Chapter 15 Deep Data Analytics: Future of Telehealth

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ABSTRACT

In the past, doctors and specialists were not connected to patients through telemedicine for providing virtual health and medicine. In rural areas, where experts in medical fields were not able to reach or be present at, telemedicine proved a great benefit. As the years passed, the explosive use of the internet brought profound changes to telemedicine practices. The escalation of smart devices with the capability of delivering high quality video and audio raised the possibilities of delivering remote healthcare. Telehealth care helps patients at home or at assisted living facilities as a revolutionary alternative to personal visits for both basic as well as expert care. Applying deep data analytics to telemedicine will create new horizons in telehealth by analyzing large data sets of patients using live video streaming to predict the health challenges of patients.

INTRODUCTION

The merging of technological applications with health called Telehealth. The face of health care is totally changing as it was in earlier days. The need for merging technology with health is rising day by day. The popularity of Telehealth is increasing rapidly and accepted in large part. In cluster of health care Telemedicine and Telehealth used interchangeably (Priyanka & Kulennavar, 2014).

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Deep Data Analytics

Telemedicine is defined as an application of tools, techniques and technology in medicine so that people can take advantage from it from any part of the world and round the clock, where as Telehealth is having a wider scope related to many techniques and approaches to deliver clinical services, enhancing knowledge and know how about health and medicine.

Telehealth is adopted worldwide and to be used by all disciplines related to health. Below are many health disciplines where Telehealth has been widely accepted shown in Figure 1.

- Dentistry
- Counseling
- Physical therapy
- Home health, etc.





To educate medical professionals and stack holders, Telehealth changes the era from transforming the scene from activities related to diagnostic used in traditional era regarding monitoring health of patient.

The delivering mode which helps in delivering health care services and public health with the use of information and communication technologies to pursue below services as shown in Fig 2.

- Treatment
- Consultancy
- Suggestion and advices
- Individual Care
- On time treatment without delays

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