Roles of Health Information Managers in Building a Healthy Nation

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Introduction

Building a healthy nation has become a herculean task due to the dearth of reliable data on the health status of the entire population. The basic demographic data about the size, structure, and distribution of the population are unreliable on national scale. The system for the registration of births and deaths nationally is defective, and hence, it is not possible to calculate the simplest indicator like crude birth rate, crude death rate, and infant mortality rate. The state of health of the population is assessed on the basis of scanty information, which has been collected in a few limited surveys and research studies. The health services at the national, state and local government levels cannot be managed efficiently, on the basis of the available data (National Health Policy, 2004). For a healthy nation building, efficient health information management is required. National Health Management Information System Policy (2006) asserts that government mandate requires that a National Health Information System (NHIS) shall be established by all governments of the federation to be used as a management tool to support evidence based decision making and management of health care delivery services.

The guiding principle of an effective Health Information Management System is to keep things simple, practicable and sustainable: Through the data collection formats that consist of a fewer number of summary forms for communities, health facilities, local government areas (LGA) and states, including Federal Capital Territory (FCT), and health facility registers which serves as the source of health information. The system offers information services for intervention and active participation to the government at all levels, the organized private sector, the Non-Governmental Organization (NGO), and international organizations, to develop a robust public health care delivery services in Nigeria (National Health Management Information System Policy, 2006). Omole (2009) opined that building a healthy nation is a complex assignment and to achieve its ultimate objectives, a result oriented health care delivery template has to be designed on scientific lines, based on the available facts and figures. Hence, there is need for availability of accurate, high quality health information at the right place and at the right time, which remains the primary responsibility of health information managers.

Building a Healthy Nation

The health care industry is intensely focused upon transformation, as leaders increasingly realize that only those organizations that can expertly manage risk while reducing costs will
likely prosper under the new value-based care models: As organizational structures shift, health care leaders also need to adopt new strategies to succeed in this new world (Deloitte, 2017).

Planning is the most basic towards building a healthy nation. It is the predetermined course of action, over specific period of time. Planning is deciding in advance, what to do, how to do it, when to do it, and who is to do it. Planning bridges the gap from where we are to where we want to go, and it is concerned with the future and the relationship between ends and means; the relationship between goals and ways of achieving those goals (Ijilegan 1998). Planning according to Olumide, (2008), involves selecting and relating of facts by making use of assumptions regarding the future in the visualization and formation of proposed activities believed necessary to achieve desired result. Planning encompasses setting of goals or objectives, and forecasting. Forecasting is the process of using past and current information to predict future events. It involves estimating and considering alternative courses of action towards effecting a progressive change in the health sector.

Thomas, (2003) described Health sector reform as “A process that appraises the overall health needs of a geographical area or population and determines how these needs can be met in the most effective manner through the allocation of existing and anticipated future resources”. Public Health Action Support Team (PHAST, 2011) posited that health care needs vary according to the age, structure and health profile in a population. Ultimately all transformation processes come down to identify the needs of the target population and then determining the best means for meeting those needs. The like hood of people seeking health care is determined by range of social and economic factors and will impact upon demand of health care. The like hood of people receiving health care is determined by innovations on the health sector and this will impact upon the volume of activity in health system.

**Health Information Management**

Health information begins at birth and ends at death. It is a collection of information from multiple sources with a variety of uses. It includes data from the individual patient record as well as aggregate data on patient population, such as clinical and non-clinical, epidemiological data, demographic data, research data, reference data, and coded data (Osundina, 2014). It is a clear, concise and accurate history of a patient’s life and illness, written from medical point of view. It includes significant characteristics of a patient and the events, occurring in the course of professional care for the purpose of providing the best medical care to the patient, teaching,
research, and medical care evaluation studies (Osundina, 2007). For a patient record to be completed, it must contain sufficient information written in sequence of events to justify the diagnosis and warrant the treatment and the result.

The quality of health care services in any society depends on proper management of health information. Hence, efficient, effective, and result oriented health sector reform is dependent on a good health information management practice, storage and preservation. Therefore health information managers must ensure the availability of high quality data and information to support effective patient care and the transformation health care industry (Helen, 2015). Health information management practice is the life blood of the health care delivery system, the patient’s record in manual or automated form contains medical information that describes all aspects of health care. It is an essential tool in running the day-to-day health services rendered to patient in the hospital (Huffman, 2011). Therefore, Health Information Management involves the use of professional and technical skills to create, use, store, maintain and release health information for administrative, clinical research, legal purpose, and decision making.

Who are Health Records Managers?

Health Records Manager is a specialist or practitioner, saddled with the responsibility of providing accurate documentation and registration of patient health information, and up-to-date health statistical information, on hospital activities analysis, both on curative and preventive health services, either as inpatient and outpatient, through the process of gathering and collection of patient information, and its manipulation for meaningful decision making (AHIMA, 2014). Health Records managers are responsible for maintaining components of health information system, consistent with the medical, legal, accreditation and regulatory requirements of the healthcare delivery system. Health Records Managers maintain, collect, and analyze data, crucial to the delivery of quality patient care. They compile and report health (information) data for reimbursement, facility planning, marketing, and research. Also, they abstract and code clinical data, using appropriate classification scheme, and analyze health records, according to standards (Omole, 2013).

Health Records managers are health care professionals, responsible for collecting, capturing, storing, analyzing distributing and protecting medical information, fundamental to providing quality patient care. The information supplied by them, are used by physicians and
other health care professionals to provide optimum patient care, and support important medical decisions (W.H.O. 2011).

**Specific Roles of Health Records Managers in Building a Healthy Nation**

The specific functions of health records managers are;

i. Creation, care, custody, storage and retrieval of patients’ health (records) information.

ii. Documentation and registration of patients’ physical and demographic information.

iii. Provision of statistical information from the health records, for medical, administrative, research, monitoring and evaluation.

iv. Rendering of associated services concerned with the release of patients’ health information, such as legal services, insurance services and international health agencies e.g. WHO.

v. Coding and indexing of diseases and operations for compilation of morbidity and mortality health information at local, state and national levels for the purpose of identifying specific area of intervention.

vi. Establishment of effective numbering control in order to facilitate accessibility of health information for research study towards the development of good public health strategies.

vii. Maintenance of confidentiality of health information to protect personally identifiable information from unauthorized persons.

viii. Ensuring continuity of patient care through the establishment of an effective appointment system.

ix. Qualitative and quantitative analysis of health information and development of appropriate indicators for the evaluation of services rendered.

x. Participation in various training, programmed towards the development of health records and information management practices, which are aimed at contributing to advancement of knowledge in the practice.

**Legal Requirements of Health Information System**

Russell (2015) describes laws as the statement or body of rules and regulations designed or formulated to guide human conduct or action which are enforced among members of a given state or society. It is a statement of rules and regulations that is to guide general conduct of the
society. They are rules that society adopts to govern itself. Law is the primary source of many legal rules and principles and was based initially on tradition and custom.

Huffman (1981) asserts that hospitals must maintain a variety of records. The public health law in every state or country requires of those who own or operate hospitals to make records of the statistical particulars relative to patients available, and the like are required for vital statistics and to alert proper authorities. The law (i.e. public health law) set forth minimum legal requirement relating to a health information management practice and these are:

(i) There shall be a health information management department with adequate space, equipment and qualified personnel to include at least one registered health records officer or a person with equivalent training and experience in a hospital of one hundred beds or over.

(ii) A health record shall be started for each patient at the time of admission with complete identification data and a nurse’s notation of condition on admission. To this shall be added immediately an admission note and orders by the attending or a resident physician. A complete history and physical examination shall be recorded by the physician within twenty-four hours of admission and always before surgery, except in cases of unusual emergency.

(iii) All health records shall include proper identification data; the clinical records shall be prepared accurately and completed promptly by physicians and should include sufficient information to justify the diagnosis and warrant the treatment; doctors’ orders, nurses’ notes and charts shall be kept current in an acceptable manner; all entries shall be signed by the person responsible for them.

(iv) Health records shall be filed in an accessible manner in the hospital and shall be kept for a minimum of twenty–five years after the discharge of the patient, except that original health records may be destroyed sooner, if they are microfilmed, computerized or digitized by a process approved by the Federal Ministry of Health.

Therefore all health institutions must conform to the minimum legal requirement of health information management. In accordance with the state regulation or statutes, having known that health records are used to indicate statistically the extent and quality of care being given in hospital and the information contain in them, is of great importance in health care, medical research and transformation of health sector of the national economy.
Methods of Managing Health Information

Data and information are the life blood of the health care delivery system, and vital to the decision making process surrounding the health sector reform (Osundina, 2014). Health records managers are involved in managing data and information shared by users with different needs and definitions which must be addressed in developing health care information system. Health care functions revolve round collecting, analyzing, making decision, using data and information and auditing for data integrity. Internal uses of data include creating a medical history, ensuring that the patient receives proper care, communicating between providers, recommending procedures, generating billing information, creating legal documentation, giving accreditation, licensing and governmental agencies information system, including identifying trends arising with transformation of the health sector (Austin & Boxerman, 2013). All these functions cannot be accomplished without a health records manager that will properly manage patient health records both manually and electronically, to serve the various functions stated above.

Health information management improves the quality of health care by ensuring that the best information is available to make any health care decision. It also manages health care data and information resources. It encompasses services in planning, collecting, monitoring, analyzing and disseminating, individual patient and clinical data (Russel, 2011). These services guarantee an evidence-based quality healthcare reform. AHIMA (2013) reveals that electronic record management must conform to national standard, be capable of exchanging information with multiple sources, and expose the health record managers to boundless opportunities as the profession transits to a national health management information system network.

Health record is a complete compilation of scientific data about patient’s life and illness, derived from many sources, coordinated into an orderly documented file, packaged by the medical record department and finally filed away for various uses, both personal and impersonal (Omosanya, 2016). Health information may be managed manually or electronically (Olaniyan, 2014).

1. Manual Method: This involves the use of paper, ink and paper product in the creation, storage, maintenance and use of health information. The strategies used in the manual method include the adoption of the basic health information management systems such as; numbering system, tracing system, filing system, appointment system, coding and indexing system. These systems are operational in a health information management department with adequate space, equipment and qualified personnel in the health institution, via various sections of the
department such as, registration, admission and discharge, coding and indexing, statistics, and library sections. Information is made available to the users manually based on their needs and requests (Makata, 2015).

2. **Electronic Method:** This involves the application of computer system and other electronic devices into the creation, maintenance and use of health information. The strategies used in electronic health records method include the use of hardware, software, human ware, procedures and storage devices. Application packages, such as multipurpose hospital information system (MPHIS), Microsoft Word, Microsoft Excel, District Health Information System – 2 (DHIS-2), Statistical Package for Social Sciences (SPSS), Electronic Coding Procedures and Instructions (ECPI), including storage devices like hard disc, CDROM, flash drive, network and internet services are adopted for effective management of patient records and sharing of information with complete accuracy (Oyeniran, 2013).

**Contributions of Health Information Management Practice to Building a Healthy Nation**

Osundina (2012) indicates that, a written record must be maintained on every person who has been admitted to the hospital as an in-patient, an out-patient, or as an emergency patient. Health information documents the hospital experience of the patient with the main objective of providing a means of communication between the physician and other professionals contributing to the patient’s care. It serves as a basis for planning individual patient’s care and furnishes documentary evidence of the course of the patient’s illness and treatment during each hospital admission. In line with this, Bowen (2015) submits that health information serves as a basis for analysis study and evaluation of the quality of care rendered to the patient, assist in protecting the legal interest of the patient, hospital, physician and health workers. It also provides clinical data that are used in research and education for the purpose of extending frontiers of medical knowledge for an improved quality patient care.

Akanji (2014) asserts that the physiological and demographic data contained in health information such as; name, address, gender, age, marital status, occupation, place of origin, denomination, next of kin, hospital number, and telephone number and so on, help in the unique identification of patients to avoid confusion. These data are also used in tracing patients for case investigation during surveillance activities. Health information is useful for teaching, or giving instructions to medical students, nurses, and other professionals. It is useful in seeking out
etiological factors in a disease, compare progress and result of different forms of treatment for patient with similar diseases (Fatiregun, 2014).

Quality of patient care is assured, as the health information provides continuity of patients’ care on subsequent admission, evaluation of medical care rendered to the patient, and provision of clinical and health statistical data for the planning of health care delivery services, and development of health policies, which have positive impact on the health sector’s transformation. Emerging ethical and legal issues are resolved as health information serves as witness in court for hospital, its staff and the patient. Also, insurance claims for damages resulting from accident are made possible through evidence provided by health information (Osundina, 2014).

The National Health Policy, (2004), reiterates that, the availability of accurate, timely, reliable, and relevant information is the most fundamental step towards informed public health action, and transformation of health sector. Also, the relationship between planners, policy makers, service managers, communities and other stakeholders, in the transformation process is critical to transforming the health sector successfully. Because the dilemma that gives rise to the need for healthy nation building is often, the gap between the available resources and health needs, which are identified via available information, leading to the requirement to make choice as to how to use these resources efficiently (PHAST, 2011).

Therefore health information management practitioners carefully generate and collect health information, take custody of health information, manage health information and selectively disseminate them to the legitimate members of the society for quality health care services that guarantee socio-economic development of the nation through appropriate health care reform. It is the health information management practice that is behind provision of accessible, affordable, and cost effective health care services including disease surveillance and notification systems that guarantee effective transformation of the health sector in Nigeria.

**Challenges of Health Information Management and Healthy Nation Building**

Abubakar (2014) identified the following, as challenges facing health information management and health sector transformation in Nigeria. These are; inadequate finance, shortage of staff, shortage of materials, and inadequate coordination of data flow; including complexity and overlap of data collection instrument, lack of feedback to peripheral levels and huge backlog of unprocessed data.
Summary of Findings

The quality health information generated from a reliable Health Management Information System is an indispensable platform for a result oriented healthy nation building. Every health organization regardless of the size and purpose needs reliable health information for transforming their services in a better way. The quality of any health sector transformation in any nation depends on the quality and quantity of relevant health information that is available to the policy makers, through effective health information management system.

Therefore government at all levels should ensure standardization and financing of health data infrastructure, especially with respect to establishing and strengthening relevant organizational structures for healthy nation building in Nigeria.

Conclusion

In the course of the study, inferences were drawn from existing literatures and postulated models that, there is significant influence of health information management on building a healthy nation. The National Health Management Information System Policy, (2006) confirmed this by reporting that; the availability of accurate, timely, reliable, and relevant health information is the most fundamental step towards informed public health action.

Therefore, in order to effectively transform the health sector, government at all levels have overriding interest in supporting and ensuring the availability of health data and information as a public goods for public, private, and non-governmental organizations (NGOs) utilization. The role of government must extend to ensuring the standardization, digitization, dissemination and adequate funding of the Health Information Management Systems in Nigeria in order to promote effective health sector transformation.

Recommendation

Government should put mechanism in place to facilitate timely collection, storage, analysis, dissemination and the use of health information as well as in financing its essential sub-systems, and components.

The interface between the government, the private sector, and communities is desirable for a more comprehensive health profile of population.

Government should facilitate standardization and financing of health data infrastructure (especially the DHIS 2- web based application) with respect to establishing and strengthening
relevant organizational structures for Health Management Information System activities in Nigeria.
Medical and health professionals should have the right attitude and perception towards health information management to facilitate availability of accurate information to enhance rapid transformation of the health sector in Nigeria.