage (UHC) or simply Universal Coverage (UC) and Nigeria should be part of this global movement, which is likely going to be the post-Millennium Development Goals (MDG) global health target. The World Health Assembly in 2005 and the African Union through a conference of Ministers of Health and Finance in the African region in July 2012, passed different resolutions in support of UC. The United Nations also passed a resolution in December 2012 in support of UC.

UC implies that everyone should be able to access quality health services without being subjected to financial hardship in the process (WHO, 2007). UC was placed on the global agenda when the 2005 World Health Assembly adopted a resolution calling on member states to pursue universal coverage (WHO, 2005). A major focus of this resolution was to reduce the reliance on out-of-pocket payments and to promote pre-payment health care financing mechanisms.

Since the adoption of the resolution in 2005, Nigeria has not made much progress towards achieving UC. The coverage levels with most healthcare services (including free services) and pre-payment financing mechanisms are very low. The country has very low UFC levels; less than 5% of the population is covered by financial risk protection mechanisms (such as health insurance) and coverage areas with most healthcare services are very low. The achievement of UC is a task that must be accomplished in Nigeria if the health indices are to improve from their current sub-optimal levels. At the current rate of reduction in health-related MDGs' morbidity and mortality indices, it is very unlikely that that Nigeria will achieve any of the health-related Millennium Development Goals (MDGs) and is currently not primed to achieve UC.

UC cannot be achieved by weak health systems such as Nigeria's, where more than 65% of healthcare financing comes from households' out-of-pocket payments. The country has the resources that are required to achieve UC. However, in addition to the resources, it requires the right combination and optimization of the building blocks of the health system, which are the means whereby many programmes and interventions are planned and delivered, and strengthening health systems and making them more equitable have been recognised as key for fighting poverty and fostering development.

It is fundamental that all human beings have equal access to basic and essential healthcare services that are needed to ensure them an optimal state of health. Access to healthcare is a fundamental human health right. This assertion is enshrined in many global resolutions and declarations and in the Nigerian constitution. "… health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right and … a most important world-wide social goal." (Alma Ata Declaration-1973).

A comprehensive notion of social protection of health should be adopted since health is a universal right (Knaul et al, 2012). Good heath generates wealth, hence the saying that 'health is wealth'. The distinction between health and healthcare should be clear (FHS, 2011). *Health* refers to a state of the human body and mind, whilst *healthcare* refers to chemicals, devices, and services used by people to improve their health (FHS, 2011). It also recognised that demand for healthcare is a derived demand for health. This implies that we consume healthcare services because we want to achieve good health and not that the healthcare services provide us with joy on its own. That is, people do not consume healthcare just for the sake of consuming it, rather they do because it will help to make them stay healthy.

Economically, healthcare is also a special good and should be treated differently especially in ensuring UC with essential services. There are many unique characteristics of healthcare that make it different from other goods and services. These unique characteristics include: uncertainty about when illness will occur and expenditures on healthcare incurred (uncertainty); the provider has much more information than the healthcare consumer (asymmetry of information), a situation that can lead to supplier-induced demand; non-excludability and non-rivalry in the consumption of some goods and services (existence of public goods); healthcare actions or inactions by an individual can affect other people either positively or negatively (positive or negative externality); and irrationality by consumers. These factors are collectively known as causes of 'peculiar market failures in the healthcare market'.

UC interventions in low- and middle-income countries improve access to healthcare, have a positive effect on financial protection, and in some cases seem to have a positive impact on health status (Giedion et al, 2013). The effect of UC schemes on access, financial protection, and health status varies across contexts, UC scheme design, and UC scheme implementation processes (Giedion et al, 2013).

A strong health system is important for improving and enhancing the health status of the people because healthcare services are delivered and consumed through the health system. The fundamental problems that deter countries from

moving closer to UC are lack of resources, over dependence on direct payment at the time people need care and inefficient and inequitable use of resources (WHO, 2007). These conditions exist substantially in the Nigerian health system.

Hence, if a health system is weak or is under-performing, healthcare services will be sub-optimally delivered, consumed, and financed, and will ultimately lead to the poor health status of the people. It should be noted that a health system amongst other things comprises of formal health services which include the professional delivery of personal medical attention, actions of traditional healers and use of medications, whether prescribed by a provider or not, and home care of the sick.

A strong or good health system above all, contributes to good health (WHO, 2000). It also reduces inequalities by prioritising actions to improve the health of the worse off (is equitable); i.e. even distribution of health in the populations, reduces waste (is efficient), is responsive: respect for persons (including dignity, confidentiality and autonomy), client oriented (prompt attention, quality of basic amenities). A strong health system also develops human resource through investment and training, optimally delivers and finances services and acts as overall stewards of the resources and powers entrusted to them.

As stated earlier, the Nigerian health system is weak and this is particularly manifest in the poor maternal and child health indices. The country has a very high maternal mortality ratio (630 per 100,000 live births), 58% ANC coverage, 45% delivery by skilled birth attendants, very high under-5 mortality rate (153 per 1000 live births in urban areas and 243 per 1000 live births in rural areas). It is estimated that every day, 2300 children aged less than five years and 145 women of childbearing age die in Nigeria. To paint a very vivid image, this is like 12 mid-size planes crashing in Nigeria every day with no survivals. Sadly, the system is not really paying attention

National health systems, such as the Nigerian health system, should strive to achieve UC of at least all essential healthcare services. Nonetheless, considerations of efficiency and equity are paramount in the achievement of UC. Equity is particularly important as UC implies the explicit coverage of all citizens no matter their socio-economic status, gender, age, geographic location, education, occupation, religion, tribe, creed or other characteristics. Under UC, 'all animals are equal' – and not 'all animals are equal, but some are more equal than others' (George Orwell).

The World Health Organisation ranked the Nigerian health system 187th out of 191 countries surveyed, superior only to four countries mired in armed conflicts (WHO, 2000). A major criterion that lowered the ranking of the Nigerian health system was the issue of poor levels of financial access to healthcare services. Most developed countries have organized their healthcare systems around the principle of universal coverage which requires that everyone within a country can access the same range of services according to needs and preferences, regardless of income, social status, or residency, and that people are empowered to use these services (Marmot et al., 2008).

Improving the functioning of health systems and achieving equitable access and affordability of healthcare services to all is encapsulated in current efforts to UC. The World Health Organization (2010) proposed four target indicators for countries to use to measure progress towards achieving universal coverage and these are: 1) Total health expenditure should be at least 4% - 5% of the gross domestic product; 2) Out-of-pocket spending should not exceed 30-40% of total health expenditure; 3) Over 90% of the population is covered by pre-payment and risk pooling schemes; and 4) Close to 100% coverage of population with social assistance and safety-net programmes.

My experiences, personal research studies and review of evidence produced from elsewhere have been fundamental in informing my views on the performance of the Nigerian health system regarding equity and need for UC as a panacea to the poorly functioning and performing Nigerian health system. This lecture explores key relevant evidence, produced by me and my colleagues within and outside the Health Policy Research Group (HPRG) and their role in health system improvement, on the health system building blocks, control knobs and health indices.

This lecture also examines the current status of UC and inequities in Nigeria, by mostly using the evidence that the lecturer, his research group, close associates and key researchers have produced. The lecture is structured in seven sections. The first section introduces the lecture, whilst the second section introduces the notions of health systems, health system research, equity and universal coverage. The third section examines the evolution of the Nigerian health system, including key elements of health sector reform initiatives in the country. The fourth section critically presents the evidence-base on UC and inequity in provision, utilisation, financing and payments for healthcare services in Nigeria. The fifth section iterates the evidence to discuss the challenges with achieving UC in Nigeria, the way forward and limitations. Section 6 examines the broader issue of health system strengthening in Nigeria as a solid foundation for UC. Section 7 provides some conclusions and recommendations.

### SECTION 2: PRINCIPLES OF HEALTH SYSTEM, EQUITY AND UNIVERSAL COVERAGE

### 2.1 What is a health system?

**2.1.1. Definition:** A health system is the sum of all the organisations, institutions and resources whose primary function is to improve health. The term includes all levels from service delivery, to policy making and implementation (WHO, 2000). A health system needs staff, funds, information, supplies, transport, communication and overall guidance and direction. It needs to provide services that are responsive and financially fair, while treating people decently.

2.1.2. Functions: There are many frameworks, WHO (2000) and others. The four functions according to the WHO (2000) are service provision, resource generation, financing and stewardship. (1) Service provision: encompassing both formal and informal service providers, whether public or private and also service organization both at the level of service delivery and higher up the chain of management; (2) Resource generation: encompassing key inputs such as human resources, physical capital, drugs and medical supplies; (3) Financing: the volume and sources of financial resources available for the health system, together with the mechanisms for pooling resources and transferring them to service providers; and (4) Stewardship: the role of oversight of the health system which falls to the government, and encompasses defining the vision and direction of health policy, exerting influence through regulation, and collecting and using key data.

The expectations from a good health system are: Improved health status (improved health); Efficiency – good health at low cost; Equity – vertical vs. horizontal (accessibility); Good quality; Affordability; Responsiveness; Universal coverage; and Financial Risk protection.

The failings of health systems include (Hanson, 2006): failure to achieve the above expectations; a lot of focus by many Ministries of Health is on the public sector and often disregard the frequently much larger private sector health care; many healthcare providers work simultaneously for the public sector and in private practice - the public sector ends up subsidising unofficial private practice; and many governments fail to prevent a "black market" in health, where widespread corruption, bribery, "moonlighting" and other illegal practices flourish. Others include lack of evidence-based decision/policy making (reliance on faith-based policy making and development of strategies), non or poor implementation of policies and strategic plans, low levels and use of Health Systems Research, Operations research, basic research and routine monitoring and evaluation; weak governance positions (many health Ministries fail to enforce regulations and tackle corruption), etc.

### 2.1.2. Components (Building blocks)

The composition of the health system is multi-dimensional: Government sector; Private sector; Households; Healthcare services; Training institutions; Research institutions; Regulatory bodies; etc. All the health providing units, specialities, disciplines, formal and informal organisations amongst others, are part of the health system. In summary, the four key actors in a health system are: (1) The government or professional body that structures or regulates the system; (2) The population including patients who ultimately pay for the health system and receive services; (3) Financing agents, who collect funds and allocate them to providers, or purchase services at national or lower levels; and (4) The providers of services who themselves can be categorised in various ways; by level, by function, by ownership etc (WHO, 2000).

There are six global building blocks of the health system (WHO, 2012): (1) Governance: Leadership must guarantee effective oversight, regulation, and accountability; (2) Service delivery: Health services must be efficient, effective, and accessible; (3) Health Financing: Health financing systems must raise adequate funds for health, ensuring that people can access affordable services; (4) Human Resources for Health: A number of well-trained staff should be available; (5) Health Management Information System: Health information systems should generate useful data on health determinants and health system performance; and (6) Access to medicines, etc: Access to medicines, vaccines, and medical technologies must be equitable.

There are eight Nigerian building blocks (FMOH, 2011). These are the thrusts of the Strategic Health Development Plans. They are the six WHO blocks (combined into 5) plus Community participation; Partnerships; and Research. The main thrust is to ensure that all the blocks function effectively no matter the underlying framework that is used to describe them. A health systems specialist has to put them together to form a functioning health system that can provide good health services and improve the health of the population.

### 2.2 Health Systems Research

It is the production and use of knowledge to improve how societies organise their health system to achieve health goals: how they plan, manage and finance activities to improve health, as well as the roles, perspectives, and different actors in this effort (WHO, 2012). It is used to improve the interactions of the different building blocks (or thrusts) of the health system for improved performance. It is an essential component of Health Sector Reform. Health systems research with adequate investment can greatly assist strengthening of the health system.

Health Systems Research (HSR) is currently a global priority: The Global Symposium on Health Systems Research and the formation of Health Systems Global (Society for Health Systems) were recently formed to promote HSR. It is recognised that health systems cannot be improved without evidence generated through research.

An ideal HSR should give high priority to research, identify national health research priorities, translate health research into action, systematically apply existing knowledge, develop an efficient and effective research environment and systematically monitor & evaluate the results of the system and its strengthening (AHPSR, 2010).

HSR contributes significantly to our understanding of health systems and policies and in turn, to the improvement of those health systems and policies. It generates evidence for strengthening of health systems and is urgently needed to improve health and help achieve the Millennium Development Goals, achieve Universal Coverage and other state, national and international goals.

The key steps in HSR are: (1) Managing the research agenda: setting research priorities and allocating resources to them; (2) Producing evidence through original research and a synthesis of existing knowledge; (3) Promoting use of evidence through, for example, advocacy channels, and specific mechanisms designed to link producers and users; and (4) Utilising evidence in decision making (AHPSR, 2010). HSR is multidisciplinary – health economics, policy, management, epidemiology, politics, socio-epidemiology, history, etc. It uses multi-methods – both quantitative and qualitative research methods.

## 2.3 Equity in healthcare

Equity is fairness and has long been considered an important goal in the health sector (Bambas and Casas undated; O'Donnel et al. 2008). Health inequity refers to health inequalities that are unjust according to some theory of social justice (Armstrong-Schellenberg et al., 2003). Equity is a state where there are no unjust and avoidable inequalities. Avoidable health inequalities result from differences in the circumstances in which people grow, live, work and age, and the systems that are put in place to deal with illness (WHO, 2008). Achieving equitable 'access' to health services entails the removal of barriers that disadvantaged groups face in obtaining healthcare, including not only geographical barriers, but also cultural and financial impediments (Ong et al., 2009). Health equity is said to be achieved when all people have the opportunity to attain their full health potential and no one is disadvantaged from achieving this potential because of their social position or other socially determined circumstance (Braveman, 2003).

Some researchers have explored and explained the theoretical basis and measurement principles and processes for health inequity in several publications (Howe, Galobardes, Matijasevich, Gordon, Johnston, Onwujekwe, Patel, Webb, Lawlor, Hargreaves, 2012; Gordon, Howe, Galobardes, Matijasevich, Johnston, Onwujekwe, Patel, Webb, Lawlor and Hargreaves, 2012; Onwujekwe OE, Fox-Rushby J and Hanson K, 2005, etc.)

Inequities persist in the Nigerian health system. Inequity in access to and use of healthcare services could result from differences in their distribution across socio-economic status (SES) and geographic population groups. It has been shown that though households in the lowest SES groups experience increased exposure to disease, they are usually less likely to purchase and access healthcare services, and when they eventually do, it often leads to a depletion of household resources such that other basic household needs like food and education are not met (Onwujekwe et al., 2006).

Out-of-pocket expenditure for health and poor service delivery are major contributors to the health inequity in the health system. This is a resultant effect of the introduction of user fees within the public healthcare system, especially primary healthcare (PHC). Out-of-pockt expenditure has continued to raise the issue of equity in access to and utilisation of services by all socio-economic groups (Onwujekwe and Uzochukwu, 2005). However, there are also user charges in hospitals and other levels of healthcare in Nigeria (Onwujekwe and Uzochukwu, 2005).

Equity per se is fairness and has long been considered an important goal in the health sector (Bambas and Casas undated; O'Donnel et al., 2008). Yet inequalities between the poor and the better-off persist. The poor tend to suffer higher rates of mortality and morbidity than do the better-off. They often use health services less, despite having

higher levels of need (O'Donnel et al., 2008). Few studies have been undertaken to assess socio-economic inequities in health in African countries such as Nigeria and this apparent lack of interest might arise from the erroneous perceptions that families living in rural areas are fairly homogenous with respect to socio-economic status (Armstrong- Schellenberg et al., 2003). In terms of government policies, the concept of equity is related to that of redistribution which is the extent to which policies mainly benefit groups with greater needs (Morestin et al., 2010).

Equity simultaneously requires that relevant and similar cases be treated in comparable ways, and relevantly different cases be treated in different ways (Bambas and Casas, undated). Within health economics, equity can further be differentiated into horizontal and vertical equity. Horizontal equity is defined as the 'equal treatment of equals'. The vertical equity objective is to achieve 'equitable access for unequal need' (Ong et al., 2009). However, as horizontal equity does not take account of individual characteristics, it does not consider differences in pre-existing health status and thus differences in the 'need' for healthcare (Ong et al., 2009). Vertical equity has a higher potential for redistributing resources, and therefore often faces more political obstacles (Bambas and Casas, undated; Waters, 2000). Consequently where health disadvantage exists, vertical equity, defined as the 'unequal but equitable treatment of unequals', is important. The implication is that preferential treatment is given to those deemed to be worse off, to enable improved access to health services (Ong et al., 2009).

However, since a key equity principle is that people should contribute to the funding of health services according to their ability to pay and should benefit from effective healthcare solely according to their need for or capacity to benefit from care. Hence this "equitable financing incidence principle" implies the following (McInytre et al., 2007b):

Financing mechanisms should provide financial protection which ensures that no one who needs health services is denied access due to inability to pay and households' livelihoods should not be threatened by the costs of access to health care. This implies that health care financing contributions or payments should be separated from service utilization, which requires some form of pre-payment (i.e., tax and/or health insurance funding).

Cross-subsidies from the healthy to the ill and from the wealthy to the poor in the overall health system should be promoted. This implies that mechanisms should be put in place to allow cross-subsidies between different financing mechanisms.

It is believed that the "equitable benefit incidence principle" implies that there should be universal access to health services. This means not only should the distribution of services be based on the relative healthcare needs of different communities but also that there should be no substantial differences in the types and quality of health services that different groups have access to.

In order to attain equity in access to health services, effective coverage is necessary (WHO, 2010). This could be evaluated through four dimensions namely availability coverage, accessibility coverage, acceptability coverage, and contact coverage. Effective coverage, therefore, entails the proportion of the population in need of health services who ultimately receive an actual intervention (WHO, 2010).

## 2.4 What is Universal Coverage?

Universal health coverage is arguably the single most powerful concept that public health has to offer in addressing health inequity (WHO, 2010). Improving equity in access to healthcare services hinges on ensuring universal coverage (UC).

UC is sometimes called Universal Health Coverage (UHC) or Universal Access and the 2005 World Health Assembly adopted a resolution calling on member states to pursue universal coverage. The resolution marked a paradigm shift from targeted coverage to universal coverage. UC is access to the full range of health services people need, with social health protection (McIntyre, 2011). Nonetheless, all definitions of UC have two core elements in common: Providing financial risk protection for all (100%) from the costs of healthcare; and Enabling access to needed healthcare for all (100%) - financial and geographic access (AfHEA, 2011).

UC is usually for: (1) Health services: e.g. Malaria interventions; HIV/AIDS interventions; MNCH interventions; Family planning services; NCDs interventions; or (2) A component of the health system: Financing (affordability); Human Resources; Health Management Information System; Critical Resources. Universal coverage depends on achieving: More health for money (improved efficiency); More money for health; Innovative health financing; and improvement of equity in financing and general access to healthcare services. UC will surely lead to better health indices and achievement of the MDGs.

## Conceptual framework for UC:

The components of UC are Universal Financial Coverage (UFC) and Universal Geographic Coverage (UGC). UC requires human capital, infrastructure and material resources (Chua and Cheah, 2012).UC requires adequately equipped health facilities and adequate health manpower to effectively run these facilities in such a way that healthcare provision is sustained over time.

Moving towards UC involves expansion of coverage in three ways which are covered by the three dimensions of UC (McIntyre, 2011): (1) *The breadth of coverage*: the proportion of the population that enjoy social health protection; (2) *The depth of coverage*: the range of essential services necessary to effectively address people's health needs; and (3) *The height of coverage*: the portion of healthcare costs covered through pooling and pre-payment mechanisms.

According to Knaul et al. (2012), Universal health coverage is a quest with three stages: (1) universal enrolment, a term closely associated with legal coverage, entitles all people to benefit from health services funded by publicly organised insurance; (2) coverage that is universal implies regular access to a comprehensive package of health services with financial protection for all; and (3) universal effective coverage guarantees to all on an equal basis, the maximum attainable health results from an appropriate package of high-quality services that also prevents financial shocks by reducing out-of-pocket payments (Scheil-Adlung and Bonnet, 2011; Murray, 2009).

International lessons show that mandatory pre-payment mechanisms are the core of UC systems and out-of-pocket payments do not allow for financial protection and their role in health financing should be minimised (McIntyre, 2011). It is impossible to achieve universal coverage solely through insurance schemes when enrolment is voluntary (World Health Report, 2010). Voluntary enrolment should be largely seen as a complementary funding mechanism and means to ensure that the widest cross-subsidies possible be pursued (McIntyre, 2011). Other international lessons with UC in low- and middle-income countries are: affordability is important but may not be enough; target the poor, but keep an eye on the non-poor; benefits should be closely linked to target populations' needs; and highly focused interventions can be a useful initial step toward UHC. (Giedion et al., 2013).

### SECTION 3: THE NIGERIAN HEALTH SYSTEM: Then, now and the future

Nigeria operates a three-tier health care system, the Federal Ministry of Health (FMOH), state ministries of Health (SMOH) and the local government health care departments providing tertiary, secondary and primary health care respectively. The FMOH provides tertiary health care through the university teaching hospitals and federal medical centres. They also contribute to capacity building through training of health personnel-doctors, nurses, midwives and community health officers. The state ministries provide secondary care through the general hospitals, specialist and cottage hospitals. In addition, they are responsible for development of health manpower for secondary and primary healthcare. The local governments (774 local government areas) are directly responsible for the grass root delivery of primary healthcare to the communities using the national guidelines and with assistance from the state ministries of health.

Hinged on the three-tier structure of primary, secondary and tertiary level, the arrangement of the health system in Nigeria means that all tiers are involved, to an extent, in the major health system functions of stewardship, financing and service provision (Onwujekwe et al, 2012 – HSG Chapter). While the federal government is the highest level, it has little influence over funds allocated for secondary and primary health services (except those funded through special agencies and programmes) (FMOH, 2004). Over the years, overall performance of the health system has been abysmally low. Budgetary allocations to health has been dismal, the 5.7% of the 2013 budget being allocated to health and the ones before it fall short of the allocation structure directed towards achieving the Millennium Development Goals. Publicly financed health services barely reach the poor raising the need for over dependence on out-of pocket spending (Onwujekwe, 2005, Onwujekwe et al, 2011, Onwujekwe et al, 2012 - BIA).

The Nigerian healthcare system is dominated by three groups of providers: i) the public sector; ii) private-for-profit; and iii) private-not-for-profit providers (Onwujekwe et al, 2009). The public sector comprises federal, state and LGA owned health facilities. These facilities include primary health centers, secondary health facilities including federal government and state owned hospitals and clinics, and tertiary health institutions (Onwujekwe et al, 2009). The private-for-profit sector includes hospitals and clinics, laboratories, patent medicine dealers (vendors), pharmacy shops and itinerant drug sellers. The private not-for profit providers are mostly mission hospitals.

In 2005, the total number of health facilities in Nigeria was 23, 640 distributed as follows :20,278 (85.8%) primary health care facilities,3,303 (14.0%) secondary health care facilities and 59 (0.2%) tertiary health care facilities.. Thirty eight percent (9034) of these facilities were privately owned, however, the private sector is estimated to provide 60% of the health care services in the country.

The Nigerian health system has been performing sub-optimally and has not helped to improve the health status of the people (Tables 1 and 2).

Table 1 Some basic and access indicators in Nigeria, 2005-2010

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Basic indicators	2005	2006	2007	2008	2009	2010					
Rural population, % total	54	53	52	52	51						
GNI per capita, PPP\$	1,530	1,790	1,860	1,990	2,070						
Fiscal space: government tax as % of GDP	0.2	0.1	0.2	0.3							
Access indicators											
Doctor per 1,000 pop		0.3	0.3	0.3	0.4	0.4					
Nurse and Midwife per 1,000 pop		1.7	1.7	1.8	1.6	1.61					
Doctor nurse and midwife per 1,000 pop		2	2		2	2					

Source: 1. World Bank data 2000-2011

- 2. World Health Statistics 2005-2011
- 3. Nigeria WHO statistics
- 4. http://apps.who.int/ghodata/?vid=15000&theme=country

Table 2: Other Basic indicators (NPC & ICF Macro, 2009)

Maternal and Child Health status **	
Malnutrition [stunting, wasting]	Stunted: 41%
	Severely stunted:23%
	Wasting: 14%
	Underweight:23% (NDHS, 2008)
2. Low birth weight	8% (NDHS, 2008)
3. Delivery by skill birth attendants	39% (NDHS, 2008)
4. DTP3 coverage	35% (NDHS,2008)

Note \*\*This information may be available from the most recent UNICEF Multiple Indicator Cluster Survey (MICS) (see http://www.childinfo.org/mics3 surveys.html)

Some of the major health system challenges are as follows (PHC conference, Nigeria country presentation, 2008): Lack of a health system backbone that supports the scaled-up delivery of essential health services, especially through the PHC system; Funding gaps: Inadequate funding at all levels; Three Tiered Health Systems, which is not backed by legislation and hence, some stakeholders are not fully committed to its implementation; Inadequacies in HR for PHC particularly in the rural areas (Quality and quantity); Fragmentation of programmes due to multiplicity of implementing partners; Inadequacies in the HMIS; Poor Coordination/Inter sectoral Collaboration, namely, multiple sectors and partners. Also, the bulk of source of money for health care in Nigerian health system remains out-of-pocket spending (OOPS), borne by households and payment is regressive as everyone pays the same irrespective of whether poor or rich. This poses a major challenge to the scaling up of health services and has contributed to the vast inequities that currently exist.

Evidence shows that Nigeria will not achieve any of the health-related MDGs and is not on track to achieving UC. In Nigeria, total health expenditure is 0.7% of GDP instead of the WHO recommended 4% - 5%; Out-of-pocket spending is more than 60% of total health expenditure instead of the WHO recommended 30-40%; Less than 5% of the population is covered by pre-payment and risk pooling schemes instead of the WHO recommended 90%; and Less than 2% coverage of population with social assistance and safety-net programmes instead of the WHO recommended 100%. In addition, evidence from the 2012 Joint Annual Review (FMOH, 2012) shows that in Nigeria, there are: 1) Low level of access to healthcare services; 2) Poor health indicators; 3) Rising poverty; 4) Struggle to achieve MDGs; 5) Inequity; and 6) Low level of coverage and use of IPT. However, there were: 1) increased immunization coverage; and 2) Increased ITNs ownership (42%).

# 3.1 Some existing and new developments in the Nigerian health system that have implications for improving the health system and achieving Universal Coverage

#### 3.1.1 The National health bill

The National health bill was initially approved (in May 2011) by both the senate and the House of Representatives but was not signed into law by Mr President due to opposition from some actors. However, the bill was re-presented to the new National Assembly and has undergone second reading in the Senate. It is hoped that it will be passed and assented to by Mr President this year.

The bill, when it becomes law will add a lot of fillip to the Nigerian health system. Importantly, it has provisions that will substantially increase the level of financial resources that will be available to fund health services, especially primary health services.

In this respect, the bill on section 10 stipulates that a fund to be known as the National Primary Health Care Development Fund (the Fund) will be established. The funding will be akin to what obtains for Universal Basic Education Commission (UBEC) funding. The bill provides that 2% of federal consolidated revenue (before the money is shared to all tiers of government) will be used to fund the NPHCD Fund. Half of the fund will be disbursed to the NHIS and the other half will be spent by the NPHCDA. Hence, the fund will primarily be used to improve the functioning of the PHC system in Nigeria.

It is important to note that neither the NHIS nor the NPHCDA has developed guidelines on how they will use this fund. Hence, opportunities exist for interested organizations to help these two organizations to develop the guidelines

and make the achievement of universal coverage an integral part of guidelines for use of the funds by the NHIS and NPHCDA.

# 3.1.2 State Primary Healthcare Development Agencies (SPHCDA) and LGA health authority

The Health Bill stipulates that disbursement of the Fund to the states will be through State Primary Health Care Board (SPHCB). Also, section 3.20 of the Revised National Health policy of 2004 stipulates that each state and the FCT should establish a State Primary Health Care Management Board (SPHCMB) to oversee the coordination of PHC activities in the state. In other words, both the bill and the National Health Policy did not mention SPHCDA. However, many states have started creating their State Primary Healthcare Development Agencies, which could be acceptable as SPHCB or SPHCMB. Also, the policy states that each LGA will create a LGA primary health authority (LPHA), or according to the Bill LG health authority (LGHA). Hence, although geared towards achieving the same purpose, the bill and national health policy have different names for organizations.

It is envisioned that the SPHCB and LPHA will work together to ensure better delivery of primary health services in the country. However, it is left to be seen whether there will be better communication between SPHCB or SPHCDA with LGHA compared to what currently obtains between States MoH and LGAs PHC departments.

# 3.1.3 Scaling-up of Community-based Health Insurance (CBHI) scheme by the National Health Insurance Scheme (NHIS)

The NHIS plans to scale-up the use of community-based health insurance (CBHI) schemes in Nigeria as a complementary financing mechanism to the formal sector insurance programme that is already being implemented. This is in response to the charge by the former President Obasanjo that there should be universal coverage with health insurance mechanisms in Nigeria by 2015. The NHIS has already developed an implementation manual for the CBHIS. It will cover mostly people that are employed in the informal sector and will be implemented mostly at the primary care level. The purchaser may not necessarily be only HMOS (Onwujekwe and Oloriegbe, 2011). The providers will include primary care facilities and private facilities. Enrolees will pay premiums before they can access services. However, the NHIS will subsidize CBHI schemes, hopefully from its share of the NPCD Fund. Currently, the NHIS has developed the benefit package which it is now costing, preparatory for national consultation on its acceptability and adoption by various community groups. There is currently an actuarial study to determine the premium. The national consultation will hopefully happen in September, after which the NHIS-CBHI will be launched.

### 3.1.4 NHIS-MDG maternal and child programme

The Office of the Senior Assistant to the President on Millennium Development Goals (MDG) Office (OSSAP-MDG) was until recently funding the National Health Insurance Scheme (NHIS) to pilot financial risk protection mechanisms for free maternal and child (under-fives) care in selected states. The states were expected to make some counterpart payments, which most of them did not make. Nonetheless, the programme made tremendous impact in improving access to MCH services and reducing maternal and child mortality and morbidity in the implementing states. The programme indeed achieved substantial health gains in the implementing states and a study by the USAID showed that the programme provided good returns for the investment. Twelve states were benefiting as at 2011 and the original plan by the MDG office was that all states will have become beneficiaries by 2015. The programme was scheduled to end in 2015 and was expected to mature into CBHI schemes in the implementing states. The MDG office was expected to develop and implement the exit strategy for MDG/DRG office intervention in 2014/2015, but the programme was apparently suspended by OSSAP-MDG.

According to the head of the NHIS in 2011, the sustainability of CBHI after MDG-DRG office funding ends will be ensured by the NHIS through: Payment from states and LGAs governments; cost-reduction (e.g. ensuring that benefit packages are specific for pregnancy-related issues for women); and use of the money that will come from the proposed Primary Health Care Fund (in the National Health bill).

# 3.1.5 Revitalization of Primary health care and community participation strategy of the National Primary Healthcare Development Agency (NPHCDA)

The revitalization of the PHC system is a strong component of the 2003 - 2007 and ongoing Health Sector Reform Strategies of the government. The revitalization is ultimately for equitable and efficient delivery of essential services. The main current strategies for revitalizing PHC system, which are now being implemented include the following:

- 1. Establishment of the Ward Health System
- 2. Development of minimum health benefit package for primary health care based on promotive, preventive, curative and rehabilitative services, known as the Ward Minimum Health Care Package (WMHCP)

- 3. Improved public-private partnership (PPP) in service delivery for primary health care
- 4. Infrastructural Development
- 5. Establishment of MSS

One of the NPHCDA's main strategies is community participation. The possible involvement of NPHCDA in CBHI is hinged on its community participation objective. NPHCDA has developed a guideline for engaging communities and has access to all communities through various committees such as ward development committees, which is a contribution that it can make towards effective implementation of CBHI. This is because community participation is sine qua non for success of CBHI. In addition, the NPHCDA has access to over 23,000 PHC facilities (retail outlets) including 859 model PHC facilities across the country, which will be used as providers for CBHIS. Also, the NPHCDA will be able to easily mobilise communities where there are free healthcare services to transform such services in CBHIS. The NPHCDA has also improved the human resource requirements for the PHC system because it has employed 4000 midwives as part of Midwives Service Scheme (MSS) and also employed 1000 community-health extension workers (CHEWS), all working in primary care centres across the Nigeria. NPHCDA can also contribute to research and impact evaluation of CBHIS, which is essential for possible programme modifications for improved effectiveness.

# 3.1.6 The National health policy

The 1988 National Health Policy document describes Primary health care (PHC) as the key to attaining the health goals for all the people of this country. The Health policy was expected to change the thinking of the policy makers and make them to be more responsive to the health needs of the nation. The aim of government was initially to promote curative over and above preventive care (FGN, 1975; FRN, 1981) until 1988 when the country adopted a national health policy that has primary health care as its centre-piece (FMOH, 1988). The policy was revised in 2004 (FMOH, 2004)

The policy states that PHC shall form an integral part of both the national health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It states further: All Governments and the people are determined to formulate strategies and plans of action including action to be taken by local governments, to launch and sustain primary health care in accordance with this national health policy. The key elements of the policy are: education on the prevailing health problems and on the methods of preventing them; promotion of food supply and proper nutrition; maternal and child care including family planning; immunization against the major infectious diseases; prevention and control of local endemic and epidemic diseases; and Provision of essential drugs and supplies. The 1988 National Health Policy was revised in 2004. The revised policy contains the benchmark for adjudging the performance of government. By and large, primary health care still takes prime place in the revised version (Federal Ministry of Health, 2005).

A weakness with the National Health Policy is that it is not backed by law and was most likely developed with a military mind-set, where there is a strict command system. This is probably a reflection of the period that it was first developed, when the country was under military rule. It was probably envisaged at the time that all the tiers of government will abide by the provisions of the policy as 'commanded' even in the absence of an enabling law. This has not happened, especially in the era of democracy and the federal structure of Nigeria. Hence, the health system operates like a jungle where there is no order. The Federal government is involved in secondary and primary levels of care, the states are involved in tertiary and primary levels of care and the LGAs mostly abdicate their roles in PHC and leave the delivery of health services at the primary care level to the federal and state governments. There are also minimal linkages between the various tiers of the health system. In other words, the Nigerian health system lacks a backbone, and this has been an impediment for the health system to achieve meaningful impact.

# 3.1.7 Health Sector reform (HSR) in Nigeria-the imperatives

Nigeria has embarked on series of HSR from 1975 till date. However, the impacts of the specific HSR interventions are not quite clear, since there was no impact evaluation of the interventions. Having said that,, some of them, especially the PHC HSR apparently helped to improve the functioning of some aspects of the health system, albeit insignificantly since the health indices and other measurements of health system performance have remained poor and in some cases worsened in Nigeria. The main HSR programmes at the federal level in Nigeria have been: 1) Basic Health Services Scheme (1975-1980); 2) Primary Health Care and the National Health Policy (1978 & 1988 respectively); 3). Health Sector Reform Programme (2003 to 2007); 4).National Health Investment Plan and Midwifery Services Scheme; 5) National Strategic Health Development Plan. It is recognized that there have been scattered little pieces of HSR in some states.

# SECTION 4: SPECIFIC EVIDENCE-BASE ON INEQUITY AND UNIVERSAL COVERAGE IN THE NIGERIAN HEALTH SYSTEM

These are mostly based on evidence produced by Prof Obinna Onwujekwe, researchers in Health Policy Research Group and associates on six health system building blocks: They are disaggregated according to the following areas: Equity, Universal coverage, Health System Governance, Health Financing, Service delivery, Human Resources for Health, Community participation and partnerships, Critical resources, Cross-cutting: Disease Burden and Broad health system strengthening.

Tables 3 and 4 demonstrate the poor state of Nigeria's health system regarding poor levels of financial access. As the table shows, out-of-pocket spending (OOPS) is the major source of money for financing healthcare in Nigeria and the percentage of GDP devoted to healthcare is very low. In the context of high levels of poverty, the burden of OOPS have further diminished the ability of many households to thrive even in the face of little healthcare expenditures, reduced the ability of some to seek care at all, or when they do, from sources where inappropriate care are likely to be obtained. (Onwujekwe, 2005, Onwujekwe et al., 2011, Onwujekwe et al., 2013).

Tables 3: Basic indicators of UC in Nigeria

140105 01 24510 11141040015 01 0 0 1111 1180114					
Health financing and universal coverage indicators					
Percentage of GDP devoted to healthcare	0.7% of GDP instead of the WHO recommended 4% - 5%;				
Out-of-pocket spending	More than 60% of total health expenditure instead of the WHO recommended 30-40%;				
Level of financial risk protection	Less than 5% of the population is covered by pre-payment and risk pooling schemes instead of the WHO recommended 90%.				
Catastrophic health spending in Nigeria					
Incidence of catastrophic health expenditure	14.8% [catastrophy was measured at a threshold of 40% of				
[when payment for healthcare exceeds a defined	non-food expenditure( Onoka et al, 2011) and was				
level of household income and makes the	22.0% at various times. Onwujekwe et al, (2012)				
household sacrifice consumption of other					
items(Onoka et al, 2010)]					

Table 4. Key indicators of health financing, 2000-2010

		2005	2006	2007	2008	2009
1.	THE, % GDP	3.9	3.8	6.6	5.2	5.8
2.	GGHE, % THE	30.9	29.7	25.3	36.7	36.3
3.	Private HE, % of THE	69.1	70.3	74.7	63.3	
4.	GGHE, % government expenditure	3.5	3.5	6.5	6.4	
5.	External, % of THE	4.8	5.9	2.2	4.6	4.9
6.	Social security expenditure, % GGHE	0	0	0	0	0
7.	OOP, % Private HE	90.4	90.4	95.9	95.4	95.3%
8.	Social Security expenditure, % THE	0	0	0	0	0
9.	OOP % THE*	62.4	63.5	71.6	60.3	65.7
10.	THE per capita US\$	27	33	74	73	69
11.	THE Per capita PPP int. \$	45	59	131	113	136
12.	<sup>+</sup> Proportion of government expenditure budgeted for health		4.6	4.3	4.5	5.39
		•			•	

Source: 1. World Health Statistics 2005-2011. 2. http://apps.who.int/ghodata/?vid=15000&theme=country#

Source +: 3. http://www.fmf.gov.ng/Budget2009Info/2009FBudgetHealth.pdf http://www.who.int/whr/2000/en/whr00\_en.pdf

## 4.1 Inequity in use of services healthcare payments and coping with payments

The incidence of health inequities has been demonstrated in many of our studies in Nigeria (Onwujekwe et al, 2013; 2012; 2011a, 2011b; 2011c; 2010a, 2010b, 2009; Onoka et al, 2009) and elsewhere (Onwujekwe et al, 2006). For instance, a study in Nigeria found that the poorest 25<sup>th</sup> group of people (quartile) was more likely to use low level providers (patent medicine dealers, shops, herbalists) with poor quality services and was also more likely to lose person-days when ill (Onwujekwe and Uzochukwu, 2004; Onwujekwe et al, 2011a). A study in Sudan provides evidence on inequity in expenditure on and consumption of malaria vector control interventions and shows that better-off households have the capacity to prevent and treat malaria (Onwujekwe et al, 2006).

Inequities in access to, use of health care services and expenditure on treatment provide impediments to achieving universal coverage in Nigeria (Onwujekwe, 2005). Also, the present health financing arrangement is not fair and leads to low levels of financial risk protection, decreased affordability of services and general low levels of coverage with health services. These contribute immensely to the poor functioning of the Nigerian health system and general poor health indices in the country. (Onwujekwe, 2005; Onwujekwe et al, 2011, 2012).

Socio-economic and geographic differences also exist in the financial burden resulting from treatment of illness. Some findings show that worse-off households (rural dwellers and poorer SES groups) experience the highest burden of health expenditure, and this is worsened by the near complete lack of financial risk protection (Onwujekwe, Hanson and Uzochukwu, 2012). The better-off SES more than worse-off SES groups used OOPS to pay for healthcare (Onwujekwe, Uzochukwu, Obikeze, Okoronkwo, Ochonma, Onoka, Madubuko and Okoli, 2010). The use of own money was the commonest payment-coping mechanism in the three communities. The sale of movable household assets or land were not commonly used as payment-coping mechanisms, however, decreasing SES was associated with increased sale of household assets to cope with payment for healthcare in one of the communities. Fee exemptions and subsidies were almost non-existent as coping mechanisms. The study concluded that there is the need to reduce OOPS and channel and improve equity in healthcare financing by designing and implementing payment strategies that will assure financial risk protection of the poor such as such pre-payment mechanisms with governments paying for the poor.

Private financing mostly from consumers OOPS is the major health financing mechanism in Nigeria (Onwujekwe 2005, Onwujekwe et al 2013, Velenyi 2006, Onwujekwe and Velenyi, 2010, Soyibo et al 2005, 2010). Many studies confirmed that healthcare services are largely financed by OOP, and this has been found to deplete more of the aggregate income of the two worse-off SES quintiles (Onwujekwe et al, 2010, 2013). This may be the reason the poorest households in southeast Nigeria were seen to have the least incidence of spending on health care (Onoka, Onwujekwe et al, 2012).

High levels of OOP are often catastrophic to households especially the poorest when it compels them to forfeit many essential household needs so as to cope with the burden of paying for treatment (Xu et al, 2003). The use of mostly OOPS has led to many untoward effects such as increased levels of catastrophic health expenditures (CHE) and impoverishment.

The levels of catastrophic expenditures are much higher in Nigeria than values reported in many other developing countries (Onoka, Onwujekwe et al, 2011; Onwujekwe et al, 2012) including where programmes are subsidized (Onwujekwe et al, 2009). However this is not surprising in a context where two-thirds of the population live on less than 1 dollar (1 \$) a day and are expected to pay from their pocket at the point of health service use. Onoka, Onwujekwe et al (2012), Onwujekwe, Hanson and Uzochukwu (2012) and Ichoku, Fonta and Onwujekwe (2010) produced evidence of high levels of CHE in overall health care services in Nigeria. CHE was found to be more amongst the poor and rural dwellers.

Specifically, Onwujekwe O et al (2009) showed that HIV treatment was catastrophic and the CHE was generally more with females, rural dwellers and most poor patients. The study found that subsidized ART programme lowers the cost of ARV drugs but other major costs are still incurred, which make the overall cost of accessing and consuming ART treatment excessive and catastrophic. It is noteworthy that most ART programmes have removed fees for some of the cost items. Also, Onwujekwe et al (2009) also showed that malaria treatment services were catastrophic especially to the poor households.

As already highlighted, payments for healthcare are mostly undertaken using regressive out-of-pocket payments in Nigeria (Onwujekwe et al, 2013). The National Health Accounts in Nigeria show that consumers bear 65% to 70% of Total Health Expenditure in Nigeria (Soyibo et al,2005, 2010). In order words, government provides only about 30% to 35% of funding for healthcare, and this mostly goes into paying staff salaries and for overhead expenditures. Therefore, the main financiers of the activities of the health system are the consumers.

Notwithstanding their lower levels of utilization, the poor often spend more on health care as a share of income than the better-off (O'Donnel et al. 2008), which predisposes them to incurring catastrophic health expenditures (Onwujekwe et al, 2009; 2010; 2012; Onoka, Hanson, Onwujekwe and Uzochukwu, 2011).

Geographic inequities and inequalities also exist in the provision and use of health care services in Nigeria with a skewing against rural inhabitants (Onwujekwe et al, 2005, 2010). Evidence from southeast Nigeria shows that while urban dwellers use mostly formal healthcare providers, rural dwellers use mostly the informal providers, and rural dwellers are prescribed the cheaper drugs compared to urban settlers (Onwujekwe et al, 2010, 2011b). It has also been found that methods of payment for health care differ significantly between urban and rural areas; the former used user-fees payment mostly and the later mostly used instalment payment (Onwujekwe et al, 2005).

However, a recent study on the BIA of priority public health services in Nigeria, showed that there is a greater consumption of most free services by poorer SES quintiles, rural dwellers and females, and concluded that although the coverage of these services fell below target levels, those with greater need received more benefits (Onwujekwe et al, 2012).

Many studies have also highlighted inequities in treatment seeking and in type of providers where treatment is sought with the poorest less inclined to seek and receive prompt and effective treatment due to multiple issues around affordability, availability and acceptability (Onwujekwe et al, 2011). The highest burden of health expenditures are mostly borne by the most-poor SES groups and rural dwellers, thus creating both socioeconomic and geographic inequity in access and use of healthcare services (Onwujekwe et al, 2005, 2011). For common illnesses like malaria, there is evidence of existing inequity in access and use of malaria control and preventive tools (Onwujekwe, 2005) and reported high levels of socioeconomic and geographic inequities in out-of -pocket health spending (Onwujekwe, 2005, Onwujekwe, 2011, Ewelukwa, Onoka and Onwujekwe, 2013) which are often catastrophic (Onwujekwe, 2012).

# 4.2 Universal coverage

Nigeria is not making satisfactory progress towards UC. Evidence presented shows there is very low coverage in Nigeria (of most healthcare services, including the free ones) (NDHS, 2009, Onwujekwe, 2012) in comparison with other countries and global benchmarks shows. The UC levels in Nigeria is one of the lowest in comparative countries. The country should strive very hard towards UC. In all, financing mechanisms that are aiming towards UC should strive to substitute OOP spending with pre-payment mechanisms, with cross-subsidies from the rich to the poor & from the healthy to the unhealthy.

# Level of UFC in Nigeria

- Total health expenditure is 0.7% of GDP instead of the recommended 4% 5% by WHO
- Out-of-pocket spending is more than 60% of total health expenditure instead of the recommended 30-40%
- Less than 5% of the population is covered by pre-payment and risk pooling schemes instead of the recommended 90% by WHO
- Less than 2% coverage of population with social assistance and safety-net programmes instead of the recommended 100% by WHO

### Level of UFC in other African and developing countries

- Ghana: Has extended mandatory health insurance coverage to more than 60% of the Ghanaian population
- RWANDA: Achieved UFC of the informal sector. About 90-95 percent of Rwandans in the informal sector are enrolled and are accessing health care and during 2005–2011, deliveries at health facilities increased by 78 percent, new curative consultations by 51 percent, and family planning users by 209 percent.
- South Africa has 40% mandatory health insurance; 40% voluntary pre-payment; 20% out-of-pocket
- Malaysia:Total Health Expenditure (4.75% of GDP); Out-of-pocket expenditure as a % THE 30.7%; Comprehensive safety nets for vulnerable groups; and Tax-based financing mechanism
- Thailand: Universal coverage using a variety of pre-payment mechanisms (75% mandatory health; insurance, 15% other pre-payment mechanisms); 30 Baht UC scheme

Encouraging for the achievement of UFC in Nigeria is the fact that evidence exists showing that people are willing to enrol and pay for different financial risk interventions such as health insurance mechanisms to protect themselves from the uncertain risk of illness r and health expenditures incurred, and help to achieve UC. There is positive evidence that people are willing to pay for CBHI and PVHI (Onwujewe et al 2010, Onwujekwe and Velenyi, 2012). Our evidence also shows that corporate bodies are willing to pay for private health insurance for their employees (Onwujekwe and Velenyi, 2012). The levels of willingness to pay(WTP) are generally related to people's income level, with rich people willing to pay more that the poor. (Onwujekwe et al, 2010).

Currently, efforts in Nigeria are being channelled towards scaling up CBHI schemes as an option that could provide financial protection especially to the rural dwellers and those outside the formal employment sector. While these efforts are laudable, it is important that the processes; from scheme design to implementation be based on existing evidence. Onwujekwe et al (2009) found that less than half of the people were willing to pay for CBHI for themselves, and their households' contributions to CBHI were found to be small, retrogressive and inequitable because flat sums were paid as initial registration and premium regardless of SES. The study also found that males and those with more education stated higher WTP values; factors such as previously paying out-of-pocket for health care was negatively related to WTP while previous use of any health insurance mechanism was positively related to WTP. Low levels of premium and low levels of fund pools as reported in the study will undermine equity in financing and sustainability of such schemes.

In an assessment of preferences for benefit packages with SES and geographic residence of the respondents, Onwujekwe et al (2011) reported that the poorer SES and respondents from rural areas preferred a more comprehensive benefit package that includes both in-patient and outpatient visits (Onwujekwe et al, 2010). The fact that in many schemes communities participate in the process of defining the benefit package to be covered in advance (what to buy, in what form, and what to exclude) is a major strength of CBHI (Bennett, 1998), hence these factors should be borne in mind in the design of schemes.

In a state where the scheme had been implemented, evidence from two communities with varying levels of success show that, enrolment was generally low (15% in worse performing and 48.4% in better performing community) (Onwujekwe et al, 2009). The average premiums were also small though there was equitable enrolment and utilization of services. Hence, efforts need to be made to increase the number of enrolees, so as to increase the pool of funds and risks and that enrolee payments especially in poor and rural communities be supplemented by subsidies from government and donors in order to ensure equitable financial risk protection (Onwujekwe et al, 2009).

Despite these challenges, CBHI has played a key role in reforms in both Rwanda and Ghana, the two countries that have taken the boldest steps towards universal coverage (AFHEA, 2011). If CBHI schemes are to play a role in moving to universal coverage in more African countries, there is consensus that tax (and donor) funding is required to subsidise contributions for low-income groups and to fully pay the contributions of the poor (AFHEA, 2011) otherwise it may not be possible to cover all members for a reasonably comprehensive basic package of care through CBHI schemes. Evidence from CBHI studies shows that where benefits seem to be well distributed by SES, the level of enrolment is equitable among different SES groups, an implication that it provides access to health care in a way that does not disproportionately favour the richer members of the society (Onwujekwe et al, 2009). However, although poorer SES groups and rural dwellers are desirous to enroll in PVHI, their stated willing to pay amounts are smaller compared to better-off groups (Onwujekwe and Velenyi, 2010).

In this regard, we have produced evidence on why some financial risk protection (FRP) mechanisms (e.g. health insurance) may or may not work, as a guide on how to strengthen and scale-up the different FRP mechanisms. These include a study in Anambra state that determined whether CBHI is equitable, (Onwujekwe et al, 2009); another that examined whyCBHI works or does not work (Uzochukwu, Onwujekwe et al, 2007); and one on why a state will adopt the FSSHIP and another will not adopt it (Onoka et al, 2012). This is specifically a study on constraining and enabling factors to adoption of the formal sector social health insurance programme( FSSHIP) of the NHIS in Enugu and Ebonyi states (Onoka, Onwujekwe et al, 2012). We have also produced evidence on general enablers and impediments to UFC in Nigeria (Onwujekwe et al, 2011; Ezeoke et al, 2012).

Specifically, the constraining factors to adoption of the (FSSHIP) in Ebonyi state are (Onoka, Onwujekwe et al, 2012): no provision of state-owned insurance schemes/HMOs and circulation of funds within the state; unacceptable and inefficient process of sending state contributions up to the NHIS in Abuja, having the NHIS deduct 10% as administrative cost and having this money come back to the state grossly reduced; making health facilities work is

more of a challenge than starting insurance and that this should be corrected first; and concerns about the governance and accountability system of the NHIS, especially lack of information to stakeholders at all levels about the activities of the scheme.

The enabling factors to adoption of FSSHIP in Enugu state are (Onoka, Onwujekwe et al, 2012): Wide stakeholder involvement in reaching the decision for adoption; HMOs with state offices providing constant motivation to the health sector players in the state (through provision of information on insurance and mobilization of labour unions and health ministry staff); Strong interest from the state governor; and enactment of a health insurance law.

Ultimately, the achievement of health system objectives will only occur if the stewardship or governance of the system is good. One of the studies showed that Health System Governance (HSG) in Nigeria is weak and this is a contributory factor to the poorly performing Nigerian health system. The findings (Onwujekwe et al, 2012) showed that: (i) strategic vision for health and policies exist but people are not generally aware about their implementation; (ii) policies and strategies are not explicitly demand-driven and demand-responsive; (iii) there is a sizeable number of people that are ignorant about the legal issues in the health sector; (iv) the general population have poor knowledge about their rights in the health sector; (v) there is limited needs-based resource allocation by the government; (vi) the poor may not be optimally accessing health services; (vii) there is inefficient management of information, finances and human resources leading to sub-optimal coverage of health services; (viii) there is moderate to low level of accountability; (ix) there is good information gathering system and moderate capacity for data analysis but poor information dissemination system; (x) ethics in health sector exists although many people may not be well informed.

# SECTION 5: HOPE FOR UNIVERSAL COVERAGE AND EQUITABLE HEALTH SYSTEM IN NIGERIA

Improving UC requires a diverse set of policies (Thiede et al 2007). Access to health services is influenced by many behavioural, cost and distance factors (Noor et al. 2003). It is important to ensure that strategies that are implemented are equitable and hence, available to the poorest SES groups, since the poor people bear a disproportionate burden of the disease and have poor health-seeking habits (Onwujekwe et al. 2006) due to financial barriers (Okoli and Cleary, 2011).

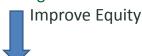
Amongst other things, the predominance of OOPS should be eliminated and the country moved towards achieving UC, especially UFC with appropriate FRP mechanisms. The elimination of the use of OOPS and movement towards UFC, although possible nationwide, could be started at sub-national (States and LGAs) levels for willing and capable states and LGAs. They will serve as role models and best cases for other hesitant or 'slower' states to emulate and also move towards UFC.

## **Conceptual framework:**

Universal coverage depends on:



- Enabling policies, legislation, strategic plans, capacity, advocacy, improved perceptions
- More health for money (improved efficiency)
- More money for health (increased funding)
- Innovative health financing



Better health indices, achieve MDGs and other goals

Health systems in many low- and middle-income countries are failing many population groups, who are faced with wide-ranging barriers to getting the health care they need (McIntyre et al. 2007b). To address these health system failures, system-wide interventions are required. Foremost among these interventions is challenging the status quo in relation to the public-private health care mix, with an urgent need to strengthen public health services that have been systematically neglected over the past few decades while also seeking to regulate the worst excesses of the private health sector. Promoting a greater reliance on financing mechanisms that are progressive and that strengthen cross-subsidies in the overall health system is critical, as is ensuring that available financial and human resources are equitably allocated among geographic areas and population groups (McIntyre et al.2007b).

Specifically, in order to improve affordability and achieve UC, policy makers need to explore how to reduce direct costs for users of these key health services in the context of the particular characteristics of different treatment types (Cleary et al, 2013). Affordability needs to be considered in relation to the dynamic aspects of the costs of treating different conditions; the timing of treatment in relation to diagnosis and the frequently high transport costs associated with treatments involving multiple consultations can be addressed by initiatives that provide close-to-client services and subsidised patient transport for referrals (Cleary et al, 2013).

Poor geographical access to healthcare contributes to the existing inequity in healthcare but in places where there is adequate geographical access, financial access may be an impediment, with most rural dwellers being subsistence farmers and out-of –pocket payments for healthcare very easily drives most families into further poverty such that payment for basic healthcare may become catastrophic. This results in some families in dire need of healthcare not seeking it even when it is available as they are not able to afford the direct costs of healthcare.

The health care literature further shows that health inequalities are largely driven by socio-economic factors and thus determined outside the health care sector (Joumard et al. 2010). The roots of most health inequalities and of the bulk of human suffering are somewhat social (WHO, 2005) and concerted effort is required to address it through the following areas: decrease *social stratification* itself, i.e., reduce inequalities in power, prestige, income and wealth linked to different socioeconomic positions; decrease the *specific exposure* to health-damaging factors suffered by people in disadvantaged positions; seek to lessen the *vulnerability* of disadvantaged people to the health-damaging conditions they face; and intervene through *healthcare* to reduce the unequal consequences of ill-health and prevent further socioeconomic degradation among disadvantaged people who become ill (WHO, 2005).

#### **Enabling factors to UFC in Nigeria**

Enabling factors to UFC in Nigeria include: leaders (including the President, Minister for health, state governors and National assembly members) that are committed to achieving UC; Enactment of the National Health bill into law; Existing HMOs, CBHI, PVHI, employer-health services; Existence of free maternal and child health programmes across the country; Passage and signing of the National Health Insurance Commission bill into law; Various national and global resolutions on UC; Development partners committed to UC; Enabling environment for health sector reform; SURE-P

Some other enabling global and national frameworks either exist or are planned to achieve universal coverage. These include: The Nigerian constitution, African Union (AU) and World Health Organization (WHO) declarations; Federal Structure of the country; NHIS-MDG Programme; Health Bill that will attract more funds to the health system to improve PHC services and increase financial access to healthcare services; Commitment of governments to free MNCH services; The National Health Insurance Scheme (NHIS) act of 1999 that stipulates that there should be UHC in Nigeria; The National Health Financing Policy of 2006; National and State Strategic Health Development Plans; Various health strategic documents, policies and laws at the federal, state and LGA levels; Existence of the formal sector programme of the NHIS at the federal level; National Primary Healthcare Development Agency; Existence of community financing schemes and potential to scale them up; Vision 2020:20; MDG goals; Partnerships with development agencies

# Barriers to UFC in Nigeria

They include: low level of financial risk protection and high catastrophic expenditures; Existence of high levels of out of-pocket spending; Existence of large informal sector which are not covered by the formal sector programme; Lack of a clear blueprint by federal and state governments on how to cover people in the informal sector; Reluctance of many states and private sector to register their employees in the NHIS formal sector health insurance programme; the Federal structure of Nigeria; Lack of legal framework for UC in the constitution; absence of national and state costed plans for Universal Coverage; weak capacity in health economics and health financing at NHIS, FMOH and SMOHs; Defects in the NHIS act of 1999; Poor understanding and perceptions of health insurance by the populace especially state governments and the organised private sector; Lack of knowledge about health insurance – including the NHIS in the country.

## **5.2 Improving UFC**

Progressive health care financing mechanisms, in which those with greater ability to pay contribute a higher *proportion* of their income than those with lower incomes, should be prioritized. Part of the answer lies in one form of health insurance or the other. As long as out-of-pocket payment for health care dominates, all of the above reforms will be difficult to achieve. Nigeria has not made much progress towards achieving universal coverage with the programmes of the National Health Insurance Scheme nor with the pockets of community based health insurance schemes. The examples from other sub-Saharan African countries and the other parts of the world show that UFC is achievable. Ghana has been able to improve affordability and access to healthcare for children by using dedicated VAT amount to pay premiums for enrolling children in its National Health Insurance Scheme. Other forms of health financing systems, mainly the social health insurance and commercial (private voluntary) insurance may also need to be explored.

### Where should we be going?

Based on the available evidence, Nigeria should be striving towards achieving Universal health coverage through tackling of inequities; harnessing more resources for health by actualising the 'Health in all Policies' principle; ensuring More Health for Money (improving efficiencies) (WHO, 2010); More money for Health (WHO, 2010); and generally strengthening the health system. The twin issues of more health for money and more money for health were expounded by the WHO in the World Health Report of 2010 that dealt with achieving UC (WHO, 2010).

In Nigeria, lack of health insurance for employees by corporate bodies, governments at all levels and eligible households should be made a punishable offence. This is borrowing from the central crux of Obamacare in the USA, which is the achievement of UC with health insurance. It is a crime for any eligible corporate body or individuals that are not covered by either Medicare or Medicaid not to have health insurance. This is a direction that we should pursue in Nigeria.

Enabling laws for UC should be made at the Federal and state levels. Most importantly, citizens' rights to UHC should be enshrined in the Nigerian constitution, so that it becomes the right of every citizen to have unimpeded access to healthcare services. The 1999 constitution is very silent on issues of health and health is not on any list. The constitution does not specify anything on how the health system should be organised. These are some of the draw backs that the Health Bill is trying to correct. However, the constitution remains a more paramount instrument than a bill that is enacted into law.

Also, since achieving UFC depends on available evidence so that we will know what works and what does not work in different contexts, efforts should be made to ensure that the key actors 'Get Research into Policy and Practice (GRIPP) or 'Get Research into Strategies, Policies and Practice (GRISPP). There should also be efforts towards decreasing the gap between plans/ policies and actual implementation. The country may develop very good plans for achieving UC, but weaknesses with implementation will derail the lofty ideas.

# SECTION 6: HEALTH SYSTEM STRENGTHENING IN NIGERIA AS A SOLID FOUNDATION FOR UNIVERSAL COVERAGE.

Nigeria needs significant health sector reform (HSR) in order to prime the country's health system to perform better and achieve UC. HSR is a sustained process of fundamental change in policy and institutional arrangement, guided by government, designed to improve the functioning and performance of the health sector and ultimately the health status of the population (Sikosana et al, 1997). In other words, HSR is a sustained, purposeful change to improve the efficiency, equity and effectiveness of the health sector (Berman,1995) or a process that seeks changes in health sector policies, financing, and organization of services, as well as the role of government, to reach national health objectives (Population Council,1998).

All the conditions for serious Health Sector Reform interventions have continued to exist in Nigeria and they are: 1) Poor health indices; 2) poor levels of financial and geographic access to healthcare services and people cannot access the healthcare they need; 3) poor quality of services; 4) rising costs without commensurate output and the need to constrain health sector costs; 5) rising expectations of the people; 6) massive medical tourism to India, Egypt, Ghana and other countries leading to huge economic losses to the country; 7) Scarce resources are used inefficiently: public funds are being spent on inappropriate and cost-ineffective services; 8) Services do not respond to what people want (people will not accept poor quality services, in the public health sector they face unmotivated staff, long waiting times, inconvenient clinic hours, inadequate supplies and drugs and lack of any confidentiality or privacy and in private health sector, they are at risk of financial exploitation with no safeguards against potentially dangerous treatments); 9) inability to make significant progress to achieve the MDGs; and 10) not primed to achieve universal coverage. The hospitals apparently are not much better than the one that General Abacha described in 1983 as mere consulting clinics.

The HSR thrusts in Nigeria should address all the building blocks of the health system and fundamentally craft a new National Health Policy that will entrench the HSR thrusts and that will take into cognizance the political economy of Nigeria. HSR involves political and "top down" process (but with community involvement) led by national, regional or local government; Content is marked by diversity rather than uniformity of measures; Content is specific to a country and to its health system characteristics. HSR can also involve: improving the performance of the civil service; Decentralization; Improving the functioning of national ministries of health; Broadening health financing options; Introducing managed competition; and Working with the private sector (Cassels, 1995).

HSR in Nigeria will involve an overhaul of the healthcare system, with emphasis on grass root health care provision and delivery. Equity issues must be an integral part of the planning process. This implies strengthening health systems—at all levels (LGA, State and National), based on the WHO building blocks, Nigerian building blocks and other appropriate health system frameworks. This will entail the use of innovative mechanisms and re-jigging of some existing structures. The end point will be to re-build the Nigerian health system so that it can support, deliver and sustain UC.

The HSR thrusts will explicitly be aimed to achieve Universal Coverage. Key characteristics of HSR that should be pursued should be in line with the postulations of Figuerasetal (1997), which means that they should be: 1) Structural rather than incremental or evolutionary; 2) change in policy objectives followed by institutional change rather than redefinition of policies alone; 3) purposive rather than haphazard change; and 4) sustained and lengthy rather than one off.

Some of the possible strategies are described below.

# 6.1 Building a health system backbone – developing a new National Health Policy and reconstructing the Nigerian health system

Complete reconstruction of the National health policy and enactment of enabling laws in the constitution or in the health bill. Nigeria needs to construct a health system backbone, which will be dependent on the primary health system and comprised of the provision and financing of essential health services by the so called primary, secondary and tertiary levels (Onwujekwe et al, 2012). There should be systematic linkage of primary healthcare centres to tertiary and secondary facilities and revision of National Health Policy in response to realities of the present time and the health bill. Hospital based health insurance schemes should be introduced.

This may also entail the development of a new Health Policy for Nigeria – not the revision of the old one, but borrowing some aspects of the old one. The brand new health policy should take cognizance of the federal structure of Nigeria. It should explicitly detail the line of linkages between all the tiers of the health system. Most importantly, it should make PHC everybody's business, instead of assigning it to the LGAs, since a well functioning PHC system is tantamount to improving the health status of most Nigerians. The notion of 'Health in all Policies' should also be embedded in the new Health Policy, with specific roles assigned to the various sectors, outside the core health sector that have important health functions that should be considered part of the health system.

## 6.2 Development and implementation of strategic plans for institutionalising 'Health in all Policies (HiAP)'.

HiAP is a policy strategy, which targets the key social determinants of health through integrated policy response across relevant policy areas with the ultimate goal of supporting health equity (http://www.health-inequalities.eu/HEALTHEQUITY/EN/policies/health\_in\_all\_policies/#Definition). The HiAP approach is closely related to concepts such as 'inter-sectoral action for health', 'healthy public policy' and 'whole-of-government approach'. In practical terms HiAP can be achieved by ensuring that all Ministries, Departments, Agencies (MDAs) have health desks, all the health issues with all MDAs identified, all strategies for addressing all the health issues relating to the MDAs developed within the context of Medium Term Sector Strategies (MTSS), costed and included as annual budgets of the MDAs. A 'Health in all Policies' committee from the presidency will coordinate, monitor and evaluate and refine the Health in all Policies strategies for all the MDAs. There should be annual summits on Health in all Policies (involving multi-stakeholders) – around June just before MDAs fully develop their strategies and budgets.

# 6.3 Introduction of a new cadre of health workers: Health Administrators and Managers (with Bachelor of Science (BSc) in Health Administration and Management).

There is a growing need for trained health care administrators and managers in Nigerian health system, which has been dominated by medical personnel who act both as providers of care and managers. While they are very efficient and effective in the former, sometimes they are found wanting in the latter i.e. management due to lack of requisite training. The system needs the injection of properly trained personnel to handle the business aspect of health care delivery including budgeting, accounting, management, finance, forecasting etc. Also the identification of the professional gap of health managers and administrators in the health sector with the introduction of the new Civil Service reforms has been very obvious (Dept of HAM, UNEC, 2008).

As Department of HAM UNEC (2008) argued, it is now very necessary to develop health managers with relevant high academic and professional skills to provide efficient and effective health services management at all levels in both public and private health care organizations. These new cadres of graduates will be expected to help improve the health system at the primary, secondary and tertiary levels. Fresh graduate entry is essential so that the health system gets enough human resources whose primary training and job will be to ensure that the health system becomes efficient and equitable. These graduates will also form the core of any post-graduate programme in health administration and management.

There is lack of capacity in health management, health administration, health economics and health policy in Nigeria and most sub-Saharan African (SSA) countries to man managerial and administrative positions in the

ministries of health, health organizations and services (Dept of HAM, UNEC, 2008). It is not enough to build hospitals and mount health care programmes. It is also very important to prepare the human resources by inculcating in students how to apply administration and management knowledge to make appropriate decisions and proffer solutions to problems in the health system. Knowledge of health system administration, health system management; and health economics and policy are essential skills that are required to improve the health system and ensure that the country achieves UC (Dept of HAM, UNEC, 2008).

A noted reason for the underperforming of the Nigerian health system is the lack of capacity in health management and or administration in the country as also obtains in most sub-Saharan African (SSA) countries (Department of HAM, UNEC 2008). There is hence the lack of adequately trained as well as academically equipped health management professionals to man management positions in the ministries of health, health organizations and services in Nigeria. Evidence also shows that one of the greatest problem preventing appropriate delivery of care, improved access to care and the financial viability of the health system has been the scarcity for trained and seasoned health care managers. Evidence also indicates increasing need for trained health economists/managers by the civil society organizations in attempt at reforming and improving the Nigerian health system (Department of HAM, UNEC 2008). As a result, it has become necessary and important to provide relevant professional training in order to develop health management experts and health economists with high academic and professional skills to provide effective leadership in the health services delivery at both the public and private health sectors (Dept of HAM, UNEC, 2008).

Hence, urgent steps should be taken by the Federal Ministry of Health and other important stakeholders to promote and support the establishment of BSc programme in Health Administration and Management in Nigerian universities. As stated earlier, this recommendation is in line with the recommendations of the health summit of 1995 and should be actualized from Departments of Health administration and Management or Public Health in Nigerian universities.

# 6.4 A new explicit Health Sector Reform and Strengthening action for achieving Universal Coverage.

This will include a health financing reform that will promote a greater reliance on financing mechanisms that are progressive and that strengthen cross-subsidies in the overall health system.l (Mcinytre et al.2007). This ensures that available financial and human resources are equitably allocated among geographic areas and groups (Mcinytre et al.2007). Redistribution of income from rich to poor, whether within or between countries, will increase the health of the poor more than it hurts the health of the rich, and thus improve average national or world health (Deaton, 2003).

6.5 Other HSR thrusts should be used to: 1) Improve Health System Governance and other building blocks, especially financing, service delivery and human resources (Onwujekwe et al, 2012); 2) Improve efficiency (more health for money); 3) Improve equity; 4) Comprehensive Sector-wide delivery of essential (PHC) services; 5) Expenditure tracking systems and improvement of equity and efficiency in the use of resources – how can we achieve more health for available money; 6) Benchmarking and grading of health systems of the 36 states (and their LGAs) and the FCT – diagnosing areas of weakness and where health reform should be focused (based on the building blocks, N/SSHDP and control knobs) in different areas; 7) Systematic coordination of donor support to improve the delivery of essential services.

# SECTION 7: CONCLUSION AND AREAS FOR FUTURE WORK: CRITICAL EVIDENCE NEEDED TO ACHIEVE UC AND IMPROVE THE HEALTH SYSTEM

Health systems in many low- and middle-income countries such as that of Nigeria are failing many population groups, who are faced with wide-ranging barriers to access the health care they need. Health systems are consistently inequitable, providing more and higher quality services to the well-off that need them less than the poor who are unable to obtain them (Gwatkin et al. 2004). In the absence of a concerted effort to ensure that health systems reach disadvantaged groups more effectively, such inequities are likely to continue. To address these health system failures, system-wide interventions are required to strengthen public health services that have been perennially neglected (McIntyre et al. 2007b). In addition, health system interventions of this nature should be supported by broader poverty-reduction strategies to break the vicious cycle of poverty, ill-health, and further impoverishment (McIntyre et al. 2007b).

As part of the global push for increased access to health services, there was a high level dialogue between African Ministers of finance and health towards and beyond the MDGs in Tunis, which led to the declaration on value for money, sustainability and accountability in the health sector: A joint Declaration by the Ministers of Finance and

Ministers of Health of Africa, July 5, 2012. There were ten recommendations, but the pertinent ones to this chapter are: (No 6) All countries should lay out the path to universal health coverage for each country, in particular establishing mechanisms to ensure equitable access to essential health services including social health insurance while ensuring effective safety nets to protect vulnerable individuals, households and communities; and (No 7): Improve efficiency in health systems, including equitable access to skilled health workers and the introduction of measures such as results based financing and incentives to enhance transparency and performance and reduce wastage.

Evidence indicates that achieving universal coverage might be difficult and even expensive (Mcinytre et al.2007). For instance, diverting resources from more cost-effective programs to those that address the course of children could reduce overall efficiency, resulting in equity-efficiency trade-off. The more we try to increase equity by redistributing income, the more we reduce efficiency (Wonderling et al. 2010).

Broad Strategies to improve affordability and achieve UC are: More Health for money – improved efficiency; More Money for health – generate/allocate more money to health; Equity in resource allocation and ensuring financial access; Universal coverage of financial risk protection mechanisms such as NHIS formal sector programme, CBHI, free MCH programmes etc; Health in all Policies to be an integral part of the strategic framework; Redistribution of health workers through incentives; and Innovative financing mechanisms. A study based on empirical findings recommended that in order to achieve equity in the health system and possibly move towards UC, there should be a decrease in amount of user-fees paid, enhanced physical access and improved quality of services to decrease inequity in use of hospitals for treatment of endemic diseases (Onwujekwe and Uzochukwu, 2004).

## 7.1 Roadmap for UC: Universal Financial Coverage (UFC) and Universal Geographic Coverage (UGC)

Evidence shows that there are several common features for UC across countries and regions, such as the coexistence of UHC schemes, heterogeneity in design and organisation, a widespread effort to include the poor in the schemes, and the prevalence of mixed financing sources (contributions plus taxes) (Giedion et al, 2013). However, there is paucity and inconclusive evidence on the impact of specific UHC design features on their intended outcomes (Giedion et al, 2013). In Nigeria, two important organisations for this are NPHCDA and NHIS, especially if the Health Bill is passed and signed into law by Mr President. This is bearing in mind that a National PHC fund (2% of consolidated revenue will be given to NHIS and NPHCDA every year) should be used to achieve UC. The achievement of UC will hinge on the tripod of health promotion: improvement in the quality of services; improved access and advocacy so that people will know that the services exist.

#### The UC road-map in Nigeria should:

- 1. Develop and cost strategic plans for achieving UC in Nigeria: develop and cost 38 plans for achieving UFC in the country by the third quarter of 2013 (for the Federal, 36 states and the FCT). A roundtable on UFC with key speakers/discussants coming from countries with advanced UFC such as Thailand, Ghana, South Africa and Rwanda plus development partners, especially ILO, AfDB, the World Bank and WHO will help in the development of the Federal and some state plans.
- 2. Create a mass movement for UFC and UC in Nigeria (demystify and make UFC a topical issue in Nigeria (such as given to reduction in infant and maternal mortality and immunization). A forum at each state level and at the national level should be developed to promote UFC in different contexts and areas. Each forum will comprise of prominent opinion leaders such as traditional and religious leaders, different trade unions and professional associations, Organised Private Sector (OPS), Nigerian Labour Congress (NLC), Trade Union Congress (TUC), Federal and State legislature, ALGON, Mass media, development partners, NPHCDA/SPHCDA, Sure-P, F/SMOH, National Planning Commission, Central Bank of Nigeria, Nigerian Economic Summit Group (NESG), Nigerian Economic Society (NES), Nollywood, Kannywood, and other as deemed fit in different contexts.
- 3. Information Education and Communication to the governors, other policy makers, and to the general public to engender trust, improve knowledge and wide acceptability of the UC, especially the UFC aspect.
- 4. Develop a system for tertiary facilities to adopt a minimum of two PHC centres as part of their service delivery outlets and develop hospital-based health insurance schemes.
- 5. Significantly increase coverage with health insurance and other Financial Risk Protection mechanisms
  - a. All states should develop their social health insurance (SHI) guidelines and laws by end of 2013
  - b. Motivate the scale-up of various forms of private health insurance

- c. All states should adopt and implement the Formal Sector Social Health Insurance Programme (FSSHIP) and the states should develop their plans and SHI model.
- d. The NHIS should investigate and correct market failures in the current FSSHIP (quality, enrolment, benefits).
- e. The NHIS should enrol all Federal government employees and facilitate their accessing of benefits
- f. The NHIS should work with the organised private sector to ensure that at least 80% of them enrol their employees in the FSSHIP by 2015
- g. The government should work with the labour unions to ensure that enrolees contribute 5% of their basic salaries
- h. Tertiary hospitals-based health insurance scheme for both the informal and formal sectors, with providers as the hospitals and their comprehensive health centres should be developed.
- i. The governments at all levels should support the development of communities of trades-people, religious bodies, professional associations and artisans health insurance schemes
- j. The governments at all levels should launch a CBHI scheme in at least two communities per LGA and enhance the capacity and sustainability of existing CBHI schemes
- k. The existing national and state free maternal, neonatal and child schemes could be harnessed to be the core of CBHIS or other FRP mechanisms in Nigeria.
- 1. The governments at all levels should motivate the adoption of special CBHI by donors and wealthy corporations (include motivating all telecom and oil producing companies to enrol their catchment communities in health insurance schemes).

# 7.2 Health Systems Research for UC

There has to be the generation and use of evidence in the realm of Health Systems Research for the improvement of the functioning of the health systems so that it can achieve universal coverage. However, it is noted that some knowledge and the means to change are at hand but what is needed now is the political will to implement these somewhat difficult but feasible changes (Marmot et al 2008).

Health Systems and Policy Research and Analysis (HSPR+A) should be used to generate the needed evidence to achieve UC and GRISPP strategies used to make practical use of the generated evidence. It is noted that health systems are the means whereby many programmes and interventions are planned and delivered and strengthening health systems and making the Nigerian health system more equitable and efficient is key for fighting poverty and fostering development. Health systems research can significantly contribute to better health policies and programmes in Nigeria. Lack of research on the other hand can lead to undesirable results as has been witnessed over the years, where the health system actors have relied mostly on un-evidence-based development of strategic plans and policy-making.

Some key HSR areas from the Second Global Symposium on Health Systems Research, 3 November, 2012 - Beijing, China were provided by the participants. This was around the theme of inclusion and innovation towards Universal Health Coverage (UHC). Key ideas for action that have emerged related to the objectives of the program after the Symposium reviewed state-of-the art research and discussed strategies for strengthening the field of health systems research include:

- The cutting edge of health systems research should be advanced by supporting analysis of politics and policy; community action interventions; fiscal innovations; equity oriented health metrics; and longitudinal methods to capture dynamism and long-term impact of interventions.
- More research on: social inequalities in health, including urbanisation and ageing; social exclusion; governance; and the balance of sectors, including informal, private, and public.
- The development of social science methodologies, health metrics and monitoring and evaluation systems in a balanced manner should be encouraged in order to appreciate the complexity of health systems, policies and implementation processes and capture their historical origins, current status and future long-term impacts.
- Other innovations that warrant support include strengthened data surveillance systems; better documentation of financial flow at all levels; nesting research and incorporation of knowledge uptake in research design for improved monitoring and accountability, including by communities, in implementation of UHC.

- Knowledge translation should be facilitated by developing communities of practice and trust between researchers, practitioners and policymakers; drawing from multiple sources of knowledge and evidence, including real-world experiences; strengthening open-access databases; and enhancing South-South exchange of innovations to achieve UHC.
- Long term and public financing for public research institutions for health systems research is desired. Interest groups and partnerships should be supported for various forms of training in health systems research, that include communication, values, power relations and context analysis as capacities at all levels...."

The key health systems research areas in Nigeria include: How to achieve more health with available money; how to raise more money for health; How to translate increased government revenue to more money for health and improve health system functioning; and How to ensure universal coverage with financial risk protection mechanisms (such as health insurance). Other areas for HSR should be undertaken according to: the health system building blocks; Equity (understanding equity as a problem in its own right and how to make the health system more equitable); Efficiency (producing outputs at least cost); Sector analysis (understanding health systems (Sector) reforms, inter-sectoral collaboration, private sector, public private partnership); Management and Organisation (assessment of performance, service delivery, administration); Disease burden (Epidemiological analysis of disease conditions); Financing (resource mobilisation and collection, risk pooling, purchasing, different financing mechanisms); Socio-epidemiology of many conditions; and political-economy of effecting change and supporting HSR. The frameworks should be those of health systems research applying health economics and Health Systems Research principles and methodologies.

The achievement of UC (UHC plus UFC) is a task that must be accomplished in Nigeria. The interventions for achieving UC should avoid the occurrence of the 'law of inverse equity where "health interventions initially reach those of higher socio-economic status and only latter affect the poor" (Victora et al., 2000). It can be argued that Nigeria cannot achieve any of the health-related MDGs and is currently not primed to achieve UC. The country has all the resources to achieve UC, but it requires the right combination and optimization of the health system building blocks.

My future local (Nigerian-based) research agenda will be geared mostly towards intervention implementation research aimed at helping to actually improve the functioning of the Nigerian health system. Hence, the studies will be anchored on the tenets of Health Systems Research. I see the works and publications that my collaborators and I have produced as just the beginning and not the end. The journey is still just beginning, but hopefully, it will not be too long before we use evidence-based decision making to significantly improve the Nigerian health system to be able to provide UC and significantly improve the health status and indices of the people.

Finally, it is clear to me that significantly improving the existing national capacities in Health Economics and Health Policy and Systems Research plus Analysis (HPSR+A) hold the key to unlocking the door of the poor health system of Nigeria. It is important that the capacity of research users (strategic decision makers + policy makers) to understand and use generated evidence to improve the health system is undertaken with all seriousness. Hence, I will continue to significantly contribute to the capacity development of both researchers and research users within the frameworks of Health Economics, Health Policy, Pharmaco-economics, Pharmaco-epidemiology, HPSR+A and Getting Research into Strategies, Policies and Practices (GRISPP). The existing and proposed academic programmes in the Department of Health Administration and Management, Faculty of Health Sciences and Technology, University of Nigeria and the research and capacity development portfolio of the Health Policy Research Group, Department of Pharmacology and Therapeutics, Faculty of Medical Sciences, University of Nigeria, already leaders in their areas in Africa, will be the epi-centre of such activities.

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#### REFERENCES

- 1. African Health Economics and Policy Association. (2011) Towards universal health coverage in Africa: key issues from the 2011 AfHEA conference. AfHEA2nd conference. 15<sup>th</sup>-17<sup>th</sup> March, 2011
- 2. Bambas, A and Casas J. A. (undated) Assessing Equity in Health: Conceptual Criteria
- 3. Bennett S, Creese A, Monasch R. (1998) Health Insurance Schemes for people outside Formal Sector Employment. In *Document WHO/ARA/CC/98 1*. World Health Organisation, Geneva; 1998
- 4. Braveman, P.A. (2003) Monitoring equity in health and healthcare: a conceptual framework. Journal of health, population, and nutrition, 21(3): p. 181
- 5. CBHI Nigeria Brief rev UN CPG 052912
- 6. Chua HT and Chah JCH (2012). Financing Universal coverage in Malaysia: a case study. BMC Public Health, 12(Suppl 1) S7:S7
- 7. Cleary S, Birch S, Chimbindi N, Silal S, McIntyre D (2013). Investigating the affordability of key health services in South Africa. Soc Sci Med. 2013 Mar;80:37-46.
- 8. Deaton Angus, 2003, Health, Inequality, and Economic Development. Journal of Economic Literature Vol XLI: pp 113-158 March,
- 9. Ewelukwa O, Onoka C and Onwujekwe O (2013s). Viewing health expenditures, payment and coping mechanisms with an equity lens in Nigeria. *BMC Health Services Research*
- 10. Ezeoke OP, Onwujekwe OE and Uzochukwu BS. (2012). Towards universal coverage: examining costs of illness, payment and coping strategies to different population groups in southeast Nigeria. American Journal of Tropical Medicine and Hygiene; 86(1): 52–57
- 11. Federal Ministry of Health. (2004) Health Sector Reform Programme (HRSP): Strategic Thrust and Plan of Action. 2004–2007. Abuja, Nigeria: Federal Ministry of Health 2004, 7.
- 12. Giedion U, Alfonso EA and Diaz Y (2013): The impact of Universal Coverage schemes in the developing world. Washington DC: The World Bank. <a href="http://tinyurl.com/a3dshyv">http://tinyurl.com/a3dshyv</a>Gilson, L. (2007) Acceptability, trust and equity. In: The Economics of Health Equity edited by Di Mcintyre and Gavin Mooney. Cambridge University Press Cape Town.
- 13. Glied SA. Mandates and the Affordability of Healthcare. Available at: <a href="http://www.nber.org/papers/w14545">http://www.nber.org/papers/w14545</a>. Accessed 2012.
- 14. Global Symposium on Health Systems Research. Summary of recommendations from the Second Global Symposium on Health Systems Research, 3 November, 2012 Beijing, China.
- 15. Gordon D, Howe LD, Galobardes B, Matijasevich A, Johnston D, Onwujekwe O, Patel R, Webb EA, Lawlor DA and Hargreaves JR (2012). Authors Response to: Alternatives to principal components analysis to derive asset based indices to measure socio-economic position in low and middle income countries: the case for multiple correspondence analysis. *International Journal of Epidemiology* 41(4): 1209-1210.
- 16. Gwatkin, D.R., Bhuiya, A and Victora C.G (2004) Making health systems more equitable. *Lancet* 364: 1273–80.
- 17. Howe LD, Galobardes B, Matijasevich A, Gordon D, Johnston D, Onwujekwe O, Patel R, Webb EA, Lawlor DA, Hargreaves JR (2012). Measuring socioeconomic position for epidemiological studies in low- and middle-income countries a methods of measurement in epidemiology paper. *International Journal of Epidemiology*, 41(3):871-886
- 18. Ichoku HE. *The redistributive effects of healthcare financing in Nigeria-* A technical report submitted to Poverty and Economic Policy Research Network. In. Canada: University of Laval; 2005.
- 19. Ichoku HE, Fonta W, Onwujekwe O and Kirigia J (2011). Evaluating the Technical Efficiency of Hospitals in Southeastern Nigeria. European Journal of Business and Management. 3(2):24-37.
- 20. Ichoku H, Fonta W and Onwujekwe O (2009). Incidence and intensity of catastrophic healthcare financing and impoverishment due to out-of-pocket payments in southeast Nigeria. *Journal of Insurance and Risk Management* 4(4):47-59
- 21. Journard, I., C. André and C. Nicq (2010), "Health Care Systems: Efficiency and Institutions", OECD Economics Department Working Papers, No. 769, OECD Publishing. <a href="http://dx.doi.org/10.1787/5kmfp51f5f9t-en">http://dx.doi.org/10.1787/5kmfp51f5f9t-en</a>
- 22. Knaul FM (2012). The quest for universal health coverage: achieving social protection for all in Mexico. Lancet (380), 1259-1279.
- 23. Kirigia JM, Asbu EZ, Kirigia DG, Onwujekwe O, Fonta WM, Ichoku HE (2011). Technical efficiency of human resources for health in Africa. *European Journal of Business and Management*. 3(4): 321-345
- 24. Madubuko G, Onwujekwe O, Obikeze E, Uzochukwu B, Okoronkwo I and Ogbonnia O (2009) Burden of endemic disease and health seeking behaviour in Ebonyi State, Nigeria: Socio-economic status and geographic differences. *African Journal of Nursing and Midwifery* 11(2): 98 112
- 25. Madubuko G, Eze S, Onwujekwe O and Uzochukwu B (2008). Who pays for the poor? Enhancing equity in paying for healthcare in public facilities in Enugu and Ebonyi states of southeast Nigeria: existence of discretional fees. Proceedings of International Conference on Research and Development. *Pan African Journal Series*. 1(12):57-66.
- 26. Marmot M, Friel S, Bell R, Houweling T.A. J, Taylo S (2008) Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet*; 372: 1661–69.

- 27. McIntyre D. Conceptual issues related to universal coverage. AHPSR Proposal Development Workshop. Cape Town, 22 March, 2011.
- 28. McIntyre, D., Thiede, M and Birch S. (2007a) Access as a policy-relevant concept in low- and middle-income countries. Paper presented at iHEA Conference.
- 29. McIntyre, D., Whitehead, M., Gilson, L., Dahlgren, G. and Tang, S. (2007b) Equity Impacts of Neoliberal Reforms: What Should the Policy Responses Be? International Journal of Health Services, Volume 37, Number 4: 693–709.
- 30. Menizibeya WO. The Nigerian healthcare system: need for integrating adequate medical intelligence and surveillance systems. *Journal of Pharmacy and Bioallied Sciences* 2011;3(4).
- 31. Mills A, Ataguba JE, Akaziliu J, Borghi J, Garshong J. Equity in financing and use of healthcare in Ghana, South Africa and Tanzania: implications for paths to universal coverage. *The Lancet* 2012;380(9837):126-133.
- 32. Morestin F., Gauvin F.P., Hogue M.C and Benoit F (2010) Method for synthesizing knowledge about public policies. preliminary version. The National Collaborating Centre for Healthy Public Policy, Quebec, Canada.
- 33. More Health for the Money CPG rev UN 052912
- 34. More Money for Health Nigeria Brief RG CPG rev UN 052912
- 35. Murray CJL. Assessing health system performance using information on effective coverage of interventions. Health Information System Knowledge Hub, Working Paper Series 3. Brisbane, Australia: School of Population Health, University of Queensland, 2009.
- 36. National Bureau of Statistics (NBS) 2007, Nigeria Multiple Indicator Cluster Survey 2007 Final Report. Abuja Nigeria.
- 37. National Bureau of Statistics (2006). www.nigerianstat.gov.ng
- 38. National Population Commission and ICF Macro (2009): Nigeria Demographic and Health Survey 2008.
- 39. National Population Commission. Available at: <a href="http://www.omlinenigeria.com/links/links">http://www.omlinenigeria.com/links/links</a> ReadPrint.asp?blurb=549. Accessed.
- 40. Noor A.M, Zurovac D, Hay S.I, Ochola S.A, and Snow R.W (2003) Defining equity in physical access to clinical services using geographical information systems as part of malaria planning and monitoring in Kenya. Tropical Medicine and International Health, Volume 8 no 10 pp 917–926
- 41. Obiajulu N. The Nigerian Social Health Insurance System and the Challenges of access to healthcare: an antidote or a white elephant? *Medicine and Law* 2009;28(1):125-166.
- 42. O'Donnell, O., Doorslaer, E., Wagstaff, A., and Lindelow, M. (2008) Analyzing Health Equity Using Household Survey Data: A Guide to Techniques and Their Implementation. WBI Learning Resources Series.
- 43. Okoli C.I and Cleary S.M (2011) Socioeconomic status and barriers to the use of free antiretroviral treatment for HIV/AIDS in Enugu State, south-eastern Nigeria. *African Journal of AIDS Research*, 10(2): 149–155.
- 44. Oliver, A and Mossialos, E. (2005) Equity of access to health care: outlining the foundations for action. *Journal of Epidemiology and Community Health.* 58: 655-658.
- 45. Ong, KS., Kelaher, M., Anderson, I. and Carter, R (2009) A cost-based equity weight for use in the economic evaluation of primary health care interventions: case study of the Australian Indigenous population. International Journal for Equity in Health 8:34.
- 46. Onoka CA, Onwujekwe OE, Uzochukwu B, Uguru N, Anochie C, Ewelukwa O (2012). Variations in incidence out of pocket spending for illness amongst households of different socio-economic groups: An investigation using expenditure diaries. *African Journal of Health Economics*.
- 47. Onoka C, Onwujekwe O, Uzochukwu B, Ezumah N. Why are states not adopting the formal sector programme of the NHIS and what strategies can encourage adoption? Policy Brief. AHPSR, 2012.
- 48. Onoka CA, Hanson K, Onwujekwe O and Uzochukwu B (2011). Examining catastrophic health expenditures at variable thresholds using household consumption expenditure diaries. *Tropical Medicine & International Health*. 16(10):1334-1341
- 49. Onoka C, Onwujekwe O and Uzochukwu BSC. (2010). Challenges in actual implementation of health policies: a review of payment exemption in Nigeria. *Journal of College of Medicine* 15(2):57-63
- 50. Onwujekwe O, Barry S, Siddiqi S, Kirigia J, Eze S and Uzochukwu B (2012). Chapter 4: *Health System Governance in Nigeria*. In O Olaniyan, AO Lawanson and O Olubajo (editors). Economics of Health System Governance and Financing in Nigeria: Vol 1 of Essays in honour of Prof. Adedoyin Soyibo. University of Ibadan Press.
- 51. Onwujekwe O, Uzochukwu BSC and Kirigia J (2012). Basis for effective community-based Health Insurance schemes: investigating inequities in catastrophic out-of-pocket health expenditures, affordability and altruism. *African Journal of Health Economics*; 1(1):9-20.
- 52. Onwujekwe O, Hanson K and Uzochukwu BSC (2011). Do poor people use poor quality providers? Evidence from the treatment of presumptive malaria in Nigeria. *Tropical Medicine & International Health* 16(9): 1087-1098
- 53. Onwujekwe O, Onoka C, Uzochukwu B and Hanson K (2011). Constraints to universal coverage: Inequities in health service use and expenditures for different health conditions and providers. *International Journal for Equity in Health*. 13;10(1):50.
- 54. Onwujekwe O, Uzochukwu B, Ezeoke O and Uguru N (2011). Health Insurance: Principles, Models and the Nigerian National Health Insurance Scheme. *Journal of College of Medicine*; 16(1):45-56.

- 55. Onwujekwe O, Onoka C, Uguru N, Tasie N, Uzochukwu U, Kirigia J and Petu A (2011). Socio-economic differences in acceptability of community-based health insurance in southeast Nigeria. *Public Health*. 2011), doi:10.1016/j.puhe.2011.09.006
- 56. Onwujekwe O, Uzochukwu B, Dike N and Ezeoke O. (2010). Informal payments for healthcare: differences in expenditures from consumers and providers perspectives for treatment of malaria in Nigeria. *Health Policy*, 96:72-79
- 57. Onwujekwe O, Okereke E, Onoka C, Uzochukwu B, Kirigia J and Petu A (2010). Willingness to pay for community based health insurance: Do economic status and place of residence matter? *Health Policy and Planning*; 25(2):155-161
- 58. Onwujekwe O, Hanson K, Uzochukwu B, Ichoku H, Ikeh E and Onwughalu B. (2010). Are malaria treatment expenditures catastrophic to different socio-economic and geographic groups and how do they cope with payment in southeast Nigeria? *Tropical Medicine and International Health*, 15 (1): 18–25
- 59. Onwujekwe O, Chima Onoka, Nkoli Uguru, Nnenna Tasie, Benjamin Uzochukwu, Soludo Eze, Joses Kirigia and Amos Petu (2010). Preferences for different benefit packages for community-based health insurance: an exploratory study in Nigeria. *BMC Health Services Research*, 10:162
- 60. Onwujekwe O, Uzochukwu BSC and Ezeoke O. (2010). Socio-economic inequalities in cost of seeking treatment for malaria in southeast Nigeria. *Journal of College of Medicine* 15(2):2-16.
- 61. Onwujekwe O, Uzochukwu B, Obikeze E, Okoronkwo I, Ochonma O, Onoka C, Madubuko G and Okoli C (2010). Investigating determinants of out-of-pocket spending and strategies for coping with payments for healthcare in southeast Nigeria. *BMC Health Services Research*, 10:67
- 62. Onwujekwe O, Dike N, Chukwuka C, Uzochukwu B, Onyedum C, Onoka C and Ichoku H (2009) Examining catastrophic costs and benefit incidence of subsidized anti-retroviral treatment programme in south-east Nigeria *Health Policy*, 90:223-229.
- 63. Onwujekwe O, Uzochukwu B, Dike N, Okoli C, Eze S and Chukwuogo O (2009). Are there geographic and socioeconomic differences in incidence, burden and prevention of malaria? A study in southeast Nigeria. *International Journal of Equity in Health*, 8:45
- 64. Onwujekwe O, Onoka C, Uzochukwu B, Okoli C, Obikeze E and Eze S (2009). Is community-based health insurance an equitable strategy for paying for healthcare? Experiences from southeast Nigeria. *Health Policy* 92: 96-102
- 65. Onwujekwe OE, Onoka C, Uzochukwu B, Obikeze E and Ezumah N (2008). Issues in equitable health financing: socioeconomic and geographic differences in households' illness expenditures and policy makers' views on the financial protection of the poor. *Journal of International Development*. 20:1-15
- 66. Onwujekwe O, Hanson K and Fox-Rushby J (2008). Construct Validity of the Bidding Game, Binary with Follow-up, and a Novel Structured Haggling Question Format in Determining Willingness to Pay for Insecticide-Treated Mosquito Nets. *Medical Decision Making*. 28(1):90-101.
- 67. Onwujekwe O, Ojukwu J, Shu E and Uzochukwu B (2007). Inequities in valuation of benefits, choice of drugs and mode of payment for malaria treatment services provided by community health workers in Nigeria. *American Journal of Tropical Medicine and Hygiene*, 77(1): 16-21
- 68. Onwujekwe O, Uzochukwu B, Ojukwu J, Dike N and Shu E (2007). Feasibility of a community health worker strategy for providing near and appropriate treatment of malaria in southeast Nigeria: an analysis of activities, costs and outcomes. *Acta Tropica*: 95-105.
- 69. Onwujekwe OE, Ojukwu J, Ezumah N, Uzochukwu B, Dike N and Eze S (2006). Socio-economic differences in preferences and willingness to pay for different providers of malaria treatment in southeast Nigeria. *American Journal of Tropical Medicine and Hygiene* 75(3): 421-429
- 70. Onwujekwe O et al (2006). Consumers stated and revealed preferences for community health workers and other strategies for the provision of timely and appropriate treatment of malaria in southeast Nigeria. *Malaria Journal*. 5:117.
- 71. Onwujekwe O, Malik EF, Mustafa SH and Mnzava A (2006). Do malaria preventive interventions reach the poor? Socio-economic inequities in expenditures and use of mosquito control tools in Sudan. *Health Policy and Planning*, 21(1):10-6.
- 72. Onwujekwe O and Uzochukwu U, Nwobi E and Ochonma G (2004) Inequalities in household expenditures to prevent and treat endemic tropical diseases in Southeast Nigeria: harnessing the information to improve equity in primary health care. *Journal of Medical Research and Technology 1* (2): 28-38.
- 73. Onwijekwe OE, Shu EN, Ghasi S, Nwagbo DFE, Uzochukwu BSC, Onyido A and Onwuameze OE (2003). Assessing payment and pricing issues in establishing demand-responsive systems for community-based insecticide-treated nets programmes in Nigeria. *Journal of College of Medicine*, 8(2): 36-39.
- 74. Onwujekwe OE, Chima RI and Okonkwo PO (2000). Economic burden of malaria illness versus that of a combination of all other illnesses: A study in five malaria holo-endemic communities. *Health Policy*; 54:143-159.
- 75. Onwujekwe OE, Shu EN, Ndum CC and Okonkwo PO (2000). Treatment with ivermectin: what works in one community may not work in another. *Journal of Epidemiology and Community Health*; 54:79-80.
- 76. Onwujekwe O, Hanson K, Ichoku H and Uzochukwu B (2013). Financing incidence analysis of household out-of-pocket spending for healthcare in Nigeria. *International Journal of Health Planning and Management*
- 77. Onwujekwe OE (2005). Inequities in healthcare seeking in the treatment of communicable endemic diseases in Southeast Nigeria. *Social Science and Medicine*. 61(2):455-63
- 78. Onwujekwe O, Ojukwu J, Uzochukwu B, Dike N and Shu E (2005). Where do people from different socio-economic

- groups receive diagnosis and treatment for malaria in southeast Nigeria. *Annals of Tropical Medicine and Parasitology*, 99(5): 473-481.
- 79. Onwujekwe O, Malik EF, Mustafa SH and Mnzava A (2005). Socio-economic inequity in demand for insecticide-treated nets, in-door residual house spraying, larviciding and fogging in Sudan. *Malaria Journal*. 15;4(1).
- 80. Onwujekwe OE and Uzochukwu BSC (2005). Socio-economic and geographic differentials in costs and payment strategies for primary health care services in Southeast Nigeria. *Health Policy* 71(3): 383-397
- 81. Onwujekwe O, Onoka C, Uzochukwu B, Okoli C, Obikeze E, Eze S. Is community-based health insurance an equitable strategy for paying for healthcare? Experiences from southeast Nigeria. Health policy. 2009 Sep;92(1):96-102. PubMed PMID: 19349091.
- 82. Onwujekwe O and Velenyi E (2010). Chapter 13: Feasibility of Private Voluntary Health in Nigeria. In <u>Alexander S. Preker, Peter Zweifel</u> and <u>Onno Schellekens</u> (editors) (2010). Global Marketplace for Private Health Insurance: Strength in Numbers. The World Bank: Washington DC
- 83. Onwujekwe O, Ojukwu J, Shu E, and Uzochukwu B (2007) Inequities in Valuation of Benefits, Choice of Drugs, and Mode of Payment for Malaria Treatment Services Provided by Community Health Workers in Nigeria. *Am. J. Trop. Med. Hyg.*, 77(1), pp. 16–21.
- 84. Onwujekwe O, Ojukwu J, Ezumah N, Uzochukwu B, Dike N, and SoludoE (2006) Socio-Economic Differences in Preferences and Willingness to Pay for Different Providers of Malaria Treatment in Southeast Nigeria. Am. J. Trop. Med. Hyg., 75(3), pp. 421-429.
- 85. Onwujekwe O, Dike N, Chukwuka C, Uzochukwu B, Onyedum C, Onoka C, Ichoku H. (2009) Examining catastrophic costs and benefit incidence of subsidized antiretroviral treatment (ART) programme in south east Nigeria. Health Policy 90 223–229
- 86. Onwujekwe O, Hanson K and Uzochukwu BSC. (2011) Do poor people use poor quality providers? Evidence from the treatment of presumptive malaria in Nigeria. *Tropical Medicine & International Health* 16(9): 1087-1098
- 87. Onwujekwe O, Hanson K, Ichoku H, Uzochukwu B. (2013) Financing incidence analysis of household out-of-pocket spending for healthcare: getting more health for money in Nigeria? International Journal of Health Planning and Management 2013; DOI: 10.1002/hpm.2166
- 88. Onwujekwe O, Hanson K, Uzochukwu B. (2012) Examining Inequities in Incidence of Catastrophic Health Expenditures on Different Healthcare Services and Health Facilities in Nigeria. PLoS ONE, 7(7): e40811. doi:10.1371/journal.pone.0040811
- 89. Onwujekwe O, Ojukwu J, Uzochukwu B, Dike N, Ikeme A & Shu N. (2005) Where do people from different socioeconomic groups receive diagnosis and treatment for presumptive malaria, in south–eastern Nigeria. Annals of Tropical Medicine & Parasitology, 99(5): 473–481.
- 90. Onwujekwe O, Okereke E, Onoka A, Uzochukwu B, Kirigia J, Petu A.(2010) Willingness to pay for community- based health insurance in Nigeria: do socioeconomic status and place of residence matter Health Policy Plan. 25 (2):155-161.
- 91. Onwujekwe O, Onoka C, Uguru N, Tasie N, Uzochukwu B, Eze S, Kirigia J, Petu A. (2010) Preferences for benefit packages for community- based health insurance: an exploratory study. *BMC Health Services Research*, **10**:162
- 92. Onwujekwe O, Onoka C, Uzochukwu B, Okoli C, Obikeze E, Eze S. (2009) Is community-based health insurance an equitable strategy for paying for healthcare? Experiences from south-east Nigeria. Health Policy 2009 (92) 96-102.
- 93. Onwujekwe O, Onoka C, Uzochukwu B, Obikeze E, Ezumah N. Issues in equitable health financing in South East Nigeria:Socio-economic and geographic differences in households' illness expenditures and policy makers' views on the financial protection of the poor. *Journal of International Development* 2009;21:185-199.
- 94. Onwujekwe O, Onoka C. Uzochukwu B, Hanson K. (2011) Constraints to universal coverage: inequities in health service use and expenditures for different health conditions and providers International Journal for Equity in Health, 10:50
- 95. Onwujekwe OE. (2005) Inequities in healthcare seeking in the treatment of communicable endemic diseases in Southeast Nigeria. Social Science and Medicine, 61(2):455-63.
- 96. Onwujekwe, O, Malik, E, Hassan s, Mustafa M, Mnzavaa A. Do malaria preventive interventions reach the poor? Socioeconomic inequities in expenditure on and use of mosquito control tools in Sudan. Health policy and planning. 2006;21(1):10-6.
- 97. Onwujekwe O, Hanson K and Uzochukwu B (2012). Examining inequities in incidence of catastrophic health expenditures on different healthcare services and health facilities in Nigeria. *PLOS One*;7(7):e40811.
- 98. Onwujekwe OE, Hanson K and Uzochukwu B (2012). Are the poor differentially benefiting from provision of priority public health services? A Benefit incidence analysis in Nigeria. International Journal for Equity in Health,11(1):70
- 99. Onwujekwe O, Barry S, Siddiqi S, Kirigia J, Eze S and Uzochukwu B (2012). Which way Nigeria? An application of the WHO framework for assessing health system governance. Book Chapter in Honour of Prof Doyin Soyibo. University of Ibadan Press.

- 100. Onwujekwe O, Hanson K and Uzochukwu BSC (2011a). Do poor people use poor quality providers? Evidence from the treatment of presumptive malaria in Nigeria. Tropical Medicine & International Health 16(9): 1087-1098
- 101. Onwujekwe O, Malik E-F, Mustafa SH, Mnzavaa A. Do malaria preventive interventions reach the poor? Socioeconomic inequities in expenditure on and use of mosquito control tools in Sudan. Health policy and planning. 2006;21(1):10-6.
- Onwujekwe O, Uzochukwu B. Socio-economic and geographic differentials in costs and payment strategies for primary healthcare services in Southeast Nigeria. Health policy. 2005;71(3):383-97.
- 103. Onwujekwe O, Hanson K, Uzochukwu B, Ezeoke O, Eze S, Dike N. Geographic inequities in provision and utilization of malaria treatment services in southeast Nigeria: Diagnosis, providers and drugs. Health policy. 2010;94(2):144-9.
- 104. Onwujekwe O and Velényi E (2012). Willingness to pay for private voluntary health insurance in southeast Nigeria. *African Journal of Health Economics*; 1(1):109-118.
- 105. Onwujekwe O, Onoka C, Uzochukwu B, Hanson K. Constraints to universal coverage: inequities in health service use and expenditures for different health conditions and providers. International journal for equity in health. 2011;10(1):1-9.
- 106. Onwujekwe O, Hanson K, Uzochukwu B, Ichoku H, Ike E, Onwughalu B. Are malaria treatment expenditures catastrophic to different socio-economic and geographic groups and how do they cope with payment? A study in southeast Nigeria. Tropical Medicine & International Health. 2010;15(1):18-25.
- 107. Onwujekwe O, Onoka C, Uzochukwu B and Hanson K (2011b). Constraints to universal coverage: Inequities in health service use and expenditures for different health conditions and providers. International Journal for Equity in Health. 13;10(1):50.
- 108. Onwujekwe O, Onoka C, Uguru N, Tasie N, Uzochukwu U, Kirigia J and Petu A (2011c). Socio-economic differences in acceptability of community-based health insurance in southeast Nigeria. Public Health. 2011), doi:10.1016/j.puhe.2011.09.006
- 109. Onwujekwe O, Okereke E, Onoka C, Uzochukwu B, Kirigia J and Petu A (2010a). Willingness to pay for community based health insurance: Do economic status and place of residence matter? Health Policy and Planning; 25(2):155-161
- 110. Obinna Onwujekwe & Edit Velenyi: Feasibility of private voluntary health insurance in Nigeria: valuation of benefits and equity assessment
- 111. Onwujekwe O, Hanson K, Uzochukwu B, Ichoku H, Ikeh E and Onwughalu B. (2010b). Are malaria treatment expenditures catastrophic to different socio-economic and geographic groups and how do they cope with payment in southeast Nigeria? Tropical Medicine and International Health, 15 (1): 18–25
- 112. Onwujekwe O and Oloriegbe I (2011). Support to NHIS CBSHIS roll-out in Programme States. NHIS/PPRIN-MNCH
- 113. Obinna Onwujekwe, Ogo Ezeoke, Felix Obi and Benjamin Uzochukwu (2011). Situation analysis of financial health risk protection: Nigeria. Health Policy Research Group, College of Medicine, University of Nigeria and RESYST Consortium: London School of Hygiene and Tropical Medicine.
- 114. Onwujekwe O, Dike N, Chukwuka C, Uzochukwu B, Onyedum C, Onoka C and Ichoku H (2009) Examining catastrophic costs and benefit incidence of subsidized anti-retroviral treatment programme in south-east Nigeria Health Policy, 90:223-229.
- 115. Onwujekwe O, Onoka C, Uzochukwu B, Obikeze E, Ezumah N. Issues in equitable health financing in South East Nigeria:Socio-economic and geographic differences in households' illness expenditures and policy makers' views on the financial protection of the poor. *Journal of International Development* 2009;21:185-199.
- 116. Onwujekwe OE, Fox-Rushby J and Hanson K (2005). Inter-rater and test-retest reliability of three contingent valuation question formats in south-east Nigeria. *Health Economics*, 14(5):529-36.
- 117. Scheil-Adlung X and Bonnet F. Beyond legal coverage: assessing the performance of social health protection. Int Soc Sec Rev 2011; 64: 21–38.
- 118. Sharma N, Sayaka K. The path to universal coverage in Africa: focus on community-based health insurance. In: USAID, ed. *Health systems* 20/20; 2012.
- Soyibo A. National Health Accounts of Nigeria, 1998-2002. In; 2004.
- 120. Soyibo, A., Olanrewaju, O. & Lawanson, A.O. 2009. National Health Accounts of Nigeria, 2003-2005 Incorporating Sub-National Health Accounts of States. Available at: <a href="http://www.who.int/nha/country/nga/nigeria">http://www.who.int/nha/country/nga/nigeria</a> nha 2003-2005 report.pdf
- 121. Thiede M, Akweongo P and Mcintyre D (2007) Exploring the dimensions of access. In: The Economics of Health Equity edited by Di Mcintyre and Gavin Mooney. Cambridge University Press Cape Town.
- 122. Uguru NP, Onwujekwe O, Uzochukwu BS, Igiliegbe GC and Eze S (2009). Inequities in incidence, morbidity and expenditures on prevention and treatment of malaria in southeast Nigeria. *BMC International Health and Human Rights*, 9(1):21

- 123. Uzochukwu BSC, Onwujekwe O, Ezeoke OP, Uguru NP, Ezeoke U and Ajuba MN (2010). Health sector reform processes in Nigeria: A review of factors that have enabled or constrained policy implementation in Enugu and Anambra states of Nigeria. *Journal of College of Medicine*. 15(1):3-14.
- 124. Uzochukwu B and Onwujekwe O (2005). Healthcare reform involving the introduction of user fees and Drug Revolving Funds: Influence on health workers' behavior in South east Nigeria. *Health Policy*, 75(1):1-8.
- 125. Uzochukwu BSC, Onwujekwe OE and Erikson B (2004). Inequity in Bamako initiative: Implications for malaria control in southeast Nigeria. *International Journal of Health Planning and Management* 19 Suppl 1:S107-16.
- 126. Uzochukwu BSC, Onwujekwe OE, Akpala CO (2004). Did the Bamako initiative improve the utilization of maternal and child healthcare services in Nigeria? A case study of Oji River Local Government Area in Southeast Nigeria. *Journal of Health and Population in Developing Countries*, <a href="http://www.jhpdc.unc.edu">http://www.jhpdc.unc.edu</a>. February 9.
- 127. Uzochukwu BSC and Onwujekwe OE (2003). Inequity in utilisation of maternal health services: Implications for reducing maternal mortality. *Nigerian Journal of Community Medicine and Primary Health Care*, 15: 10 16.
- 128. Uzochukwu BSC, Onwujekwe OE and Akpala CO (2002). Effect of the Bamako-Initiative drug revolving fund on availability and rational use of essential drugs in primary health care facilities in Southeast Nigeria. *Health Policy and Planning*; 17(4):378-383.
- 129. Uzochukwu B.S.C and Onwujekwe O.E Socio-economic differences and health seeking behaviour for the diagnosis and treatment of malaria: a case study of four local government areas operating the Bamako initiative programme in south-east Nigeria. Int J Equity Health, 3: 6.
- 130. Uzochukwu BSC and Onwujekwe OE (2006). Exemption policies and community preferences for exemption for tropical endemic diseases in the Bamako Initiative programme in Nigeria. *Tropical Doctor*; 36(3):12-6.
- 131. Waters, H (2000) Measuring equity in access to health care. Social Science & Medicine 51: 599-612.
- 132. Whitehead M. The Concepts and Principles of Equity and Health. In. Copenhagen; 1990.
- Wonderling D., Gruen R., and Black N. (2010) Introduction to Health Economics. England: Open University Press.
- World Health Organization (WHO), 2005 Action on the Social Determinants of Health: Learning from Previous Experiences, A background paper prepared for the Commission on Social Determinants of Health. WHO Health Equity Team, http://www.who.int/social\_determinants/en/
- WHO (2010) Monitoring equity in access to AIDs treatment programmes: A review of concepts, models, methods and indicators. World Health Organization.
- 136. WHO. 2012 World health organization, data and statistics 2012. 2012]; Available from <a href="http://apps.who.int/gho/data/node.main.75">http://apps.who.int/gho/data/node.main.75</a>.)
- 137. World Health Organisation. (2005) Sustainable health financing, universal coverage and social health insurance [World Health Assembly Resolution WHA58.33], Geneva.
- 138. WHO Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health: Commission on Social Determinants of Health final report. Geneva, Switzerland: World Health Organization, Commission on Social Determinants of Health; 2008. 246
- WORLD HEALTH STATISTICS 2006 http://www.who.int/whosis/en/
- 140. WHO (2010). World Health Report

<sup>i</sup> Federal Ministry of Health, Department of Planning Research and Statistics (2005) "Inventory of Health facilities in Nigeria", Abuja.