VIT Vidyalankar Institute of Technology
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"Role of Technology in Healthcare Management"

By Dr. Sachin Wagh, Medical Planner and Hospital Design SME online lecture held on 16th September 2020, 5.00 p. m

During the webinar Dr. Sachin Wagh, Medical Planner and Hospital Design SME shared his thoughts and Experiences on ***"Role of Technology in Healthcare Management"*** *In this talk Dr. Sachin Wagh explained various emerging technologies which are changing the face of healthcare industry and patient care. He pointed out that the development in the field of IOT, Management Information Systems and data base management has changed the hospital administration and better care is available to the patients through wireless and remote accessibility. Technological advancements in Information Technology and Wireless communication made distance no barrier for availability of high end facilities and expert doctors to remote areas which* ***benefit the society.***

Introduction

DR Sachin Wagh is medical planner and hospital design SME and has enormous experience in the design of hospital systems and soft wares. His experience in the field of healthcare was relevant in the diverse areas he handled during the talk. He presented almost every available development and various new devices and practices in his presentation with demonstrating pictures. The integration of IT into healthcare and various technological developments like RFID integration in Patient and hospital management, HMIS, Electronic Medical Record, Telemedicine, Point of care Technology, Wearable devices and Public Health were the highlights of his talk

Integration of IT into healthcare and HMIS

Integration of IT into hospital and healthcare systems has made the Patient management in hospitals a much easier task. This includes electronic prescriptions healthcare data storage and sharing and consumer health applications. It also helps in community disease analysis, prevention and control through data analysis. Better patient care at admission is possible through healthcare data sharing between hospitals.

Identification using RFID

RFID Technology has made patient Queue system, Patient smart cards etc. to make identification simple. Integration of RFID technology to MIS has made Self help desk, RFID tagging, barcode for medicine, staff smart card staff attendance etc possible. This also helped in registration, consulting, nursing, OPD and pharmacy operations easier

Electronic Medical Records

Medical records need systematic documentation of medical treatments and history. It is completed and stored by healthcare providers. For the huge amount of data entry, usage of voice recognition handwriting recognition etc will help in saving time. Example of fever chart by and Electronic recording system was demonstrated and the documentation can be shared through internet which provides portability. Tablet PC with stylus can help in digitizing the handwritten data for keeping records

PACS and DICOM

Digital analysers and radiology systems help in analyzing and enlarging or compressing data which can be easily shared. Data like digital Xray, MRI, and Ultrasound can be send to PACS software after digital radiology and it will help in these analysis

Telemedicine

Telemedicine is rapidly developing application of clinical medicine. It is possible in all domains like audio, Video and graphics. It will help clinicians and patients in various different ways. Real-time telemedicine can help creation of EICU, Night Hawking etc.

Point of Care Technology

It is also known as home health or bedside testing kits. This technology has helped in testing blood glucose, hemoglobin, urine pregnancy strip, Blood gas etc. Patient care and early diagnosis is achieved by these kits which helps better care and treatments.

Wearable Devices

Wearable patches and wearable devices are used for checking SpO2 Glucose and for detecting Parkinson's, Alzheimer's through wearable patches. Portable USG with wireless connectivity to a tablet also help in checking fetus conditions remotely

Public Health

In public health these technological developments has made taking live statistics, health care records easy. An Example of Asha Workers meeting rural people and track vaccination and update on tablets was given. This data is directly uploaded to health websites and is centrally available. Mobile application based systems also ease the tracking of appointments and taking medicines

Conclusion

Technological advancements have helped the healthcare system more effective and accessible to remote areas and to poor. This also helps in timely consultation, early detection and treatment of diseases which make the society healthy.

Compiled by –Prof. Geetha Narayanan and Prof. Neelam Punjabi of Vidyalankar Institute of Technology.