

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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AIN SHAMS UNIVERSITY
FACULTY OF POSTGRADUATE
CHILDHOOD STUDIES
DEPARTMENT OF CHILDHOOD MEDICAL
STUDIES
(CHILD HEALTH AND NUTRITION)

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DESIGN, IMPLEMENTATION AND EVALUATION OF A DIGITAL HEALTHCARE MANAGEMENT SYSTEM

SUBMITTED IN PARTIAL FULFILLMENT OF MASTER'S DEGREE
IN CHILD HEALTH AND NUTRITION

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**DESIGN, IMPLEMENTATION AND EVALUATION OF A
DIGITAL HEALTHCARE MANAGEMENT SYSTEM
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ABSTRACT

Background: Information is the foundation for policymaking, planning, programming, and accountability. Health informatics is the intersection of information science, computer science, and health care. It deals with the resources, devices, and methods optimizing the acquisition, storage, retrieval, and use of information in health and biomedicine. Most professionally run hospitals and clinics now rely on Hospital “or Healthcare” Information Management Systems (HIMS) that help them manage all their medical and administrative information.

Objective: to execute and test the design, implementation and evaluation of a HIMS and testing the application in a Heliopolis, Cairo-based hospital.

Methodology: Data for this study were collected by the use of different tools to address five key areas: 1. An analysis of the need for a HIMS. 2. Benefits of HIMS 3. Analysis of data of hospital health workers perceptions towards implementation of HIMS 4. Testing and application of HIMS in pediatrics-related departments 5. Suggestions for selecting and improvement of HIMS.

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Results: Although they want more training on the use of the system, more computers and timely information, health workers perceptions indicate their satisfaction with the ease of use of HIMS and that it is important in many ways for the smooth running of the hospital.

Conclusion: HIMS has significant direct and indirect benefit to patient service quality and the development of organizational capabilities for linking strategy formulation and implementation, process improvement, decision-making, medical, and epidemiological research/reporting and performance feedback. Although problems can be identified during the process of using HIMS, the benefits outweigh the difficulties, thereby justifying their use. Certain diseases are more prevalent now in children, especially school age children such as inflammations, mostly due to infections, followed by visual acuity problems and lastly, allergic problems including bronchial asthma.

Keywords: Hospital information management systems, Electronic medical record, Electronic health record.



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THEY SAID, "GLORY BE TO YOU! WE
HAVE NO KNOWLEDGE EXCEPT
WHAT YOU HAVE TAUGHT US. IT IS
YOU WHO ARE THE
KNOWLEDGEABLE, THE WISE."
(THE NOBEL QURAN; 2:32)

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LIST OF ABBREVIATIONS

ADEs	: Adverse Drug Events.
ADT	: Admission-Discharge-Transfer
AHIMA	: American Health Information Management Association.
ASTM	: American Society for Testing and Materials
ANSI	: American National Standards Institute.
BPO	: Business Process Orientation.
CCD	: Continuity of Care Document.
CCHIT	: Certification Commission for Healthcare Information Technology
CCR	: Continuity of Care Record.
CCU	: Cardiac Care Unit.
CDA	: Clinical Document Architecture.
CDISC	: Clinical Data Interchange Standards Consortium
CDR	: Clinical Data Repository.
CDSS	: Clinical Decision Support System.
CHI	: Consolidated Health Informatics Initiative
CIO	: Chief Information Officer.
CIS	: Clinical Information System
CMC	: Children with Medical Complexity.
CMIO	: Chief Medical Information Officer.
CPOE	: Computerized Physician Order Entry.
DCCs	: Data Content Committees
DDIs	: Drug–Drug Interactions.
DOB	: Date of Birth.
DSMOs	: Designated Standard Maintenance Organizations
EBM	: Evidence-Based Medicine.
EHR	: Electronic Health Record.
EMR	: Electronic Medical Record.
EMRAM	: EMR Adoption Model.
ERP	: Enterprise Resource Planning
HI	: Health Informatics.