Healthcare Information Systems Management

Healthcare Digital Trend

How can healthcare organisations leverage technology to improve patient care and streamline operations? Effective management of information systems is critical to modern healthcare delivery. The Healthcare Information Systems Management in Healthcare program by Pan African Learning and Growth Network (PALGNET) covers electronic health records, digital transformation, data governance, cybersecurity and system optimisation strategies.

- Participants learn how to implement and manage systems that support clinical decision-making, improve communication, and enhance overall performance.
- Participants will gain essential knowledge and skills to effectively collect, store, analyse, and utilize health data to improve healthcare delivery, patient outcomes, and public health decision-making.

The current state of hospitals and healthcare systems leaves them with little choice but to adopt flexibility and agility to shift from the idea of "volume-based" to "value-based" in the very near future. Institutions of healthcare must concentrate their efforts on performance-based initiatives in the near term, while keeping an eye on long-term achievement. There is hope amongst medical professionals, researchers, and patients as healthcare is advancing swiftly with innovations and technologies for a bright future (which raises the question, "how and what will healthcare be in 2050?".

The course covers key topics including health information systems (HIS) concepts, data management principles, electronic health records (EHRs), health data standards, data quality and governance, health data analysis and visualization, health informatics, information security and privacy, and emerging trends in health information technology. Participants will engage in case studies, system design exercises, and group discussions to develop practical skills and apply their learning to real-world scenarios.

Participants in this training course will develop the following competencies:

- The future of healthcare: challenges and opportunities
- How will technology help improve well-being?
- Change Management Process, Tools & Techniques
- New and reemerging infectious diseases
- Rediscovery of lifestyle-related health issues
- Types of the health ecosystem of the future
- Cost Shifting Versus Cost Management

Objectives

- Understand the fundamental principles and practical strategies of healthcare information management
- Manage, implement, and optimise different types of information management systems, such as electronic health records and health information exchange
- Distinguish between internal and external health data and information and develop strategies for managing them to enhance decision-making and outcomes
- Ensure data quality and maintain security in healthcare information systems
- Implement healthcare information technology and develop a strategic plan for health IT initiatives
- Manage and lead healthcare IT initiatives using project management tools and techniques
- Analyse the impact of emerging technologies on healthcare information systems and think about integrating them into systems

Who Should Attend?

The Information Systems Management in Healthcare programme is ideal for professionals working with or entering healthcare IT roles, including:

- Healthcare IT managers and administrators
- Clinical informatics specialists
- Health data analysts
- Project managers in healthcare technology
- Professionals transitioning into healthcare IT leadership roles
- Health Informatics Specialists
- Healthcare Quality Officers
- Other Healthcare Professionals

Course Outline

Introduction to Information Systems Management
- Overview of health information systems (HIS)
- Types of HIS: Clinical, administrative, and public health
- The role of HIS in-healthcare delivery
- HIS planning and implementation
- Practical session: Analysing a health information system

Healthcare Data Management
- Key differences between healthcare data and information
- Recognising the significance of data in healthcare decision-making and patient outcomes
- Describing the processes of data collection, storage, and retrieval
- Discussing the consequences of poor data quality in healthcare
- Strategies for ensuring data and information quality in healthcare
- Discussing healthcare data and information regulations, laws, and standards

Electronic Health Records (EHRs)

- Discovering the main components of EHR systems
- Identifying the functionalities and purpose of EHR systems
- Addressing challenges and issues of implementing EHRs
- Discussing the interoperability of EHRs across healthcare systems
- Strategies for effective management of EHRs
- Discussing legal and ethical considerations in EHR management

Health Data Standards

- Introduction to health data standards
- HL7 standards for data exchange
- SNOMED CT for clinical terminology
- ICD codes for diagnosis and procedures
- Practical session: Applying health data standards

Data Quality and Governance

- Principles of data quality
- Data quality assessment and improvement
- Data governance frameworks
- Data stewardship and ownership
- Practical session: Developing a data quality management plan

Health Data Analysis and Visualization

- Descriptive and inferential statistics
- Data visualization techniques
- Business intelligence in healthcare
- Predictive analytics in healthcare
- Practical session: Analyzing and visualizing health data

Health Informatics

- Introduction to health informatics
- Clinical informatics
- Public health informatics
- Consumer health informatics
- Practical session: Applying health informatics principles

Information Security and Privacy

- Principles of information security
- HIPAA regulations and compliance
- Data privacy and confidentiality
- Risk management and security audits
- Practical session: Conducting a security risk assessment

Interoperability and Health Information Exchange

- Health information exchange (HIE)

- Interoperability standards and technologies
- Regional and national HIE initiatives
- The role of HIE in care coordination
- Practical session: Evaluating an interoperability solution

Emerging Trends in Health Information Technology

- Mobile health (mHealth)
- Telehealth and telemedicine
- Artificial intelligence in healthcare
- Big data analytics in healthcare
- Practical session: Exploring emerging health IT trends

Training Methodology

A combination of lectures, case studies and discussion will be utilized during this program as the delegates participation is out goal to maximize the benefits of learning. This allows participants to discuss with other delegates and the presenter their specific problems and appropriate solutions.

Certificates

On successful completion of this training course, PALGNET Certificate will be awarded to the delegates