ISSN: 2457-0400

Impact Factor: 7.675

WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH

www.wjahr.com

Volume: 10, Issue: 7

Page N. 72-79

Year: 2026

Research Article

Coden USA: WJAMA3

COMPARATIVE ANALYSIS OF MEDICAL RECORD-KEEPING PRACTICES IN PUBLIC AND PRIVATE HOSPITALS IN BANGLADESH: IMPLICATIONS FOR HEALTH SYSTEM QUALITY

[*1]Jay Priya Barua, [2]Ratna Das, [3]Tripti Rani Dey

[1]Nursing Instructor in-charge, Nursing and Midwifery College, Cox's Bazar, Bangladesh.
[2]Nursing Instructor, Chattogram Nursing College, Bangladesh.
[3]Tripti Rani Dey, Nursing Instructor, Chattogram Nursing College.

Article Received: 19 May 2026 **Article Revised:** 09 June 2026 **Article Published:** 01 July 2026

***Corresponding Author: Jay Priya Barua**
Nursing Instructor in-charge, Nursing and Midwifery College, Cox's Bazar, Bangladesh.
Email ID: jpbarua2007@gmail.com
DOI: https://doi.org/10.5281/zenodo.21022857

How to cite this Article: [*1]Jay Priya Barua, [2]Ratna Das, [3]Tripti Rani Dey (2026). Comparative Analysis Of Medical Record-Keeping Practices In Public And Private Hospitals In Bangladesh: Implications For Health System Quality. World Journal of Advance Healthcare Research, 10(7), 72–79.

ABSTRACT

Background: Medical record-keeping is a fundamental component of health information systems, directly influencing the quality, continuity, and efficiency of healthcare delivery. In Bangladesh, disparities between public and private healthcare sectors in record management practices remain insufficiently explored. **Objective:** To compare medical record-keeping practices between public and private hospitals in Bangladesh and assess their implications for health system quality. **Methods:** A comparative cross-sectional study was conducted among hospital staff, patients, and patient attendants in selected public and private hospitals in Bangladesh. Data were collected using structured questionnaires and observation checklists focusing on system performance, infrastructure, user experience, and satisfaction. Statistical analyses, including descriptive statistics and inferential tests (t-test and chi-square), were performed to determine differences between groups. **Results:** Significant differences were observed between public and private hospitals in terms of infrastructure, ICT support, and system usability ($p<0.005$). Public hospitals faced major challenges such as limited ICT resources, inadequate training, and slow system performance, whereas private hospitals demonstrated relatively better system functionality. However, public hospitals reported higher mean satisfaction scores in medical record-keeping (3.675 ± 0.47) compared to private hospitals (3.163 ± 0.62), with a statistically significant mean difference of 0.512 ($p<0.001$). Socio-demographic factors, particularly income and occupation, were also significantly associated with hospital utilization patterns. **Conclusion:** Medical record-keeping practices differ substantially between public and private hospitals in Bangladesh. Strengthening ICT infrastructure, improving workforce capacity, and ensuring system standardization are essential to enhance data quality, efficiency, and overall healthcare service delivery.

KEYWORDS: Medical Record-Keeping, Health Information Systems, Public Hospitals, Private Hospitals, Bangladesh, Healthcare Quality.

INTRODUCTION AND BACKGROUND

Healthcare systems worldwide are increasingly characterized by the rapid integration of information technology into patient care, documentation, coding, billing, and administrative management. The adoption of medical information systems has significantly improved the efficiency of healthcare delivery, reduced medical errors, enhanced quality of care, and strengthened communication between patients and healthcare providers (Pollak, 2007). Globally, more than two-thirds of hospitals in high-income countries have implemented Electronic Health Record (EHR) systems; however, adoption remains uneven in low-and middle-income countries (LMICs), where resource constraints and infrastructural limitations hinder widespread implementation.

The growing economic burden of healthcare and its critical role in improving population health have made it an important area of interdisciplinary research.

Information systems offer substantial potential for managing healthcare costs while improving service quality and patient outcomes (Kolodner et al., 2008). Healthcare delivery directly influences individuals' quality of life and societal productivity, and medical errors can have severe consequences for both patients and healthcare systems (Piontek et al., 2010). Recent evidence continues to highlight the prevalence of adverse events in healthcare settings, underscoring the need for robust and reliable health information systems. Over the past decade, advancements in medical information technologies have transformed healthcare systems globally, although disparities between institutions and sectors persist (Abraham, 2011).

Medical record-keeping practices are fundamental to ensuring quality healthcare service delivery across all healthcare institutions. Health information serves as a cornerstone for clinical decision-making, patient management, and organizational performance. Effective healthcare delivery depends not only on the knowledge and skills of healthcare professionals but also on the availability of accurate and well-managed patient data. Hospitals generate diverse forms of health information, including clinical notes, diagnostic images, laboratory reports, prescriptions, and administrative data (Collen, 2015). These records must be systematically organized and managed using standardized procedures, whether maintained in paper-based or electronic formats.

Proper medical records management requires consistent control throughout the lifecycle of records-from creation and storage to retrieval and eventual disposal or archival. This includes compliance with regulatory standards governing the handling, confidentiality, and security of patient information (Bakare, 2016; De Mingo, 2018). Medical records not only support clinical care but also serve as essential tools for accountability, legal documentation, research, and health system planning (Braa, 2007). They provide comprehensive patient information, including medical history, diagnostic findings, treatment interventions, medication records, and follow-up care (Bansal, 2020).

Ensuring the security and confidentiality of medical records is a fundamental requirement in healthcare systems. Unauthorized access or misuse of patient data can result in ethical breaches, legal consequences, and compromised patient safety. Therefore, healthcare institutions must implement strict measures to safeguard health information, including ensuring data confidentiality, integrity, and availability; protecting against security threats; and enforcing compliance with privacy policies among healthcare personnel (NHP, 2018).

Differences in medical record-keeping practices may exist between public and private hospitals due to variations in organizational structure, resource availability, and management practices. Previous studies have reported mixed findings regarding the influence of hospital ownership on management efficiency and patient outcomes (Baker et al., 2000). While competitive environments may reduce disparities, variations in infrastructure, administrative capacity, and regulatory compliance often persist. Studies in public sector management further highlight differences in organizational performance associated with management practices and institutional capacity (White, 2013; Bryson, 2018).

In Bangladesh, the healthcare system comprises both a large public sector and a rapidly expanding private sector. Despite recent policy initiatives promoting digital health, the adoption of standardized medical record-keeping systems remains inconsistent. Most public hospitals continue to rely heavily on paper-based records, while only a limited number of tertiary and private hospitals have partially implemented electronic systems. Common challenges include inadequate infrastructure, shortage of trained personnel, lack of standardized guidelines, and weak regulatory enforcement. These issues often result in incomplete documentation, missing records, duplication of data, and delays in information retrieval.

The increasing burden of non-communicable diseases (NCDs), such as hypertension, stroke, and diabetes, further underscores the importance of efficient medical record systems for ensuring continuity of care and long-term patient management. However, fragmented and inefficient record-keeping practices hinder effective clinical decision-making, compromise patient safety, and limit the use of health data for research and policy development.

Literature Gap and Study Rationale

Despite the growing body of literature on healthcare management, health information systems, and service quality, there remains a significant gap in comparative evidence examining medical record-keeping practices between public and private healthcare sectors, particularly in low- and middle-income countries such as Bangladesh. Existing studies have largely focused on general healthcare performance, digital health adoption, or patient outcomes, with limited attention to the structural and operational differences in record management systems across sectors.

In Bangladesh, where the healthcare system operates through a dual structure of public and private providers, disparities in infrastructure, resource allocation, and administrative practices are likely to influence the quality, accessibility, and security of medical records. However, empirical evidence assessing these differences in a systematic and comparative manner is scarce. This lack of evidence constrains policymakers, healthcare managers, and stakeholders from developing context-specific strategies to strengthen health information systems.

Furthermore, inefficient or inconsistent medical record-keeping can adversely affect clinical decision-making, continuity of care, patient safety, and the overall quality of healthcare services. Without a clear understanding of sector-specific gaps and challenges, efforts to improve health system performance and implement digital health initiatives may remain fragmented and less effective.

Therefore, a comprehensive comparative analysis of medical record-keeping practices between public and private hospitals is essential to generate evidence that can inform policy development, enhance institutional practices, and ultimately improve healthcare quality in Bangladesh.

Aim of the Study

The aim of this study is to conduct a comparative analysis of medical record-keeping practices in public and private hospitals in Bangladesh, with a focus on identifying key differences, existing challenges, and their implications for health system quality.

Study Objective

This study aims to compare medical record-keeping practices between public and private hospitals in Bangladesh and to assess their implications for the quality, efficiency, and overall performance of the health system.

METHODS

Study Design

This study employed a comparative cross-sectional study design to assess and compare medical record-keeping practices between public and private hospitals in Bangladesh. The cross-sectional approach is appropriate for capturing the current status of record management systems, structures, and processes across different healthcare settings at a single point in time.

Study Setting

The study was conducted in Chattogram Division, Bangladesh, including one public hospital (Chattogram General Hospital) and two private hospitals (Parkview Hospital and CSCR Hospital). These facilities were selected to enable comparison of medical record-keeping practices across different healthcare sectors within the same urban setting.

Study Population

The study population comprised hospital staff involved in medical record management, including physicians, nurses, and record officers, as well as patients and their attendants. Participants were selected from both public and private hospitals to capture diverse perspectives on record-keeping practices.

Sample Size and Sampling Technique

A total of 185 respondents were included in the study, comprising 65 participants from public hospitals and 120 from private hospitals. Participants were selected using a stratified random sampling technique, ensuring representation from different categories of healthcare providers and stakeholders involved in medical record-keeping.

Data Collection Tools

Data were collected using a structured questionnaire and observational checklist developed from relevant literature. The tools assessed key domains of medical record-keeping practices, including completeness, accuracy, accessibility, storage systems, confidentiality, and data security.

Data Collection Procedure

Data were collected through face-to-face interviews and direct observation in the selected hospitals. Prior permission was obtained from hospital authorities, and informed consent was secured from all participants. Data collection was carried out over a defined study period using trained data collectors under close supervision to ensure consistency and quality.

Data Analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics such as frequencies and percentages were used to summarize variables. Inferential statistics, including the Chi-square test and independent sample t-test, were applied to compare medical record-keeping practices between public and private hospitals. A p-value of <0.05 was considered statistically significant.

Ethical Considerations

Ethical approval for the study was obtained from the Institutional Review Board (IRB) of ASA University of Bangladesh prior to data collection. Written informed consent was secured from all participants after explaining the purpose, procedures, risks, and benefits of the study. Participant confidentiality and anonymity were strictly maintained, and all data were used solely for research purposes and stored securely with restricted access.

RESULTS AND DISCUSSION

Table 1 shows the socio-demographic characteristics of the participants including hospital staff, patients, and patients' attendants from both public and private hospitals in Bangladesh. Nearly half of the participants (49.2%) were age group 30-50 years, with a higher proportion of individuals in this age group attending public hospitals (58.5%). Older participants were also more likely to utilize public healthcare services. Although age distribution differed across hospital types, the association was statistically significant ($p<0.002$). The majorities of participants were male (70.8%), and males were more likely to seek care in public hospitals compare to females. In terms of professional composition, nurses constituted the largest group (27.0%), followed by record officers (24.9%), medical record managers (17.3%), patient attendants (14.6%),

patients (10.3%), and physicians (5.9%). Nurses represented a comparable proportion in both public and private hospitals (27.7% and 26.7%, respectively). The distribution of participants by profession showed a statistically significant association with hospital type (p<0.023).

Regarding educational attainment, most participants (48.6%) had a graduate or higher level of education. Attendance at both public and private hospitals was relatively similar across educational categories (50.8% and 47.5%, respectively). Monthly household income also demonstrated a significant association with hospital utilization (p<0.032). Approximately 42.7% of participants reported a monthly income between 20,000/- - 30,000/- BDT, with a higher proportion of these individuals attending private hospitals (43.3%). Service quality-closely linked to effective medical record-keeping practices-along with income level, emerged as key factors influencing the preference for private healthcare facilities.

With respect to departmental sources of information, the largest proportion of data was collected from the nursing department (19.5%), followed by administration/registration and procurement (14.0%), and IT and human resources departments (11.3%). Smaller proportions were obtained from physicians (7.6%), laboratory services (7.0%), finance (6.5%), radiology (4.9%), and ECG/USG departments (3.8%). Notably, a higher proportion of information from the nursing department was obtained in private hospitals (20.0%), and this difference was statistically significant (p<0.008), indicating variations in departmental engagement in medical record-keeping practices between the two sectors.

This comparative analysis of medical record-keeping practices in public and private hospitals aimed to evaluate performance across key domains, including accessibility, infrastructure, IT and software support, staff training, data security, service quality management, accountability, transparency, fairness, and efficiency, as outlined by the World Health Organization framework (Basu, 2012). The findings suggest that individuals with higher socioeconomic status, particularly those with better occupations and higher income levels, were significantly more likely to utilize private healthcare services. This pattern aligns with previous studies conducted in Spain and South Asia, which also reported that higher-income groups tend to prefer private healthcare due to perceived better service quality and system efficiency (Regidor, 2008; Guo, 2019).

Overall, the results highlight notable disparities between public and private hospitals in terms of medical record-keeping practices and associated service quality dimensions. These differences underscore the need for strengthening health information management systems, particularly in public healthcare facilities, to ensure equitable, efficient, and high-quality healthcare delivery across Bangladesh.

Table 1: Socio-demographic Information of the Participants (N=185)

Variables	Categories	Type of Hospital		Total (N)	%	P-Value
		Public, n=65 (%)	Private, n=120 (%)			
Age groups in year	< 30	15 (23.1)	42 (35.0)	57	30.8	0.002
	30-50	38 (58.5)	53 (44.2)	91	49.2	
	> 50	12 (18.4)	25 (20.8)	37	20.0	
Sex	Male	56 (86.2)	75 (62.5)	131	70.8	0.312
	Female	9 (13.8)	45 (37.5)	54	29.2	
Participants	Medical Record Manager	12 (18.4)	20 (16.7)	32	17.3	0.023
	Physicians	4 (6.2)	7 (5.8)	11	5.9	
	Nurses	18 (27.7)	32 (26.7)	50	27.0	
	Record Officers	16 (24.6)	30 (25.0)	46	24.9	
	Patients	6 (9.2)	13 (10.8)	19	10.3	
	Attendants	9 (13.9)	18 (15.0)	27	14.6	
Education	Secondary	8 (12.3)	12 (10.0)	20	10.8	0.067
	Higher Secondary	18 (27.7)	34 (28.3)	52	28.1	
	Graduate and above	33 (50.8)	57 (47.5)	90	48.6	
	Professional Degree	6 (9.2)	17 (14.2)	23	12.4	
Monthly family income	< 20,000/-	13 (20.0)	23 (19.2)	36	19.5	0.032
	20,000/- - 30,000/-	27 (41.5)	52 (43.3)	79	42.7	
	> 30,000/-	25 (38.5)	45 (37.5)	70	37.8	
Departments	Admin/Registration	8 (12.3)	18 (15.0)	26	14.0	0.008
	Nursing	12 (18.5)	24 (20.0)	36	19.5	
	Doctors	6 (9.2)	8 (6.7)	14	7.6	
	Laboratory	7 (10.7)	6 (5.0)	13	7.0	
	Radiology	4 (6.2)	5 (4.2)	9	4.9	

	ECG/USG	3 (4.6)	4 (3.3)	7	3.8	
	Procurement	12 (18.5)	14 (11.6)	26	14.0	
	IT Dept	6 (9.2)	15 (12.5)	21	11.3	
	HR Dept	3 (4.6)	18 (15.0)	21	11.3	
	Finance	4 (6.2)	8 (6.7)	12	6.5	

Table 2 illustrates the key challenges affecting effective medical record-keeping practices in both public and private hospitals in Bangladesh. This component of the study aimed to identify the barriers faced by healthcare workers in managing hospital information systems across the two sectors.

The findings indicate that public hospitals experience more substantial operational and system-related challenges compared to private hospitals. The most prominent issues in public facilities include slow system performance, inadequate provision of accurate and satisfactory information, limited availability of computers, insufficient ICT support staff, inadequate software coverage, and lack of user training. Additionally, in some areas, health information systems have not yet been fully implemented. These limitations significantly hinder efficient medical record management in public hospitals.

In contrast, private hospitals demonstrated relatively better performance in several areas, including system accuracy, availability of trained computer users, user-friendly interfaces, and staff attitudes toward information systems. However, despite these advantages, certain challenges persist in both sectors. Common issues reported across public and private hospitals include inaccurate data generation, limited user knowledge and technical skills, lack of system user-friendliness, and negative attitudes of employees toward digital systems. The observed differences between public and private hospitals were statistically significant ($p<0.005$), indicating a meaningful disparity in system performance and user experience.

Several system-level challenges were also identified, including poor transition mechanisms between old and new systems, incompatibility between legacy and updated software, and frequent system interruptions. These issues were particularly pronounced in public hospitals, where resource constraints and infrastructural limitations are more evident.

Hospitals are inherently information-intensive organizations that rely heavily on effective information management systems to ensure quality care delivery. Hospital Information Systems (HIS) and Clinical Information Systems (CIS), as described by Haux (2004), are computer-based platforms designed to support administrative and clinical decision-making processes. In this study, such systems were found to be more effectively utilized in private hospitals compared to public ones. Similarly, health information systems play a crucial role in facilitating data capture, processing, and dissemination for improved coordination of care at both individual and population levels, as noted by Fichman (2011). However, the current findings suggest that these systems remain underdeveloped and inadequately implemented in many public healthcare settings in Bangladesh.

Despite these challenges, health information technology holds significant potential to transform healthcare delivery by enhancing safety, efficiency, and overall quality of care. Effective medical record-keeping practices contribute to improved operational efficiency, better clinical decision-making, and enhanced patient outcomes. According to Ghosh (2010), well-functioning hospital information systems enable timely and convenient access to patient data, which is essential for both public and private healthcare providers.

A critical barrier identified in this study is the limited investment in health-related ICT infrastructure, which is a common issue in many developing countries. As emphasized by Gladwin (2003), successful implementation of health information systems requires comprehensive financial planning to account for initial setup, maintenance, and training costs. Furthermore, although previous studies, such as that by Huryk (2010), have highlighted factors like age, education, and prior computer experience as determinants of healthcare workers' attitudes toward technology, these factors were not found to be significantly influential in the present study.

Overall, the findings underscore the need for strengthening ICT infrastructure, enhancing workforce capacity, and improving system design and usability to ensure effective medical record-keeping practices. Addressing these challenges is essential for achieving a more efficient, transparent, and high-quality health system in Bangladesh.

Table 2: The Challenges Faced Using Hospital Information Management System (N=185).

Variables	Category	Type of Hospital		Total (N)	%	P-Value
		Public, n=65 (%)	Private, n=120 (%)			
Inaccurate information	Yes	52 (80.0)	38 (31.7)	90	48.6	0.032
	No	13 (20.0)	82 (68.3)	95	51.4	
Few computer users	Yes	53 (81.5)	18 (15.0)	71	38.4	0.051
	No	12 (18.5)	102 (85.0)	114	61.6	
Unknowledgeable of system	Yes	43 (66.2)	52 (43.3)	95	51.4	0.085
	No	22 (33.8)	68 (56.7)	90	48.6	
System keeps going on and off	Yes	45 (69.2)	37 (30.8)	82	44.3	0.631
	No	20 (30.8)	83 (69.2)	103	55.7	
System is slow	Yes	60 (92.3)	22 (18.3)	82	44.3	0.078
	No	5 (7.7)	98 (81.7)	103	55.7	
Not user friendly	Yes	58 (89.2)	32 (26.7)	90	48.6	0.035
	No	7 (10.8)	88 (73.3)	95	51.4	
Employee negative attitude	Yes	48 (73.8)	42 (35.0)	90	48.6	0.012
	No	17 (26.2)	78 (65.0)	95	51.4	
Lack of training of users	Yes	41 (63.1)	86 (71.7)	127	68.6	0.069
	No	24 (36.9)	34 (28.3)	58	31.4	
Poor changeover	Yes	46 (70.8)	51 (42.5)	97	52.4	0.058
	No	19 (29.2)	69 (57.5)	88	47.6	
Inadequate software coverage	Yes	50 (76.9)	65 (54.2)	115	62.2	0.031
	No	15 (23.1)	55 (45.8)	70	37.8	
Few ICT staff to assist	Yes	55 (84.6)	32 (26.7)	87	47.0	0.043
	No	10 (15.4)	88 (73.3)	98	53.0	
Slow paying system	Yes	35 (53.8)	14 (11.7)	49	26.5	0.098
	No	30 (46.2)	106 (88.3)	136	73.5	
Report delivery system is slow	Yes	45 (69.2)	16 (13.3)	61	33.0	0.050
	No	20 (30.8)	104 (86.7)	124	67.0	
Security system is very week	Yes	52 (80.0)	39 (32.5)	91	49.2	0.005
	No	13 (20.0)	81 (67.5)	94	50.8	
Patient party harassment by staff	Yes	40 (61.5)	21 (17.5)	61	33.0	0.023
	No	25 (38.5)	99 (82.5)	124	67.0	

Table 3 presents the overall comparison of satisfaction scores related to medical record-keeping practices between public and private hospitals in Bangladesh. The analysis demonstrated a statistically significant difference in satisfaction levels between the two sectors.

Participants receiving services in public hospitals reported a higher mean satisfaction score (3.675 ± 0.47) compared to those in private hospitals (3.163 ± 0.62). The mean difference of 0.512 (95% CI: 0.182-0.859) indicates a notable variation in perceived satisfaction between the two groups. This difference was statistically significant ($t = 4.81$, $p<0.001$).

These findings suggest that, despite the structural and technological limitations identified in earlier analyses, public hospitals may provide comparatively higher perceived satisfaction in certain aspects of medical record-keeping. This could be influenced by patient expectations, service accessibility, or familiarity with public healthcare systems. However, the relatively lower satisfaction scores observed in private hospitals may reflect higher user expectations or greater sensitivity to service quality dimensions, particularly in relation to efficiency and system performance.

Overall, the results highlight a complex relationship between system performance and user satisfaction, underscoring the need for a balanced approach that integrates both technical improvements and user-centered service delivery in medical record-keeping systems across both public and private healthcare sectors.

Table 3: Overall Comparison of Satisfaction Scores by Type of Hospitals.

Domain	Type of Hospital	N	Mean	SD	Mean Difference	95% CI	t-value	P-value
Medical Record Keeping	Public	65	3.675	0.47	0.512	0.182-0.859	4.81	0.000
	Private	120	3.163	0.62				

CONCLUSION

This study reveals significant differences in medical record-keeping practices between public and private hospitals in Bangladesh. Private hospitals demonstrated better infrastructure, system usability, and ICT support, while public hospitals faced notable challenges, including limited resources, inadequate training, and poor system integration.

However, higher satisfaction scores reported in public hospitals suggest that user perceptions are influenced by accessibility and expectations, in addition to system performance. Overall, strengthening health information systems through improved investment, training, and standardization is essential to enhance the quality, efficiency, and equity of healthcare services in Bangladesh.

ACKNOWLEDGEMENT

The study was partially supported by the ASA University of Bangladesh (ASAUB). The authors acknowledge the participants and two hospitals authority including Chattogram General Hospital and two private hospitals (Parkview Hospital and CSCR Hospital).

Fundings: No specific grant from public, commercial or not-for-profit sectors was received.

Conflict of Interest: The authors declare no conflict of interest.

Declaimer: AI tools were utilized for minor language editing and grammatical improvement, while all scientific content remained the responsibility of the authors.

REFERENCES

1. Abraham, C. & Junglas, I. (2011). From cacophony to harmony: A case study about the IS implementation process as an opportunity for organizational transformation at Sentara Healthcare; Journal of Strategic Information Systems, 20(2).
2. Bakare, A. A., Abioye, A. A. & Issa, A. O. (2016). An assessment of records management practice in selected local government councils in Ogun state, Nigeria. Journal of information science theory and practice, 4(1): 49-64. Doi:10.1633/jistap.2016.4.1.4.
3. Baker, C. M., Messmer, P. L., Gyurko, C. C., Domagala, S. E., Conly, F. M., Eads, T. S. & Harshman, K. S., et al, (2000). Hospital ownership, performance, and outcomes: assessing the state-of-the-science. Journal of Nursing Administration, 30(5): 227-40. doi.org/10.1097/00005110-200005000-00004 PMID: 10823176.
4. Bansal, A. K., Khan, J. I. & Alam, S. K. (2020). Healthcare Data Organization. In Introduction to computational health informatics. Chapman and Hall/CRC; (pp.197-54). Doi:10.1201/9781003003564-4.
5. Basu, S., Andrews, J., Kishore, S., Panjabi, R. & Stuckler, D. (2012). Comparative performance of private and public healthcare systems in low-and middle-income countries: A systematic review. *PLoS Med*, 9(6): 19.
6. Braa, J., Hanseth, O., Heywood, A., Mohammed, W. & Shaw, V. (2007). Developing health information systems in developing countries: The flexible standards strategy. MIS quarterly: management information systems, 31(2): 381-402. Doi:10.2307/25148796.
7. Bryson. A. & Green, F. (2018). Do Private Schools Manage Better? National Institute Economic Review, 243(1): R17-R26. doi.org/10.1177/002795011824300111.
8. Collen, M. F., Slack, W. V. & Bleich, H. L. (2015). Medical databases and patient record systems. The history of medical informatics in the United States, 207-88. Doi:10.1007/978-1-4471- 6732-7-4.
9. De Mingo, A. C. & Cerrillo-i-Martínez, A. (2018). Improving records management to promote transparency and prevent corruption. International journal of information management, 38(1): 256-61. www.sciencedirect.com/science/article/pii/S026840 1217306242.
10. Finchman, G. (2011). Editorial Overview: The role of IS in Healthcare. Information Systems Research.
11. Ghosh. N. (2010). Benefits of Hospital Information System.
12. Gladwin, J., Dixon, R. & Wilson, T. (2003), Using external training materials to strengthen health information management in East Africa. *Information Research*, 5: 12.
13. Guo, S., Aguirre, L. & Victora, C.G. (2019). Equitable coverage? The roles of the private and public sectors in providing maternal, newborn and child health interventions in South Asia. *BMJ Glob Heal*, 4(4): 1-10.
14. Haux, R. & Alfred, W. (2004). Strategic Information Management in Hospitals: New York: Springer.
15. Huryk, L. (2010). Factors influencing nurses' attitudes towards healthcare Information technology. *J Nursing Manag*, 2010.
16. Kolodner, R. M., Cohn, S. P. & Friedman, C. P. (2008). Health information technology: Strategic initiatives, real progress.
17. NHP. (2018). Electronic Health Record Standards for India, NHP, Govt of India. http://www.nhp.gov.in/ehr standards, extracted on 26th August 2018.
18. Opele, J. K. (2017). Knowledge management practices, interprofessional collaboration, information technology application and quality health service delivery in Federal Tertiary Hospitals in Nigerian [Thesis]. https://www.researchgate.net.
19. Piontek, F., Kohli, R. P., Conlon, J. J., Ellis, J., Jablonski, N. & Kini. (2010). Effects of an adverse drug-event alert system on cost and quality outcomes in community hospitals. American J. Health-System.

20. Pollak, V. E. & Lorch, J. A. (2007). Effect of electronic patient record use on mortality in End Stage Renal Disease, a model chronic disease: retrospective analysis of 9 years of prospectively collected data.
21. Regidor, E., Martinez, D., Calle, M. E., Astasio, P., Ortega, P. & Dominguez, V. (2008). Socioeconomic patterns in the use of public and private health services and equity in health care. *BMC Health Serv Res*, 8: 1-9.
22. White, M. & Bryson, A. (2013). Positive employee attitudes: how much human Resource management do you need? Human Relations, 66(3): 385-406. doi.org/10.1177/0018726712465096.