Abstract

With the increase in lifespan and sedentary lifestyle of people, there is an increase in demand for remote healthcare. Wireless body area network (WBAN) is a health monitoring technology in which sensors are attached to or implanted in various parts of the human for remote monitoring of different body parameters. The patient data thus obtained is private and confidential. The Cost effective Energy efficient and Secure Routing protocol (CESR) is an enhancement of Reliable Adhoc on-demand Distance Vector (RelAODV) protocol from literature, where the data is encrypted using RSA encryption scheme, thus enhancing its security. A cost function is formulated to select the minimum cost value forwarder node to enhance energy efficiency. Performance of the CESR is analyzed using MATLAB and the results show increase in reliability and security of the enhanced approach.

References

1. Syed Furqan Qadri; Salman Afsar Awan; Muhammad Amjad; Masood Anwar; Suneel
Cost Effective Energy Efficient and Secure Routing Protocol (CESR) for WBAN


15. Jun Zhou et.al. 4S: A secure and privacy-preserving key management scheme for cloud-assisted wireless body area network in m-healthcare social networks.


**Index Terms**

Computer Science  Wireless

**Keywords**