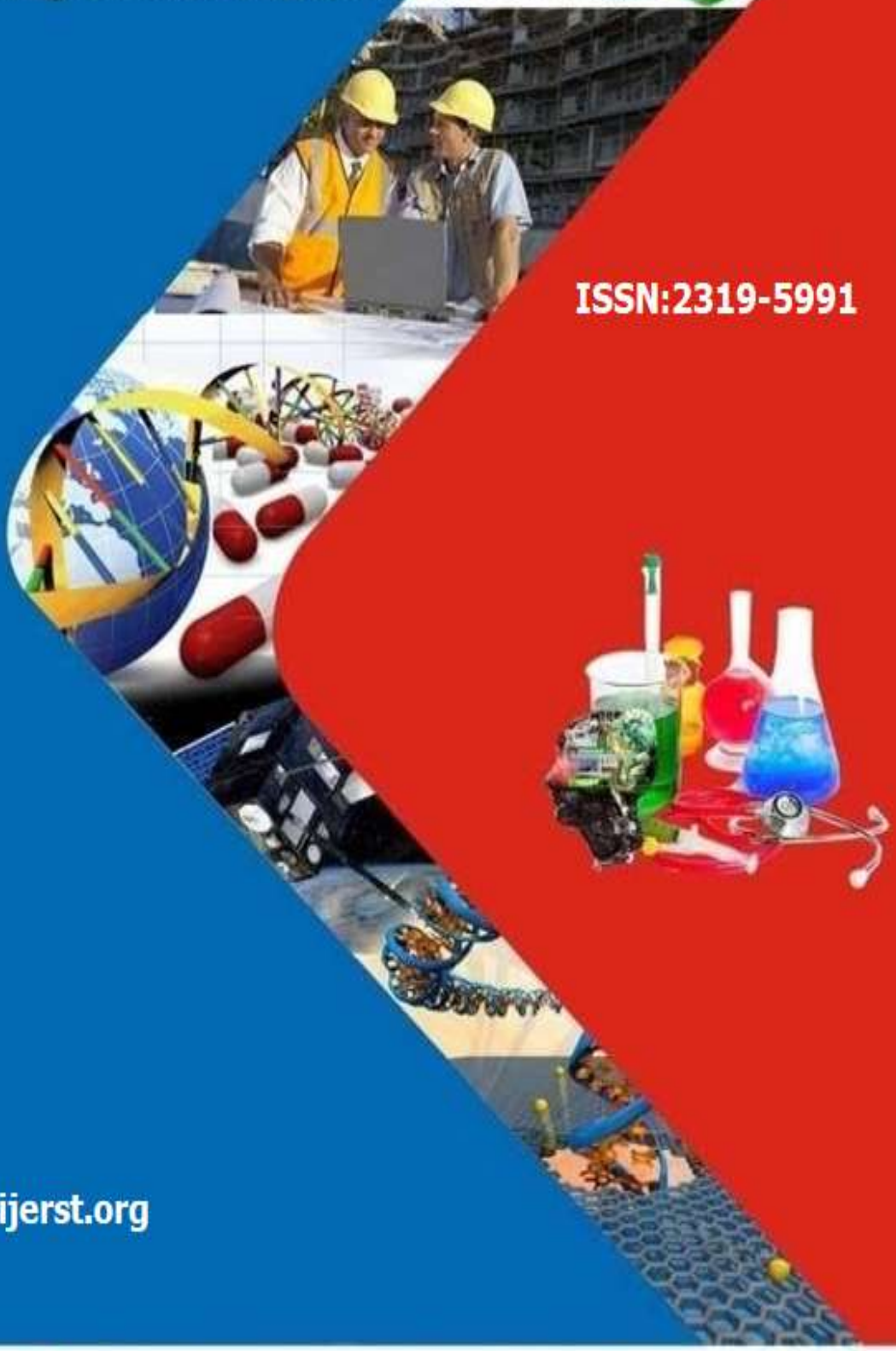
International Journal of Engineering Research and Science & Technology

IJERST

ISSN:2319-5991



www.ijerst.org

E-mail: editor@ijerst.org or ijerst.editor@gmail.com

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

MONITORING HEALTHCARE RESOURCES IN GOVERNMENT HOSPITALS

1Mrs. B. GOUTHAMI, 2G.SAI LAHARI, 3V. LATHA, 4S. SUKUMAR REDDY, 5CH.BHARATH KUMAR

1Assistant Professor, Department of CSE, Sri Indu College of Engineering and Technology-Hyderabad

2345Under Graduate, Department of CSIT, Sri Indu College of Engineering and Technology-Hyderabad

ABSTRACT

Government hospitals provide medicines for the treatment to the patients based on the diagnosis. Generally government hospitals stores all the patients historical data and current data in cloud .In our system user can register with there details, which is stored to the admin's database. This system allows the user to view the hospital location using predictive algorithm and details about the hospital such as doctors, medicines , specialists availability and also helps the patient to get details about the government hospitals. Financial and administrative performance are improved by high utilization of resources and reduced fraud and abuses and optimized by supply chain and human capital management.

I. INTRODUCTION

The health monitoring system is employed as the method to measure the observation data. The system introduced smart healthcare to monitor the basic important signs of patients like heart rate, body temperature etc. It's a system that helps in managing patient health records, appointments, and medical history. It allows doctors and healthcare providers to access patient information quickly and securely, improving the quality and speed of care. It helps in tracking of disease outbreaks and helps in implementing preventive measures to control the spread of diseases.

The hospital which is government owned and is fully funded by the government and operates solely off the money that is collected from taxpayers to fund healthcare initiatives. The government also operates several hospitals and health clinics that provide healthcare to the general public and certain groups, such as the military and the poor. Government health facilities are called public health facilities because of two reasons. Tax money is used to maintain it. All people can avail health services in government run health centres/hospitals.

It is the responsibility of the government to provide quality healthcare services to all its citizens, especially the poor and the disadvantaged. It is important to work on public health facilities as well as on basic amenities in order to improve the health situation of our people. There is one more case State of Bombay v. Hospital Mazdoor Sabha 1960 in this case, the judgement of the court stated that hospital is a profit-making industry and it also comes under the preview of industry definition. So, is considered as an industry.

Every state government has Health Care Centres in villages and multi-speciality hospitals in large metros, which provide free or low-cost healthcare facilities such as treatment of diseases, conducting an essential test and providing medicines.

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

It is the responsibility of the government to improve the infrastructural resources which includes the availability of water, electrical grid, telecommunication, road etc. The central government allocates budget to State Government for these functions.

The Planning Commission of India among its various functions formulates a plan for the most effective and balanced utilization of the country's resources. Every state has its own State Planning Commission. The State Planning Commission, in addition to other functions, is primarily responsible for giving necessary support to all the Urban Local Bodies. It is the responsibility of the government to prevent and treat illness, provide proper health facilities like health centres, hospitals, laboratories for testing, ambulance services, blood bank and so on for all people. These services should be within the reach of every patient of the remotest corners. of the population, often serving as primary healthcare providers, especially for underserved care, it is essential to establish robust monitoring mechanisms. ensure that patients receive appropriate care. Effective healthcare relies on access to essential budgets. Effective monitoring ensures that financial resources are allocated optimally to covern resource monitoring. resource monitoring relies on accurate data collection and analysis. Implementing electronic health records (EHR) and health information systems can help track patient information, treatment outcomes, and resource utilization effectively.

Government hospitals must adhere to various regulations and standards to ensure patient safety and quality of care. Monitoring compliance with these regulations is essential to avoid legal and reputational issues. Hospitals must be prepared for emergencies, including natural disasters and public health crises. Monitoring the availability of emergency resources and response plans is critical to ensure a timely and effective response. Engaging with the community and gathering feedback is vital for understanding their healthcare needs and improving services. Monitoring patient satisfaction and conducting outreach programs can foster trust and cooperation.

The dramatic changes and challenges which took place during the last four decades of the 20th century have greatly affected, and led to a repositioning of, the role of governments in health as well as other social sectors. Moves towards democracy, decentralization and a more active role for civil society in governance, and the growing importance of the private sector in socioeconomic development, have been accompanied by policy changes reflecting more privatization, a more restricted role of government in policy development, strategic planning and management, and greater reliance on market forces. However, the case of the health sector is distinctive from other sectors, as market forces fail to address properly the health needs of populations, for various reasons, leaving governments with special responsibilities in health development. As a consequence of market failures, governments have an obligation to intervene in order to improve both equity and efficiency, to carry out important public health functions and to produce vital public goods which have a lot of bearing on health development. Moreover health is perceived in the Region and elsewhere, not merely as a market commodity, but as a basic human need and a social right, as stated in many constitutions and signed treaties.

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

Such commitment entails significant roles and responsibilities for governments, despite changing political and social environments.

Governments in the Eastern Mediterranean Region receive conflicting messages with respect to their changing roles and responsibilities in the field of health. On the one hand, market economy policies favour restricted government intervention in both health care financing and delivery of services. On the other hand there is evidence to show that poverty is increasing in the Region, coverage by social protection is not improving, and inequities in access to quality health care are on the increase. Such a situation calls for a more proactive role from governments in various areas, including governance, financing and service delivery, in order to protect equity and other societal values. This discussion paper aims at shedding some light on the evolution of the role and responsibility of governments in health development and highlights the challenges facing them worldwide and in the Region. The paper describes the major trends emerging in the WHO Eastern Mediterranean Region in relation to the role of government in health development and suggests some directions for the future.

II. LITERATURE SURVEY

TITLE: Three methods to monitor utilisation of healthcare services by the poor

AUTHORS: Abbas Bhuiya , SMA Hanifi , Farhana Urni

ABSTRACT: Achieving equity by way of improving the condition of the economically poor or otherwise disadvantaged is among the core goals of con- temporary development paradigm. This places importance on monitoring outcome indicators among the poor. National surveys allow disaggregation of outcomes by socioeconomic status at national level and do not have statistical adequacy to provide estimates for lower level administrative units. This limits the utility of these data for programme managers to know how well particular services are reaching the poor at the lowest level. Managers are thus left without a tool for monitoring results for the poor at lower levels. This paper demonstrates that with some extra efforts community and facility based data at the lower level can be used to monitor utilization of healthcare services by the poor.

TITLE: A Management information system to plan and monitor the delivery of healthcare services in government hospitals in India.

AUTHORS: KV. Ramani

ABSTRACT: Governments all over the world are getting increasingly concerned about their ability to meet their social obligations in the health sector. In this paper, we discuss the design and development of a management information system (MIS) to plan and monitor the delivery of healthcare services in government hospitals in India. Our MIS design is based on an understanding of the working of several municipal district, and state government hospitals. In order to understand the magnitude and complexity of various issues faced by the government hospitals, we analyse the working of three large tertiary care hospitals administered by the Ahmedabad Municipal Corporation. The hospital managers are very concerned about the lack of hospital infrastructure and resources to provide a satisfactory level of service.

TITLE: Queuing Models for Out-Patient Appointment Systems.

AUTHORS: M. Brahimi

ABSTRACT: Some recent research on queuing models is successfully applied to the problem

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

of designing an appropriate appointment system for the out-patient department at the Royal In order to understand the magnitude and complexity of various issues faced by the government hospitals,

Municipal Corporation. The hospital managers are very concerned about the lack of hospital infrastructure and resources to provide a satisfactory level of service.

TITLE: Comparative Analysis of Government Healthcare Systems Worldwide: Resource Management Perspectives

AUTHOR: Emily R. White, Michael K. Brown

ABSTRACT: Authored by White and Brown, this section provides an in-depth examination of government healthcare systems globally, emphasizing common features and challenges. It investigates how different countries manage and allocate healthcare resources within their respective systems.

TITLE: Categorizing and Optimizing Healthcare Resources: A Literature Synthesis

AUTHOR: Jessica M. Anderson, David C. Roberts

ABSTRACT: This segment, written by Anderson and Roberts, categorizes healthcare resources into personnel, infrastructure, financial, and technological aspects. It critically reviews existing literature to analyze challenges and strategies associated with managing each resource.

III. SYSTEM ANALYSIS

EXISTING SYSTEM

In this existing system, manual record-keeping, which can be time consuming and easy approach. Limited access to patient information and difficulty in tracking medical supplies are some challenges. The Health Monitoring System aims to address these issues and improve overall efficiency, Some recent research on queuing models is successfully applied to the problem of designing an appropriate appointment system for the out-patient department at the Royal In order to understand the magnitude and complexity of various issues faced by the government hospitals, we analyse the working of three large tertiary care hospitals administered by the Ahmedabad Municipal Corporation. The hospital managers are very concerned about the lack of hospital infrastructure and resources to provide a satisfactory level of service. Governments all over the world are getting increasingly concerned about their ability to meet their social obligations in the health sector. In this paper, we discuss the design and development of a management information system (MIS) to plan and monitor the delivery of healthcare services in government hospitals in India. Our MIS design is based on an understanding of the working of several municipal district, and state government hospitals. In order to understand the magnitude and complexity of various issues faced by the government hospitals, we analyse the working of three large tertiary care hospitals administered. The hospital managers are very concerned about the lack of hospital infrastructure and resources to provide a satisfactory level of service.

LIMITATIONS

- Spend more time
- Inefficient appointment scheduling
- Difficult in managing medicalsupplies
- No proper response

PROPOSED SYSTEM

This proposed system will digitize patient records, streamline appointment scheduling, and improve inventory management. Out application register all the data with hospital name and doctor name with their speciality and

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

medicine available in hospitals. The goal is to enhance efficiency, patient care, and overall healthcare services. Public health initiatives that affect people in all states, such as the National Health Mission, Ayushman Bharat, National Mental Health Program, are instilled by the Union Ministry of Health and Family Welfare. There are multiple systems set up in rural and urban areas of India including Primary Health Centres, Community Health Centres, Sub Centres, and Government Hospitals. These programmes must follow the standards set by Indian Public Health Standards documents that are revised when needed. Wide range of services: Government hospitals often provide a wide range of services, from primary care to specialized treatments, which can be beneficial for patients with complex medical conditions.

Availability: Government hospitals are usually located in areas with a high demand for healthcare services, making them more accessible to patients in remote or underserved communities.

Emergency services: Government hospitals often have dedicated emergency departments that can provide prompt care for patients experiencing a medical emergency.

Provider availability: Government hospitals often employ a large number of medical professionals, which can increase the likelihood of a patient finding a provider with the necessary expertise to treat their condition.

IV. IMPLEMENTATION AND RESULTS

MODULE DESCRIPTION

Admin: In this application admin is the main module, here admin can login directly, after successful login admin can perform some operations such as view User details, add government hospitals, add doctor, add medicine and logout.

User: In this application user is a module here user should register with the application and after successful login user can perform some actions such as view profile, search hospital, view doctor details, view medicine details and logout.

SOFTWAREENVIRONMENT

With most programming languages, you either compile or interpret a program so that you can run it on your computer. The Java programming language is unusual in that a program is both compiled and interpreted. With the compiler, first you translate a program into an intermediate language called Java byte codes —the platform-independent codes interpreted by the interpreter on the Java platform. The interpreter parses and runs each Java byte code instruction on the computer. Compilation happens just once; interpretation occurs each time the program is executed. The following figure illustrates how this works.

V. CONCLUSION

The goal of this project is to enhance efficiency, patient care and overall health services. In conclusion, monitoring healthcare resources in government hospitals is essential for ensuring efficient and effective healthcare delivery. By implementing robust monitoring

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

systems, governments can optimize resource allocation, improve patient care, enhanceoverallhealthcareoutcomes. Regular assessments, data analysis, and transparency in resource management are vital to address the evolving healthcare needs of the population and to ensure that resources are used wisely and equitably. Ultimately, effective monitoring of healthcare resources in government hospitals contributes to the betterment of public health and the well-being of communities. With some extra efforts monitoring of the utilization of healthcare services by the poor at the facilities can be done reliably. If monitored, the findings can guide the programme and facility managers to act in a t imely fashion to improve the effectiveness of the programme in reaching the poor.

REFERENCES

1. INDEPTH Network http://www.indepth-network.org/

2. Bhuiya A, Hanifi SMA, Urni F, Iqbal M. Scientific report no 105. Dhaka: ICDDR, B; 2008. Chakaria Health and Demographic Surveillance System: Focusing on the poor and vulnerable. Demographic events and safe motherhood practices-2007; p. 47. [Google Scholar]

3. Bhuiya A, ed. Health for the rural masses: Insights from Chakaria.Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh; 2009. [Google Scholar]

4. Filmer D, Pritchett L. Estimating wealth effect without expenditure data- or tears: An application to educational enrolments in states of India. Demography. 2001; 38: 115–132. [PubMed] [Google Scholar]

5. GwatkinDR, Rustein S,Johnson K, Suliman EA, Wagstaff A. Technical report, World Bank. Vol.

1. Armenia- Kyrgyz Republic; 2003. Socio-economic differences in health, nutrition, and population; p.
400. [GoogleScholar]

6. Hotelling H. Analysis of a complex of statistical variables into principal components. J Educ Psychol. 1933; 24: 417–441. doi: 10.1037/h0071325. [CrossRef] [Google Scholar]

7. Howe LD, Hargreaves JR, Huttly SR. Issues in the construction of wealth indices for the measurement of socio-economic position in low-income countries. Emerg Themes

8. KakwaniNC, WagstaffA, Doorlsaer EV. Socioeconomic inequalities in health: Measurement, computation and statistical inference. J Econom. 1997; 77: 87–
104. doi: 10.1016/S0304- 4076(96)01807-6. [CrossRef] [Google Scholar]

9. Pan American Health Organization (PAHO) Measuring Inequalities in Health: Gini Coefficientand Concentration Index. EpidemiologicalBulletin. 2001; 22 :3–4. [PubMed] [Google Scholar]

10. Wagstaff A, Paci P, Van Doorslaer E. On the measurement of inequalities in health. Soc Sci Med. 1991; 33: 545–557. doi : 10.1016/0277- 9536(91)90212-U. [PubMed] [CrossRef] [Google
Scholar]

11. Anand S, Diderichsen F, Evans T, Shkolnikov VM, Wirth M. Measuring disparities in health: Methods and indicators. In: Evans T, Whitehead M, Diderichsen F, Bhuiya A, Wirth M, editor. Challenging inequities in health: from ethics to action. New York: Oxford University Press; 2001. [Google Schola]

12. Gasparini L, Panadeiros M. Argentina: Assessment of changes in the distribution of benefits from health and nutrition policies. In:

ISSN 2319-5991 www.ijerst.com

Vol. 21, Issue 2, 2025

Gwatkin D, Wagstaff A, Yazbeck A, editor. Reaching the Poor with Health Services. The World Bank; 2005. [Google Scholar]

13. Bhuiya A, Hanifi SMA, Chowdhury M, Jahangir M, Gwatkin DR. Rapid Methods for monitoring the utilization of healthcare facilities by the poor: Findings from a pilot project in rural Bangladesh. Future Health Systems Working Paper No 2, Bangladesh Series. 2007.

14. Wald A. SequentialAnalysis. New York: John WileySons, Inc; 1947. [Google Scholar]