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Role of Cloud Computing in Health Monitoring System

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Abstract:

Patient care is the focus of many clinical disciplines application but it is very complex as patient care is the essential information for direct patient care is defined on the applications. The present applications are not provide security on health monitoring system. The patient details are stored in cloud for the purpose of privacy and security but these are not retrieved accurate and not provide efficient privacy. However we are having major question in cloud health monitoring system What information does each professional generate? Where, when, and in what form is it needed?Even broader definitions of e-health and e-environment are used for describing processes in health care and the environment that are electronically / digitally covered, instead of just being available on the Internet. So this paper address above problem and solved the problem of patient health details are monitored very and retrospective analysis of patient-care data had become a priority need of all customers. So we are providing section health monitoring..
Key words:Mobile health (mHealth), Healthcare, Privacy, Outsourcing

I .Introduction:

The genesis of patient care systems occurred in the mid-1960's. One of the first and most successful systems was the Technicon Medical Information System (TMIS), begun in 1965 as a collaborative project between Lockheed and El Camino Hospital in Mountain View, California.Designed to simplify documentation through the use of standard order sets and care plans, TMIS defined the state of the art when it was developed. More than three ecades later, versions of TMIS are still widely used, but the technology has moved on. The hierarchical, menu-driven arrangement of information in TMIS required users to page through many screens to enter or retrieve data and precluded aggregation of data across patients for statistical analysis.Today's users have a different view of what can be done with data,and they demand systems that support those uses.Part of what changed users' expectations for patient care systems was the development and evolution of the HELP system at LDS Hospital in Salt Lake City, Utah Initially providing decision support to hysicians during the process of care (in addition to managing and storing data), HELP has subsequently become able to support nursing care decisions and to aggregate data for research leading to improved patient care. Today, both vendors of information systems and researchers in health care enterprises are working to incorporate decision support and data aggregation features in systems that use the latest technologies for navigating and linking information. Based on World Health Organization's Statistics (WHO) and other sources, chronicle diseases and psychological pressures are behind the death of 80% of elderly people (e.g. in Algeria).The greater part of elderly suffer from various chronic diseases.We plan to elucidate on how recent advancement in wireless communication and smartphone technology have empowered tremendous improvement in health monitoring services.Provide behavioral feedback about someone's health in order to prevent diseases.The consumers and healthcare service providers using smart phones are growing exponentially throughout last decade.The adoption of this technology is rapid; two-thirds of physicians and 42% of the public used smartphones as of late 2009. [1]As of February 2010, there were nearly 6,000 such apps within the Apple App Store. Of these, 73% were intended for use by consumer or patient end-users, while 27% were targeted to healthcare professionals.

II Related Work:

The basic CAM has the security enervation such as the identity representationset for a client's attribute vector v is known to trust authority and hence trust authority can easily infer the clients private attribute vector. Also it the client cannotprotect his privacy from the cloud either because the cloud can easily find out theidentity representation for the private key pkvi, iϵ[1, n] by running identity test in MDRQ. [1, 3, 4]. Modified system uses AES algorithm with hash functions whichincorporate message authentication code (MAC). It also comprises the variousmodules which communicate with each other for better integrity and uses simple userinterface.Existing Cloud-assisted mobile health (mHealth)monitoring, which applies the prevailing

mobilecommunications and cloud computing technologies to providefeedback decision support**[9],** has been considered as arevolutionary approach to improving the quality of healthcareservice while lowering the healthcare cost.But these systems depend completely upon the properoperation of their sensors. So they cannot be used along with the existing cardiac sensors of thebedside monitors in ICU, also a variation in the placement of the sensors of blood flow mightlead to false alarms or a critical condition being over looked.Most of current private telemonitoring schemes are dependent on anonymization techniques, which are deemed to be ineffective in the proposed scenario as we discussed before. Another line of work focuses on privacy preserving diagnostic programs . At the end of the protocol, a client obtains nothing on the diagnostic program but the diagnostic result while the program owner, i.e., the company obtains no information on the individual private data. All the existing solutions require a client to run multiple instances of oblivious transfer protocol with the company after setup phase,whichmeans the company has to stay online constantly. All the current solutions, are based on garbled circuits, which implies a client must download the whole circuit to his device and complete the decryption. Besides, the private computation or processing of medical information over cloud has also attracted attention from both the security community [3] and signal processing community.The flourish of m-Healthcare still faces manychallenges including information security and privacypreservation.TheSmartphone's energy could be insufficient when
an emergency takes place.

III **Proposed Work:**

In this system we are concentrated on wonderful health monitoring system like below levls.

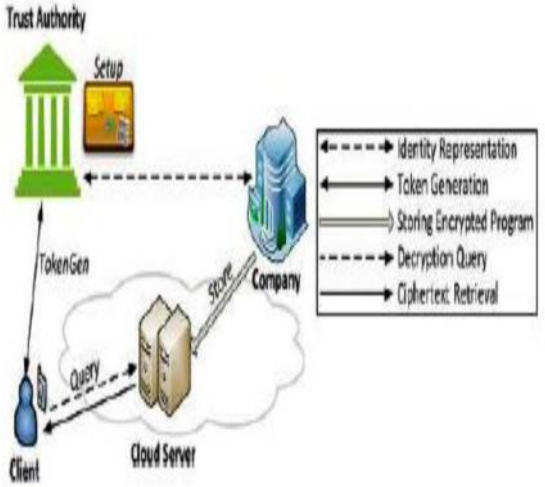

Fig 1:system architecture

This paper is to address this important problem and design a cloud-assisted privacy. It preserving mobile health monitoring system to protect the privacy of theinvolved parties and their data.The outsourcing decryption technique and a newly proposed key private proxy re encryption are adapted.It uses to shift the computational complexity of the involved parties to thecloud without compromising clients' privacy and service providers'intellectual property.Identity (ID)-based encryption, or IBE for short, is anexciting alternative to public-key encryption, which eliminates the need for a Public Key Infrastructure (PKI) thatmakes publicly available the mapping between identities,public keys, and validity of the latter. The senders using anIBE do not need to look up the public keys and thecorresponding certificates of the receivers, because the identities (e.g. emails or IP addresses) together with commonpublic parameters are sufficient for encryption.

IV **Conclusion:**

Cloud Computing technology provides human advantagessuch as economical cost reduction and effective resourcemanagement. However, if security accidents occur, economicdamages are inevitable. Our paper proposed "A secured
patient healthcare monitoring in cloud infrastructure" foreffective resource. Proposed method consists of IdentityBased Encryption (IBE) in which a master key helps todeliver the report and Outsourcing Decryption Technique inwhich a master key helps to viewing the prescription.

V Future Enhancements:

In future we can use some other encryption and decryptiontechniques and compare it with existing system. By thiscomparison we can find the accuracy which one gives moreprivacy in cloud storage. We have proposed secure cloudarchitecture to address the user privacy problem in a cloud.By using OTP and WTP in cloud computing system, ourproposed architecture achieves better goal of preserving theprivacy of a user [9].

VI **References:**

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