

# SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Sheriguda(V), Ibrahimpatnam(M), R.R District

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### PROJECT :02

#### *SeSPHR: A Methodology For Secure Sharing Of Personal Health Records In The Cloud*

#### **Abstract**

The widespread acceptance of cloud based services in the healthcare sector has resulted in cost effective and convenient exchange of Personal Health Records (PHRs) among several participating entities of the e-Health systems. Nevertheless, storing the confidential health information to cloud servers is susceptible to revelation or theft and calls for the development of methodologies that ensure the privacy of the PHRs. Therefore, we propose a methodology called SeSPHR for secure sharing of the PHRs in the cloud. The SeSPHR scheme ensures patient-centric control on the PHRs and preserves the confidentiality of the PHRs. The patients store the encrypted PHRs on the un-trusted cloud servers and selectively grant access to different types of users on different portions of the PHRs. A semi-trusted proxy called Setup and Re-encryption Server (SRS) is introduced to set up the public/private key pairs and to produce the re-encryption keys. Moreover, the methodology is secure against insider threats and also enforces a forward and backward access control. Furthermore, we formally analyze and verify the working of SeSPHR methodology through the High Level Petri Nets (HLPN). Performance evaluation regarding time consumption indicates that the SeSPHR methodology has potential to be employed for securely sharing the PHRs in the cloud

Roll Number	Name of the student	Internal Guide Name
15X31A0567	G.MOUNIKA	<b>R.CHANDRASHEKAR</b>
15X31A05B4	V.MOUNIKA	
15X31A05B7	N.SREEVENI	

