ABSTRACT

Cloud computing as an emerging computing mode can be applied to the District Medical Data Center. This is a new proposal raised in the paper. The rudiment of District Medical Data Center based on cloud computing is established. A comparison is made between the samples from the rudiment and the samples from the general systems. XML is suitable to both express the multi-element unstructured data and exchange the complex data. The various standards for DMDC are established. The advanced model of District Medical Data Center based on cloud computing is described. The idea is also showed that the District Medical Data Center is as a service on the cloud computing platform. In the future, cloud computing may be better approach to the next generation of District Medical Data Center.

INTRODUCTION

PROJECT OVERVIEW

The DMDC refer to the District Medical Data Center, is infrastructure for the healthcare system are many problems to be solved and many difficulties to be overcome in constructing the national healthcare information system now, though great progress was made over the last 20 years. The essential reason is the lack of information integration. In various medical institutions the clinical information for the patients is scattered, fragmented and isolated, it results at least that obtaining useful information is very difficult meanwhile available information is idle. A lot of information is reduplicate but inconsistent. In public health agencies, the basic information is lacking for healthy people, it results at least that no database supported our decision that should be made as soon as possible when major disaster or epidemic comes suddenly. The lack of information integration makes high cost and low efficiency.

1.1 PROJECT DESCRIPTION

To construct DMDC, the common platform must be built, because a lot of heterogeneous systems are serving now as the hospital systems in the large medical therapy units. Meanwhile the heterogeneous management information systems are running in the government sectors. Similar to the community health units are holding the different small-scale information systems. These systems run well to support the daily work. It is very difficult and very cost to integrate the heterogeneous systems because of the different servers, different databases and different software architectures. The problems of maintenance are followed for the difference of ownerships of systems. However a solution is present in the model of DMDC above, it's not standing effectively for long time. The reason is that the case is relatively closed system based mainly on the intranet rather than opened system based on the Internet. No department can afford independently not only the running expense but also technology for the DMDC. Cloud computing can be the ability to rent servers and run the huge applications on the most powerful systems available anywhere in Internet. Even to rent a virtual server, load software on it, turn it on and off at will, or clone it many times to meet a sudden workload demand. The cloud computing can be supported by a cloud provider that sets up a platform that includes the different frameworks, the different OS, the different database and the different programming languages.

Chapter -2

PROBLEM DEFINITION

2.1 Existing System:

In the existing system there is lack of information integration. In various medical institutions the clinical information for the patients is scattered, fragmented and isolated; it results difficult to obtain the meaningful information.

2.2 Proposed System:

The proposed system is aimed at integrating information on population in some region, including various clinical diagnosis information and treatment information on patients in the different medical institutions, also covering the various basic information on health