e-Health and ICT in Insurance Solutions

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Abstract. Health informatics is an emerging field of the day. It is the appropriate and innovative application of the concepts and technologies of the information age to improve health care and health [2]. Right from consultation, through prescription till the completion of treatment and medication can be implemented online. A network that includes the hospitals, clinics, pharmacies, diagnostic centers and insurance companies sharing the pooled resources can perform in coordination and work for the common goal of delivering medical claims to the stakeholders. An online software that works on Windows Server platform with SQL Server as backend and the ASP.NET programs do the purpose.

Keywords: Health Informatics, e-health, medi-claims, ASP.NET, SQL Server.

1 Introduction

Healthcare is the prime care that is intended for a human being. According to the Wikipedia, primary care is that term for healthcare services, refers to the work of health care professionals who act as a first point of consultation for all patients within the healthcare system [1]. Living healthy is every man’s right. To ensure healthy life of the citizen is thus, the mandate of the state and the Government. Providing state-of-the-art healthcare network all over the country at reasonable price is every government’s responsibility. Unfortunately, there have been so many constraints which pull the government machinery backwards from this very divine drive. Though the health policies of the countries across the globe are varying, there has been a general trend of welcoming the influx of insurance providers to the health care sector over the past two decades. The corporates and public limited companies are gorgeously handshake with this paradigm shift of health policy by implementing the health insurance to its employees and workers with a tie up between private or public limited insurance providers.

Health insurance is the insurance against the risk of incurring medical expenses among individuals. According to the Health International Association of America, health insurance is defined as “coverage that provides for the payments of benefits as a result of sickness or injury. It includes insurance for losses from accident medical expenses, disability or accidental death and dismemberment.”

Since an accident, sickness or death makes not only the person who suffer from this invalid temporarily or permanently, but also the family of the members of the
person to a great extent. The insurance sector is playing a significant role in maintaining a healthy living of the society. In this context, it is worth saying about the e-health.

The area of e-health encompasses products, systems and services, including tools for health authorities and professionals as well as personalized health systems for patients and citizens [4]. The scope of e-health includes the hospital treatment to the population health activities, which present complex information management challenges to support individualized patient care [2].

The sooner the insurance sector enact in the situation of emergency, the faster the family/society gets relief. However, there are a few limitations from their side. Unless and until they get the medical reports, the claims cannot be processed and delivered. The online servicing of medical claims is an application of health informatics comes into the scene at this juncture. Health informatics is an emerging field of the day. It is the appropriate and innovative application of the concepts and technologies of the information age to improve health care and health [2]. Health Informatics has also been defined by WHO as “an umbrella term used to encompass the rapidly evolving discipline of using computing, networking and communications – methodology and technology – to support the health related fields, such as medicine, nursing, pharmacy and dentistry” [3].

Right from consultation, through prescription till the completion of treatment and medication can be implemented online. A network that includes the hospitals, clinics, pharmacies, diagnostic centers and the insurance companies can perform in coordination and can work for the common goal of delivering medical claims to the stakeholders with utmost urgency.

2 Software System

An integrated online software that works on windows platform with SQL server as backend and the ASP.NET programs do the purpose. Such a system was developed and it could implement successfully with the co-operation of more than 30 clinics and hospitals, laboratories, pharmacies and insurance companies in the network.

The website with fully online ASP.NET software that runs on MS-Windows 2003 server and its Internet Information Server(IIS) showed good results. The concept of the system is that it consists of service providers – Insurance service companies and Medical service providers such as hospitals, laboratories, pharmacies and diagnostic centers- and service receivers/members ie. the individuals who insured and companies who pays the insurance premium of their employees and dependents. The system is designed in such a way that a third party/agent can act as the coordinator and use the system to serve many providers and members simultaneously.

2.1 Software Platform

The entire system works on an IIS Server that runs on Windows 2003 Server platform. The hardware is a high end IBM Server machine with dual hard disk of