Centralization of Patient Health Records as Basis for Effective Health Information Management in a Hospital Setting a Case of National Orthopaedic Hospital, Dala-Kano State, Nigeria

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Abstract—The need for centralized patients records support critical decisions making in hospitals and other health institution cannot be disputed; however, development of such systems requires an understanding of the actual information needs of public health professionals. This paper reports the results of a literature review on essence of centralization of patient health records, effect of decentralization of patient case folders, major indices on patient information, the need for centralized records or E- health records as whole for it importance and relevance to our modern society and lastly, bed stay which consists of number of case note received and number of discharges from January to December, 2016 at the national orthopedic hospital Dala, kano state of Nigeria. The review was undertaken in order to develop system requirements to inform the design and development of centralized patient's record for knowledge information management system. Moreover, the goal of the system is to support the collection, management, and retrieval of public health documents, data, learning objects, and effective health care service delivery in hospitals and other health institutions in the hospital and the whole world.

1. INTRODUCTION:

Health Information is like breathing mechanisms of every human being, which we all depend on in every aspect of our life on daily basis. Just like any other human Endeavour, Information is essential in health care industry. In the developed Countries, availability of health information is taking for granted since it's readily available. In our Country Nigeria, because of corruption there is death of reliable health data. This ugly situation has made planning organizing, controlling, actualizing health goals and objectives, monitoring and evaluation of Health Care Services difficult and if not urgently addressed, will spell doom for Clinical research, education and training in our health sector with a particular reference to de-centralization of case folders in our Hospital today. We should not forget that standard health information makes a healthy nation and a healthy nation is a wealthy nation.

Health information has the potential to improve the health of individuals and the performance of providers, yielding improved quality, cost savings, and greater engagement by patients in their own health care. ^[1]Despite evidence of these benefits, ^[2] physicians' and hospitals' use of health IT and electronic health records is still low. ^[3].

As we all know the sick depends on his doctor or physician with a full confidence, just like the physician on good medical records which include:

- Past and present history of the patient conditions
- The Clinical notes
- Pathological finding
- Laboratory results
- General assessments and treatments plans
- Medication
- Nursing notes and charts

Therefore, the patient unknowingly depends on his medical records with confidence attached.

Health Information could be defined as the combinations of outcome of the patient treatments arising from human and materials resources which amounted to collections, storage, retrieval and collation of data, analysis and reports for the purpose of effective management of patient health care delivery.

A complete Health Information should contain sufficient data to justify the investigations, diagnosis and treatments, length of stay and the prognosis and future course of action.

Essence of Centralization of Patient Health Records:

Every health sector strives to adopt standard measures in quality services delivery and key into accessibility, sustainability, and ensure an effective utilization of technology (Equipments/materials) and human resources.

The PHR moves from the Department's central library to diverse specialties in the hospital and later converge in the Filing Room after utilization, which is ethical in not missing, and must not be divulged. [4]

Ensure a written discharged summary immediately on patient discharge hence case folder are available. More also that patient discharge summary forms accreditation tools. The clinical coding of patient diagnosis procedures and external causes of injury are very relevant to clinical research study.

Easy access to patient case folders on demand for usage by the doctors, any Department and for administrative purposes. En-route to computer unit for data capturing are necessary. The case folders for SOPD Consultative clinics, admissions and other clinical matters will be readily available on the filling shelves.

In product and services, readily available are saleable and hence attract patronage, this is equally applicable to centralization of case folder since the records are used for the following:

- i) Patient Follow-up ii) Accreditation iii) Hospital Administration
- iv) Research v) Education vi) Training

It equally creates room for effective clinical auditing in the health care delivery system and proper identification of modern technology and its effects on the care services.

Our Expectations:

Going by ethics of our profession and by the nature of our Hospitals Patient Health Care services centralization is absolutely pertinent if we adopt ecological system approach which enhances a collective responsibility of "use and return" to the Records Library for further use again and again.

If we weigh the pros and cons of the ethics of Health Records, it's a mildly pejorative label attached to professional policies and ethics that shelter certain Health Records activities from other health care providers who are chanced to have contact with patient case folders.

Overtime we say health information is medico legal inclined but the degree of ownership and control by other clinicians/departments is an abuse of ethical adherence and it's totally unacceptable.

Effect of De-Centralization of Patient Case Folders:

De-centralization is the opposite of centralization. This Patient Health Record is found in each specialty Units or Department where the patient is receiving treatments. In other ward, the Health Records is not centralized in any way. It's a situation whereby the patient records are found predominantly every nock and crane of the Hospital services areas.

Dala Hospital as a case study: We adopt centralization of Patient Health Record solely in the filing Library and not de-centralization of Patient Health Record that we are witnessing nowadays.

Effect of De-Centralization of Patient Case Folders:

- 1) It is difficult to get the case folders handy during SOPD consultative clinics
- 2) Scanty data during research study
- 3) Un-written discharge summary
- 4) Un-authorization of health information dissemination
- 5) Lost on transit and nobody claims responsibility
- 6) What is used arbitrarily by everybody is for nobody
- 7) Quality assurance cannot be guaranteed or quantified
- 8) Statistical (data) analysis and reporting is delayed and cannot be comprehensible
- 9) Ethics of confidentiality is lost
- 10) Many others.

Ethics of Confidentiality of Patient Health Records:

Confidentiality is termed as full privilege information concerning the channels of investigations, diagnosis, and treatments of a patient to be precise and kept ethically.

The ethics holds that there are some specific conditions that may warrant releasing patient's case folders or patients' information.

The patient case folder could be released to the doctor or any Health Care Provider by the Health Record Officer on "**trust**". The patient also releases his/her private health problems (ailments) information to the doctor on "**trust**."

The patient information has three major indices thus:

1) Ethical backing 2)Legal aspect 3) Common sense

The above tools address us to be extra careful when using Patient Health Record to avoid negative effect on the Hospital and individual.

It's ethically documented that there are some aspect which leads to releasing patient information. This could be to the advantage of the patient, doctor and the hospital management.

Emphatically to release patient information should be based on the following:

- 1) To the doctor and other health care providers during the course of treatments only
- 2) On demand or request by the hospital administration

- 3) During the course of clinical research study
- 4) Medico legal (evidenced based in law subpoena)
- 5) Patient issuance claims based on the outcome of treatment
- 6) Referrals for expert opinion/management
- 7) During the course of light duty and (disease outbreak)

Threats to Confidentiality of Patient Health Record:

- 1) Illegal direct access to case folders by the Hospital staff
- 2) Undue and illegal occupant by non Health Records staff and ignorance of the danger involved.
- 3) Unauthorized hoarding and confiscating discharged patients case folders in the name of:
- i) Billing System ii) Refund iii) Out standing
- iv) Medical Reports v)She/he is my patient vi) I am the owner of the case folder
- 4) **Negative perception** about the custody of Patient Health Record by some Consultants/Doctors/Staff, which make them to hide their patient's case folders in their offices, drawer, cabinets, and car boot
- 5) The position of health records department as the sole custodian of patient's health records in the hospital is jeopardized by these staff and it's unethical.

Patient Health Records as a Legal Document Evidence Based:

Medicine and Health Records are two related fields, which have reached a stage at which health care professionals can apply a body of acceptable knowledge.

The medical skills and practice of medicine is directed towards preservation of life through:

- Treatments of ailments, injuries and management of less privilege in our society
- It's believed and accepted by the public that medical education gives the individual doctor the knowledge and skills to treat patients.
- The problems encountered in the medical practice and related professional duties are said to be:
- Violation of medical ethics
- Disregard for professional standards
- Other medical legal issues

Legal Significance of Health Records:

The law recognized medical records as a "documents" such as follows:

- Patient's case folder (Content of treatments documents)
- Special investigations

- Diagnosis
- Treatments
- Outcome of treatments (Prognosis)
- Many others

DATA ANALYSIS OF BED STAY FOR JAN. – DEC. 2016:

٠	Admission	-	2,318
٠	Discharges	-	2,260
٠	Death	-	42 patients

Discharged Case Folders Movements:

• Wards - Central Pool (see phase one of the organogram)

Number of case note received from Central Pool after Discharges during the period 2016:

Period	No. of Case Note Received	No. of Discharges
Jan. – March	436	474
April – June	359	495
July - Sept.	474	710
Oct Dec.	465	581
Total =	1,737	2,260

Discharges for the year:

- 1) 2,260 patients Case Folders
- 2) Received in Health Records Library 1,737
- 3) 523 outstanding, refund and others (see phase two organogram)

E-Health Records as Antidote to De-Centralization of PHR:

Information processing is a major society activity and a significance part of our lives is pending on information gathering, searching and assimilating information.

The foundation stone of computerization of Health Records in the hospital was laid since 2002.

The Present Management Intervened and gave us assurance of working on the modality of the cost effect. The Department came up with Health Records package content but what remained was the soft ware development. The last discussion on E-Health Records was when the Medical Director invited the Department, Head of Department IT and one digital bridge institute – an ICT organization who indicated interest and we are still awaiting the implementation.

The choice for the presentation calls for E-Health Records development. Presently our Health Records is mostly paper

based which cause the ugly effect of de-centralization and unauthorized handing.

The present going, concern (challenges) the Department is facing is because of non-computerization of Health Records.

Significance of E-Health Records:

- Effectiveness in policies and practical Health Records management and billing system approach.
- Clinical auditing system will be standard
- Discharge summary writing will be given attention regularly
- Fast response data queries reports and prompt statistical reports to the management, departments' e.t.c.
- Registration and documentations of patients problems will only take few minutes
- SOPD consultation clinics management will be standard
- Patient admission processes, discharge patient case folders and movement will be strictly monitored
- Effective research, education and training programs
- Issues of Consultants/Doctors/staff hacking case folders will be completely avoided
- Many others benefits not mentioned here

Recommendations:

- 1) It is advisable to stop proliferation of Patient Health Records unnecessarily
- 2) Adoption of modern technology to be in place for billing system strategy
- 3) The Consultants/Residents and other staff should avoid unauthorized de-centralization of case folders
- 4) The Hospital management should Endeavour to implement E-Health Records (computerization) at all cost to arils excellence
- 5) Introduction of Health Records computer laboratory is relevant to the department
- 6) The Doctors should try to be writing discharge summary for every patient on discharge

7) The image of the patient health information should be protected by the Hospital community at all cost.

Conclusion

There is unity in diversity being a slogan in our health sector. Health care services delivery is a collaborative effort of the technological knowhow by various specialties. Our mission statement is "patient's satisfaction" at all cost.

There is a clarion call for centralization of patient Health Records to attain efficiency Health Information which is very vital in patient Care Services and it's the duty of the Health Records to make this a reality. Even though, health records department is the custodian and not somebody else, but decentralization of patient records has a lot of implication and side effect to the patient and medical personnel themselves, such effect lead to the need of electronic patient records.

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