1. REVIEW OF LITERATURE

1. **Chau and Hu (2002)**, studied about the healthcare professional’s perception in accepting the telemedicine technology and identified essential factors for accepting it. The future scope of research can be identifying the resource allocation and various means of improving the service effectiveness.

2. **Zheng et al. (2005)**, studied about the behavior of receipt and espousal of clinical system from the perspective of clinicians for continual sickness and precautionary care management. The technology tested is useful for taking appointment of the doctor; information of the patient can be browsed, reminding the doctor’s directions, for recording the significant symptoms. It was found that there was a larger confrontation.

3. **Pal et al. (2005)**, identified telemedicine as a provision for offering medical services and counselling through the modern means of communication. In countries like India, where large number of patients comes from rural areas and most doctors are concentrated in urban areas, telemedicine proves to be useful. However, implementation of this method is quite difficult.

4. **Gans et al. (2005)**, studied about the current use of technology by medical practitioners and future studies need to conduct on clinical staff, administrators and other staff for better understanding of technology adoption for healthcare service.

5. **Mishra et al. (2006)**, revealed that the medical and health service sector is facing a problem in covering the nations populous entirely but, due to the number of people involved in it seems to be an impossible task for majority of the population to access the quality, experienced and doctors and experts. Consequently, with the introduction of telemedicine in India this has become a major factor in supporting the medical sector and has done quite a fine job but it seems to be difficult even with existing wide connectivity.

6. **Kapoor et al. (2007)**, the adoption of telemedicine increases the healthcare service delivery in the future and reduces the pressure on the government and doctors. Telemedicine is an application of Information and Communication Technology in the field of medicine when receiver and provider are separated by distance.

7. **Zaidi (2008)**, measured the clinician’s perceptions and usefulness of a web based antibiotic approval system and the future need to be carried on the adoption of other
technologies. It was identified that there was acceleration in the usage of electronic health records due to government policy but the complexity in implementation should be properly understand. The developers should understand the requirements of the doctors and workflow.

8. **Tung Et Al (2008)**, assessed the present level of electronic health records usage by ophthalmologists; the adoption and satisfaction levels are studied and observed low rate of adoption. Unless and until the developers understand the clinicians and doctors the adoption of electronic health records cannot be promoted.

9. **Morton and Wiedenbeck (2009)**, would like to know the doctor’s perception on the acceptance of electronic health records and tried to identify the technical, social and individual characters’ influence on the technology adoption; tested on Technology Adoption Model. The doctors’ personal characters include age, experience, prior computer usage, health system affiliation and health system portal, where as social factors include management support, physician involvement, physician autonomy, training and doctor patient relationship.

10. **Devine Et Al (2010)**, studied about the strong inner feelings of doctors on the adoption of electronic health records in primary healthcare. The study covers finesse, intention to use, perceived usefulness and perceived ease of use and identified a shift from manual prescription to e-prescription. As per the changing environment and intentions to use is voluntary. Some problems identified during initial stages such as anxiety, hesitation, confusion, apprehension and usage of computer.

11. **Holden and Karsh (2010)**, stated that the use of electronic health records and telemedicine was tested on technology adoption model from the perspective of doctors, nurses and clinical staff and the need to be tested on extended Technology Adoption Model that is Unified Theory of Acceptance and Use of Technology. The objective of this study was to determine the individual characteristics and the social and technical factors that may contribute to physician acceptance of Electronic Health Records.

12. **Zhang Et Al (2010)**, investigated on the main factors for adoption of wireless mobile information and communication technology in nursing and the future study can be carried on technology adoption. The study is successful in recognizing the beneficiaries
of technology adoption. The future study can be carried out on the requirements of doctors and staff.

13. **Attas Et Al (2012)**, studied about different ways of applying telemedicine for home based healthcare as its importance increasing among patients and society. As the study was conducted only on the doctors’ perspective the future study can be conducted from the perspective of other users of hospitals like clinical staff and nurses; the study tried to address the efficiency and workflow of clinicians from the doctors’ perspective using technology adoption model it can also be tested using unified theory of adoption and use of technology from the perspective of doctors, nurses and clinical staff.

14. **Rho and Choi (2013)**, examined the telemedicine services from public and private healthcare organizations and revealed that they need to be developed differently. The US government spent huge money on implementation and execution of technology in healthcare but there are many barriers for its adoption to clinicians.

15. **Bickmore Et Al (2013)**, examined the clinical staff perception on the adoption of technology for healthcare services. Professionals seem to be afraid of technology due to an assumption that technology will replace them, so resisted the technology. When it comes to nurses’ majority of them significantly showed interest on technology adoption. The earlier researches on technology adoption to healthcare found that the intention and actual use of technology is voluntary.

16. **Alexander G. Fiks (2007)**, concluded that an electronic health record– based clinical alert intervention was associated with increases in captured opportunities for vaccination at both sick and well visits and significant improvements in immunization rates at 2 years of age. As electronic health records become more common in medical practice, such systems may transform immunization delivery to children.

17. **Michael Klompas, MD, MPH (2012)**, The ESP surveillance platform serves as a useful model for how EMRs can enable primary care providers to engage with public health departments without complicating existing workflows or incurring extra work. The ESP platform enables clinicians to provide high quality surveillance data on notifiable diseases, influenza-like illness, and diabetes to public health agencies. EMR-based surveillance helps health departments acquire rich and timely data on broader
populations and wider sets of health indicators than is routinely possible with current surveillance systems.

18. Charles Safran (2000), said wide adoption of Internet technologies should allow truly distributed sharing of patient data across traditional organizational barriers. Hence, the meaning of an EPR, as a representation of documents, should be transformed into a collaborative environment that supports workflow, enables new care models and allows secure access to distributed health data.

19. Nancy M Lorenzi and Angelina Kouroubali (2009), said ambulatory practices are drawn toward teamwork, quality healthcare, patient information and support, and meeting patient needs. The EHR implementation experience depends on a variety of factors such as the technology, training, leadership, the change management process, and the individual character of each ambulatory practice office environment. The combination of these factors leads to differing implementation experiences.

20. Julie J. McGowan, Caitlin M. Cusack and Eric G. Poon (2008), says there is a growing mandate for health care organizations to implement EHR systems to address patient safety and quality of care. There is some evidence that computerized medical records systems can improve health care delivery but there is little research to directly link EHRs to patient care outcomes other than through proxy measures. However, with federal dollars supporting many initiatives to automate medical offices, an infrastructure could be built that would provide the foundation for future research in this area.

21. Albert Boonstra (2013), says that the existing literature fails to provide evidence of there being a comprehensive approach to implementing EHR systems in hospitals that integrates relevant aspects into an ‘EHR change approach’. The literature is diffuse, and articles seldom build on earlier ones to increase the theoretical knowledge on EHR implementation, notable exceptions.

22. James M. Walker and Pascale Carayon (2008), concluded that knowledge of how to develop, implement, and continuously improve EHRs for patient safety is currently limited and not accessible to most health care organizations. Health care organizations, EHR vendors and assessors, health care informaticians, safety engineers, human factors engineers, and other stakeholders must organize and disseminate what is currently known and create a reporting system that will advance understanding of EHR-
related safety flaws. They must work together to advance EHR safety knowledge and practices so that no patient is harmed by an EHR.

23. Susan Rea and Jyotishman Pathak (2011), stated that a prototype platform was implemented from the developing SHARPn framework to perform secure transport, data normalization and common phenotyping services on disparate EHR data. A demonstration of data throughput from two large organizations was conducted to test the design and inform future development.

24. Michael F. Furukawa, Jennifer King and Vaishali Patel (2014), says that we found that the passage of HITECH in 2009 there has been steady growth in the adoption of EHR systems among office-based physicians. Nonetheless, there is substantial work ahead, since about half of these providers have yet to adopt at least a basic EHR. The rates of adoption varied by practice size and ownership in 2013.

25. A. L. Rector, W. A. Nolan and S. Kay (1991), says it was an attempt to step back from assumptions which originated in the limitations of previous hardware and software and in the origins of many medical records systems as support for research, epidemiology, or financial management. As a result, it sees the medical record as much more than a series of date-stamped codes.

26. Pare Et Al (1999), studied the acceptance of clinical information system from doctor’s perspective. It was observed that even after lot of effort doctors are not interested to adopt CIS and doctor’s perception on patient order entry system is positive about ‘ease’ and ‘use’.

27. Chau and Hu (1999), examined the acceptance of telemedicine by doctors. The researchers used theory of planned behavior to find out the attitude and intention to use the telemedicine. The attitude and perceived behavior control are found to be significant factors to accept the technology.

28. Fisher (2002), reviewed the application technology acceptance model to healthcare specific on the acceptance of management information system among pediatricians. It was observed that TAM predicts a substantial portion of the use of acceptance of health information technology. There is a lack of standardization due to variance in TAM, TAM2 and UTAUT
29. **Chismar and Wiley-Patton (2002)**, tested the TAM and TAM2 for the online children specialists. It was observed that the *perception of doctor’s plays an important* element in technology adoption but found its adoption as low. The technology tested is useful for taking appointment of the doctor; information of the patient can be browsed, reminding the doctors’ directions, for recording the significant symptoms. It was found that there was a larger confrontation.

30. **Liang Et Al (2003)**, examined the perceptions of hospital employees on personal digital assistance using technology acceptance model. It was observed that *innovativeness, job relevance and compatibility* affects usage and its determinants explained 61 per cent of variance.

31. **Horan Et Al (2004)**, studied the doctor’s acceptance of online disability evaluation system. The information technology infrastructure, doctors’ experience, organizational process and general attitude on technology will influence the *behavioral intention to use*, but attitude found to be less important when compared to other factors of behavioral intention.

32. **Han (2005)**, studied the finish physician’s perception on the adoption of information systems; a test of TAM and UTAUT. The research concentrated on the effect of *perception on compatibility* and future behavior. The behavior was affected by *perceived usefulness* and this affect the *intention to use*.

33. **Zheng Et Al (2005)**, studied about the behavior of receipt and espousal of clinical system from the perspective of clinicians for continual sickness and precautionary care management. The research carried out for both quantitative and qualitatively i.e. receipt and espousal of technology and the mind-set as well as relatedness of the technology.

34. **Berlin Et Al (2006)**, studied about uses of clinical decision support system and online execution. It was recorded that as CDSS is heterogeneous in nature the acceptance and use need to be tested in clinical or workflow.

35. **Chaudhry Et Al (2006)**, reviewed the effect of health information technology on quality, efficiency and cost. It was identified that preventive healthcare is improved by basic healthcare, improved surveillance and monitoring. Four benchmark institutions have demonstrated the efficacy of health information technologies in improving quality
and efficiency. Whether and how other institutions can achieve similar benefits, and at what costs, are unclear.