Strategic Health Informatics and Digital Transformation Training Course



23 - 27 Nov 2026

Cairo

3700 € (Per Person)

Ref: #HSM2025_276044

Course Introduction / Overview:

The healthcare landscape is undergoing a monumental shift, driven by technological innovation and the demand for more efficient, patient-centric care. This course provides a comprehensive exploration of the intersection between digital transformation and health informatics, equipping professionals with the strategic skills to lead this change. We delve into the core principles of managing health information systems, leveraging data analytics for clinical and operational improvement, and implementing cutting-edge digital health solutions. Drawing on insights from pioneers like Dr. William Hersh and foundational texts such as "Health Informatics: Practical Guide," this program moves beyond theory to offer practical, actionable strategies. Participants will learn to navigate the complexities of electronic health records (EHR), interoperability, cybersecurity, and regulatory compliance. At BIG BEN Training Center, we have designed this curriculum to empower leaders to not only understand the technology but to strategically deploy it to enhance patient outcomes, optimize workflows, and build the resilient healthcare organizations of the future. This is an essential journey for anyone aiming to be at the forefront of healthcare innovation.

Target Audience / This training course is suitable for:

- Healthcare Administrators and Managers.
- Clinical Informatics Specialists.
- Health Information Management (HIM) Professionals.
- Healthcare IT Project Managers.
- Public Health Officials.
- Physicians, Nurses, and other Clinical Staff involved in technology implementation.
- Healthcare Consultants.
- Quality Improvement and Patient Safety Officers.
- Pharmaceutical and Medical Device Professionals.
- Healthcare Data Analysts.

Target Sectors and Industries:

- Hospitals and Integrated Health Systems.
- Primary Care Clinics and Outpatient Facilities.
- Pharmaceutical and Biotechnology Companies.
- Health Insurance and Payer Organizations.
- Medical Device Manufacturing Companies.
- Governmental Health Agencies and Public Health Departments.
- Healthcare Technology and Software Vendors.
- Long-Term Care and Rehabilitation Centers.
- Academic Medical Centers and Research Institutions.
- Healthcare Consulting Firms.

Target Organizations Departments:

- Information Technology (IT) and Information Services (IS).
- Clinical Operations and Patient Care Services.
- Administration and Executive Management.
- Health Information Management (HIM).
- Quality Improvement and Patient Safety.
- Finance and Revenue Cycle Management.
- Strategy and Business Development.
- Compliance and Legal Affairs.
- Research and Development.
- Human Resources and Training.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a comprehensive digital transformation strategy for a healthcare organization.
- Analyze the role and impact of Electronic Health Records (EHR) on clinical workflows.
- Evaluate different health data interoperability standards like HL7 and FHIR.
- Apply data governance principles to manage health information securely and ethically.
- Utilize healthcare data analytics for population health management and clinical decision support.
- Assess and mitigate cybersecurity risks specific to the healthcare environment.
- Manage change effectively during the implementation of new health technologies.
- Design patient engagement strategies using digital tools like telehealth and mHealth apps.
- Navigate the regulatory landscape, including HIPAA and other data privacy laws.
- Critically evaluate emerging technologies such as AI, IoT, and blockchain in healthcare.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, interactive, and highly practical. We believe that adult learning is most effective when it combines expert knowledge with hands-on application. This course utilizes a blended approach, featuring expert-led presentations that break down complex concepts in digital transformation and health informatics into understandable modules. These sessions are complemented by interactive group discussions and brainstorming activities, allowing participants to share experiences and learn from their peers' diverse perspectives. A significant portion of the course is dedicated to analyzing real-world case studies from various healthcare settings, enabling participants to dissect successful strategies and learn from implementation challenges. Practical workshops and simulation exercises will provide a safe environment to apply new skills, such as developing a technology adoption plan or conducting a basic cybersecurity risk assessment. Continuous feedback from the instructor and peer-to-peer review are integral components, ensuring a deep and lasting understanding of the material and preparing participants to lead transformative initiatives in their own organizations.

Course Agenda (Course Units):

Unit One Foundations of Digital Health and Informatics

- Introduction to Digital Transformation in Healthcare.
- Core Concepts and History of Health Informatics.
- The Role of Health Information Management (HIM).
- Key Drivers and Barriers to Digital Health Adoption.
- Understanding the Healthcare Ecosystem and Stakeholders.
- Ethical and Legal Considerations in Health Informatics.
- Global Perspectives on Digital Health Strategies.

Unit Two Core Technologies and Health Information Systems

- Electronic Health Records (EHR) and Electronic Medical Records (EMR) Systems.
- Health Information Exchange (HIE) and Interoperability Standards (HL7, FHIR).
- Telehealth and Telemedicine Platforms and Implementation.
- Mobile Health (mHealth) Applications and Wearable Technology.
- Clinical Decision Support Systems (CDSS).
- Picture Archiving and Communication Systems (PACS) and Vendor Neutral Archives (VNA).
- Laboratory and Radiology Information Systems (LIS/RIS).

Unit Three Healthcare Data Management and Analytics

- Principles of Health Data Governance and Quality.
- Big Data in Healthcare: Sources, Storage, and Processing.
- Descriptive, Predictive, and Prescriptive Analytics in Clinical Settings.
- Population Health Management Analytics.
- Introduction to Artificial Intelligence and Machine Learning in Healthcare.
- Data Visualization and Reporting for Healthcare Leaders.
- Ensuring Data Privacy and Security in Analytics.

Unit Four Strategy, Implementation, and Change Management

- Developing a Digital Transformation Roadmap.
- Strategic Planning for Health IT Projects.
- Project Management Methodologies for Healthcare.
- Leading Change in a Clinical Environment.
- User-Centered Design and Usability in Health IT.
- Vendor Selection and Contract Negotiation.
- Budgeting and Calculating Return on Investment (ROI) for Health IT.

Unit Five Cybersecurity, Compliance, and Future Trends

- Fundamentals of Healthcare Cybersecurity.
- Threat Modeling and Risk Assessment in Healthcare.
- Understanding HIPAA, GDPR, and other Regulatory Frameworks.
- Developing an Incident Response Plan.
- The Future of Healthcare: IoT, Blockchain, and Genomics.
- Personalized Medicine and Digital Therapeutics.
- The Ethical Implications of Advanced Health Technologies.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

As healthcare becomes increasingly data-driven, how can organizations ethically balance the immense potential of predictive analytics with the fundamental right to patient privacy and the risk of algorithmic bias?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by adopting a strategic, leadership-focused perspective on digital transformation, rather than being a purely technical or software-specific training. While many programs focus on the "how-to" of individual systems, our curriculum emphasizes the "why" and "what's next," equipping participants with the critical thinking and strategic planning skills necessary to lead complex initiatives. We bridge the crucial gap between IT, clinical practice, and executive management, fostering a holistic understanding of how technology impacts every facet of the healthcare organization. The content is uniquely structured to integrate principles of change management and project leadership directly into the technical modules, acknowledging that successful transformation is as much about people and processes as it is about technology. By focusing on real-world case studies, ethical dilemmas, and future-forward trends like AI and blockchain, the course prepares participants not just for the challenges of today, but to be the innovative architects of tomorrow's digital health ecosystem.