IIHMR DELHI | INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH

Post Graduate Diploma in Management (Hospital & Health Management)
PGDM – 2022-24 Batch

2nd Year - 5th Term Examination

Course & Code	:	**Hospital Management Information Systems-HOM 709**	**Reg. No.**	:	
Term & Batch	:	**V, 2022-24**	**Date**	:	**December 14, 2023**
Duration	:	**3 Hrs.**	**Max. Marks**	:	**70**

Instructions:

- Budget your time as per the marks given for each question and write your answer accordingly.
- Don't write anything on the Question Paper except writing your Registration No.
- Mobile Phones are not allowed even for computations.

Part A: Q. 1 to Q.10 (10 questions*1 marks = 10 marks). All are compulsory

Match the following

S. No	Column X	S. No	Column Y
1	Electronic Health Record	**A**	generated by physicians, patients, hospitals, pharmacies, and other sources but is controlled by the patient
2	Personal Health Record	**B**	originates with and is controlled by single provider
3	Electronic Medical Record	**C**	originates with and is controlled by doctors
	Say True or False		
4	Consent should be taken from the patient before collecting their medical history in hospital		
5	More than one mobile number cannot be entered in EHR		
6	Telemedicine can be used for all disease treatments		
7	e-Prescriptions can help in Adverse Drug Reporting		
	Expand the following		
8	SNOMED- CT		
9	FHR		
10	DPDP		

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Part B: Q.11 to Q.15 (4 questions *5 Marks =20 Marks) Attempt any four.

11. Bindas hospital is interested in improving its inventory. How can digital transformation achieve this.

12. An XYZ hospital is interested in developing dash boards to monitor few performance indicators. Identify two indicators for that can be monitored digitally, What type of visualization chart or graphs will you use to follow the indicators

13. What ethical concerns one should consider while designing AI based solution

14. Marco is affected by Alzheimer. How can you digitally help Marco in managing his day-to-day life.

15. Big brand is developing a dental EMR for its patients. What are the data quality parameters they should look into.

Part C: Long Questions (2 x 15 = 30)

16. WHO classified digital interventions into 4 groups. Clients, Healthcare providers, administrators, and data services.

1. Interventions for clients: Clients are members of the public who are potential or current users of health services, including health promotion activities. Caregivers of clients receiving health services are also included in this group.
2. Interventions for healthcare providers: Healthcare providers are members of the health workforce who deliver health services.
3. Interventions for health system or resource managers: Health system and resource managers are involved in the administration and oversight of public health systems. Interventions within this category reflect managerial functions related to supply chain management, health financing, human resource management.
4. Interventions for data services: This consists of crosscutting functionality to support a wide range of activities related to data collection, management, use, and exchange.

Considering the health system challenges of **quality, information, availability, acceptability, utilization, efficiency, cost, accountability** design 5 digital interventions in any of the 4 categories listed above. You may choose more than one category as you like.

20. Digital therapeutics (DTx) are evidence-based, clinically evaluated software and devices that can be used to treat an array of diseases and disorders, according to the Digital Therapeutics Alliance, the industry's trade association. They can be used independently or with medications, devices, and other therapies to treat physical and behavioural health conditions, including pain, diabetes, anxiety, post-traumatic stress disorder, and asthma.

According to the alliance, all software and devices that claim to be digital therapeutics must adhere to certain foundational principles, including incorporating patient privacy and security protections, publishing trial results in peer-reviewed journals, and receiving clearance or certification by regulatory bodies. According to the Digital Therapeutics Alliance, there are three main product categories for digital therapeutics: products to treat a disease, manage a condition, and improve a health function.

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Products in all three of these categories must "deliver a therapeutic intervention and use clinical endpoints to support product claims," the alliance states.

Low back pain (LBP) is the leading cause of long-term pain and physical disability in developed countries. Nearly 80% of individuals are affected by LBP during their lifetime. LBP imposes a major socioeconomic burden on both individuals and industry. In the United States, lost productivity due to LBP, including an estimated 264 million workdays lost annually, contributes to a total economic burden of LBP that exceeds US $100 billion. Digital approaches for LBP are becoming increasingly popular to use the evidence-based, standard of care physical therapy and mindfulness techniques recommended by physicians while increasing accessibility, maintaining program adherence, and reducing costs for users.

Design a digital therapeutic app for LBP program. What are the features that will make it as a Digital Therapeutic application. What are the core principles of DTx products will be considered. What will the evidence be generated?