

Innovative Models in Digital Health

Certificate Course – 6 Months

15th Feb 2021 to 21st Aug 2021

Introduction:

Innovative models in Digital Health, a Certificate Course, a growing domain, where healthcare professionals can gain their knowledge and skills, to apply in their profession. IIHMR Bangalore, initially started a Certificate Course on Digital Health for last 4 years, for the period of 3 to 5 days. From the experience and the growing interest, the course was designed for 6 months with added topics, recent trends etc.

About the Course:

The Certificate Course, on Innovative models in Digital Health, the Program was Initiated by Dr. Usha Manjunath-Director IIHMR Bangalore, India, Course Contents was designed and developed by Mr Anil-Sr. Consultant, Accenture, US in coordination with Mr. T. K. Pradeep Kumar-Assistant Professor, Mr Piyush Kumar - Associate Professor, Associate Dean Trainings, Dr. Deepashree-Assistant Professor, it was decided by the team, to engage the course for 6 months, starting from 15th Feb 2021.

Course Plan:

The Course was planned for 6 months, Mode of Delivery through Online, starting from 14th Feb 2021 to 15th Aug 2021, 42 sessions, including the Case Study discussions, Presentations and involving the Participants in presenting about their ideas can be added to the existing or new projects and the learnings from the participants can be evaluated through Presentation and Discussion based on the Cases and Participations during the Session.

Course objectives:

- To orient the participants in current trends in Digital Health, Cost of Delivery System, Country wise Comparison, Insurance Options in India, Digital Health Devices / Type 1,2,3, Digital Health Frame works, Patient Centricity - Persona, KPI/Measures, Balanced Score Card
- To upscale the knowledge in various aspects of Supply chain - Terminology & Concepts, Advances, Investment, Data & Data Quality, Data Integration, Data Analyst

& Visualization, IT Infrastructure - In Hospital, Interoperability, Health IT Standards, AI – Definition, Intervention in Healthcare, Algorithms, Drug Discovery using AI & ML, IoT, Advances in AI, m-Health, Telemedicine – Telehealth & Challenges in Digital Health

The Trainers for the Course:

- 1. Mr Anil- Sr Consultant, Accenture, US**
- 2. Mr T. K. Pradeep Kumar, Assistant Professor, IIHMR Bangalore**
- 3. Mr Mrinmoy Roy, Assistant Professor, IIHMR Bangalore**
- 4. Mr Mukund Kulkarni, Director, Streamline Healthcare, Bangalore**
- 5. Dr. Anchal, HxCentral, Bangalore**
- 6. Mr. Hemasai, Lead EMR, Narayana Health, Bommasandra, Bangalore**

Topics discussed in the Course:

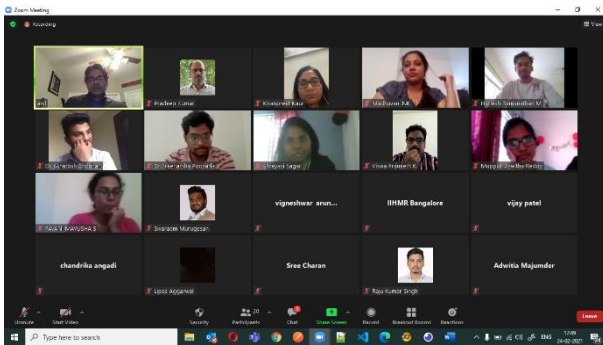
- Digital Health Definition, Cost of Delivery System, Country wise Comparison, Insurance Options in India
- Digital Health Devices / Type 1,2,3
- Digital Health Frame works, Patient Centricity - Persona, KPI/Measures, Balanced Score Card
- Supply chain - Terminology & Concepts, Advances, Investment,
- Data & Data Quality, Data Integration, Data Analyst & Visualization
- IT Infrastructure - In Hospital, Interoperability, NDHB & NDHM, Health IT Standards
- AI – Definition, Intervention in Healthcare, Algorithms, Drug Discovery using AI & ML, IoT, Advances in AI, m-Health, Telemedicine – Telehealth & Challenges in Digital Health
- Prototype, HMIS and Data Management

Recommendations:

- Digital Health, Course must be planned and engaged frequently, due technological advancement

Glimpses of the Course:

During the Course:



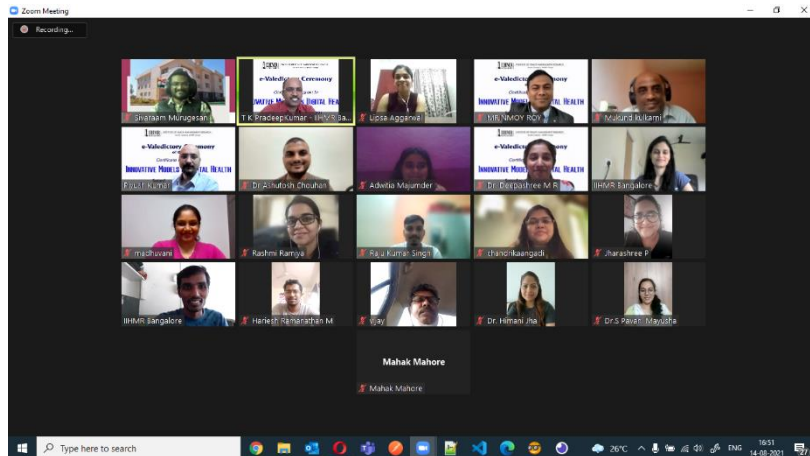
A screenshot of a Zoom meeting. The main content is a slide titled "Details of the Organizations" and "Related Diagnosis". The slide contains logos for Majumy Genomics, Microsoft, Google, IBM Watson, and Inaya. The "Related Diagnosis" section lists various medical conditions and their associated symptoms. The slide also includes a list of participants on the right side of the screen.

Details of the Organizations	Related Diagnosis
	Management is a critical role in molecular diagnosis company. The management team gives an individual insight into the genome to help people make their own choices about their health. The company offers personalized health solutions based on genetic tests that help people to get to know about themselves. By conducting genetic health analysis, health experts can generate meaningful management plans to optimize their health and their performance towards a healthier life. They provide genetic assessment to their clients. They also provide genetic testing services to their clients.
	Microsoft India partnered with IIT Madras Eye Institute and with World experts collaborated to launch Microsoft Eye Institute for Eye Care (MIEIC) as a platform to provide healthcare for Indians with eye problems by screening for eye issues and providing immediate solutions.
	Google in collaboration with IIT Madras Eye Institute, has created an image recognition algorithm to detect and identify diabetic retinopathy in fundus images, which could help to identify individuals and prevent blindness. With AI and Google's machine learning expertise, doctors will be able to grade diabetic retinopathy to a certain level of accuracy, saving time to operating.
	Watson is a fast platform to screen diabetic retinopathy (DR) in per 400000 (comparing) and has the capacity to flag high-risk diabetic retinopathy (DR) and diabetes across various images. IBM Watson is a registered SaaS product, which is a cloud-based artificial intelligence (AI) system for automated analysis of images and medical data for screening diabetic retinopathy (DR). The software can be integrated with a cloud-based system to provide immediate results.
	Inaya uses artificial intelligence for predicting diseases such as cancer, diabetes, neurological diseases, cardiovascular diseases through genomic data. It serves as a high cost effective, fast, accurate genetic diagnosis and genetic disease. Reducing the time taken for diagnosis and at the same time providing the cost of diagnosis to be very low or affordable makes that can cater to the needs of poor and poor that have through diagnosis at a very early stage with an increasing amount of genetic data being generated globally, we need a solution to maximize meaningful information from this data and use it to a specific disease in the system.
	As a leading deep learning technology in drug discovery, diagnosis and personalized medicine Inaya is a personal assistant to diabetes patients. At the core of Inaya is Artificial Intelligence and Machine Learning. This has developed more than 100 million combinations of genetic markers and their associated genes to predict the risk of diabetes, hypertension, neurological diseases, cardiovascular diseases, etc. The core components of the diabetes management program are in-house database and knowledge about diabetes, full care and family management, medication and regular tests at the convenience of following expert monitoring to keep track of patient progress.

Participants (8)

- IIMHR Bangalore (Host, me)
- MRINMOY ROY (Guest)
- chandrilaagadi (Guest)
- JHARASHREE (Guest)
- Lipsa Aggarwal (Guest)
- PAWANI MANUSHA S (Guest)
- Svaraam Marugesan (Guest)
- vijay (Guest)

Valedictory:



Conclusion:

As a Program Coordinator, I am thankful to IIHMR Management, Dr. Usha Manjunath, Professor & Director IIHMR Bangalore, Director Office, Trainings Department, IT Team, Digital Marketing Team, Accounts & Admin Department, for making the course a grand success.

Prepared by,

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