TELEMEDICINE

Transforming not Only the way we Work,
but the way we Think

Overview

A health system, also known as health care system is the organization of people, institutions, and resources that delivers health care services to meet the health needs of target population. The US health care system is a product of decades of growth and maturation but still have led to variety of deficiencies and serious problems. The responses to those problems, whether they came from the private sector or from the Government, have frequently been only short term corrections.

One such recent development in the health care system is the evolution of telemedicine, where the distance between the Providers and the patients are greatly reduced, virtually. The technology development is effectively put in to place with various devices and software that can bring the patients and providers closer when they cannot really wait for the availability of a provider physically.

In 2016, a total of 2,596,993 deaths were reported in the United States. The age-adjusted death rate was 731.9 deaths per 100,000 U.S. standard populations. An accident (unintentional injuries) was the 4th leading cause in 2013, while cerebrovascular diseases (stroke) became the 5th leading cause of death in 2013 (Ref: 01).

This system seems to evolve as a great success in future. The distance between the Hospitals would be greatly reduced giving benefit to both hospital and patient respectively; doctor could attend more patients within the same time and patients could save on their travelling cost.

Connecting Health Care with Smart Phone

A low budget school project was started at one of the Universities in Texas to make a low-cost sensor network system that could be used on a mobile phone. The project would help in monitoring and advising the patient in conditions when they are not in the hospital. In that network system, the data would be combined and transferred with short-range free communications to quickly spread information along with 3G transmission. These services were made easier by the lower cost of mobile devices. Thus, the emergence of 3G mobile networks and the smart phone devices associated was to ensure that expertise is being delivered faster and further.

With the help of telemedicine, a patient could be treated in case of any emergency with the help of live remote session with the doctor on duty at the hospital. You can also make it possible on an Android tablet. This could help saving thousands of lives where patients are not provided treatment and or right guidance until any physical help reaches.

The application would also help the hospital to track records of the patients respectively which would help them diagnose the patients on to their next visit. This could include tracking and maintain daily Vitals record.

The Future Solution

Telemedicine software could be provided to the hospitals as a smart phone application. Whenever, patient faces any critical or unusual condition, the doctor at the hospital is intimated on his smartphone (application) about the current situation of the patient. We assume that the application on the patient's smart phone would be loaded with easy to use application, allowing the hospitals to create detailed electronic patients file along with patient current photos.

For example, if the patient is having symptoms of unconsciousness, software would send the last sugar test report (also current if the patient is in a condition to test), blood pressure, and heart beat count along with the patient's picture to the Doctor's smartphone. The hospital would receive a notification prompting them to log in to assess the patient's file. The attached reports would help them analyze and form an opinion about the patient and allows them to respond with diagnosis and treatment advice either on a voice and/or video call. In addition, the doctor could also call for an ambulance too from the application itself.

A recent survey1 conducted in the United States came up with 3 key reasons for the growth of telemedicine in the year 2017;

Telemedicine will create new business models to meet consumer demand

With an increase in the demand from the consumers for the convenience in providing care for the patients and to reduce the high cost involved in the emergency department, the need for telemedicine will grow to produce a convenient care access model. Integrated telemedicine allows health care providers to extend their services online, enabling providers to meet patients anywhere, anytime without making the patients come away from the benefits of existing health system affiliations and primary care providers.

Telemedicine will provide strategic pricing options, as more patients focus on costs

The US health care system being dynamic, expectations are high that there will be changes in the Affordable Care which might end up with more patients on high deductibles health plan. Interactive patient education tools are critical to continue learning beyond the clinic and to help patients digest a significant amount of medical and financial information. Telemedicine offers a unique opportunity for health systems to offer strategic pricing options to all patient populations. This will increase in popularity as health systems, payers, and patients can benefit from successful patient management of personal health care costs.

Telemedicine will help providers meet MACRA requirements

The Medicare Access and CHIP Reauthorization Act, is bipartisan federal legislation signed into law on April 16, 2015. The law most importantly establishes new ways to pay physicians for caring for Medicare beneficiaries. Cemented the move towards cost-efficient protocols and quality metrics and opened the door for system improvement, there is tremendous potential for systemic improvement in MACRA's apparent embrace of entrepreneurial thinking. If CMS is willing to try new methods, there may be deeper technology integration in coding, EHR inter-operability, and care delivery. It could be an exciting year.

The Services

Our simple technology and medicine or 'telemedicine' software, designed with Patients in mind, connects remotely the Hospital and their patients who give diagnosis and treatment advice on complex cases. Thus, the patient is diagnosed more quickly than getting to the hospital. Listed below are the additional advantages of telemedicine:

›   More Convenient and Accessible Patient Care

›   Keeping track of patient's everyday record to better diagnose the patient on their next visit

›   Health care Cost Savings

›   Extended Specialist and Referring Physician Access

›   Increased Patient Engagement

›   Better Patient Care Quality

›   Early detection of possible major issues.

Along with the advantages (mentioned above), there are a few complexities too;

›   Technical Training and Equipment

›   Reduced Care Continuity

›   Fewer In-Person Consultations

›   Tricky Policies and Reimbursement Rules

Benefits of Telemedicine

Patient Engagement

›   Provides electronic access to patients to check their previous history and to contact the providers anytime

›   Through Patient Portal. (email)

›   Through Mobile App

›   Using Patient Portal as a messenger to send and receive messages

Provider Engagement

›   Allow providers to access the patient records by giving access to EHX

›   Linking rural health clinics to a central hospital at the nearest proximity

›   Video Conferencing with the patients to have a better understanding of their condition

Technologies that can be incorporated

›   Biological sensors

›   Real time access to patient vitals

›   Providers should receive alerts if there are any noticeable changes in patient's vitals, and blood sugar level

›   Ability to store the previous data and to compare the data in real time

"This is how Telemedicine software would be able to encrypt sessions for compliance and so forth. I believe that this is how we could possibly make cost effective software and applications that would be beneficial for both the hospitals as well as the patients. We should focus how the world is transforming with the help of technology and adapting not only the way we work but the way we think."

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