**ABSTRACT**

The Personal Health Record (PHR) is an emerging framework of health information exchange, which is often stored at cloud servers. The storage of personal medical and health information is usually outsourced to some third parties. But there are still various privacy problems as personal health information could be discovered to unauthorized people. To guarantee the patients control over to their own PHRs, it is a method to encrypt the PHRs before storing on cloud. But still issues such as risks of storing the confidential health information to cloud servers, efficiency in key administration, flexible access and efficient user administration, have still remained the important challenges toward achieving better, cryptographically imposed data access control.. Therefore, we propose a methodology for secure sharing of the PHRs in the cloud. This method ensures patient-centric control on the PHRs and preserves the confidentiality of the PHRs. Here the Blowfish algorithm is used to encrypt PHRs records using the symmetric key obtained from respective PHR owners. The patients store the encrypted PHRs on the un-trusted cloud servers and grant access to users on PHRs. In this system, we try to deploy a method to focus primarily on key security that highly reduce the key management complication for owners and users. In this system patient privacy is guaranteed by exploiting Blowfish algorithm.