

Internship Training  
at  
**Artemis Hospital, Gurugram**

**The Personal Health Record Mobile App Improves the Service Delivery  
Efficiency of Hospital Systems**

**A Study of Artemis PHR App**

by  
**Ayush Pathak**  
**PG/21/021**

Under the guidance of

**Dr. Punit Yadav**

PGDM (Hospital & Health Management)

2021-23



*International Institute of Health Management Research New Delhi*

This certificate is awarded to

Ayush Pathak

In recognition of having successfully completed his Internship in the department of  
**Homecare Operations**

And has successfully completed his project on  
**"The Personal Health Record Mobile App Improves the Service Delivery**

**Efficiency of Hospital Systems**

**A Study of Artemis PHR App"**

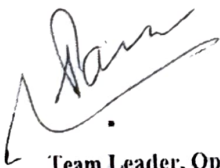
28 June 2023

At

Artemis Hospital

He comes across as a committed, sincere and diligent person who has a strong drive and Zeal for learning.

We wish him all the best for future endeavors.



Team Leader, Operations



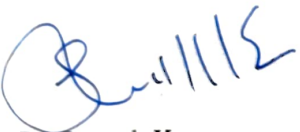
Human Resource

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ayush Pathak, student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at Artemis Hospital from 16-01-23 to 30-04-23.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements. I wish him all success in all her future endeavors.



Dr. Sumesh Kumar  
Associate Dean, Academic and Student Affairs  
IIHMR, New Delhi

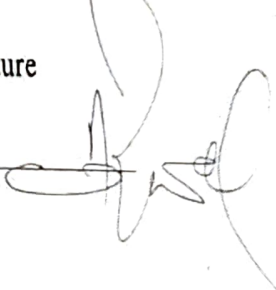
  
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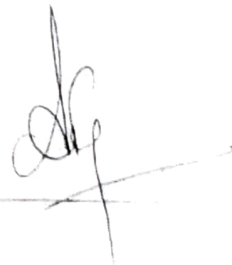
### Certificate of Approval

The following dissertation titled "**The Personal Health Record Mobile App Improves the Service Delivery Efficiency of Hospital System- A Study of Artemis PHR App**" at "" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee  
for evaluation of dissertation.

Name	Signature
Prof Ashok Aggarwal	

Dr. Aman Raj Gupta	Aman Raj Gupta
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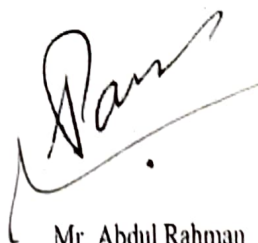
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## Certificate from Dissertation Advisory Committee

This is to certify that Mr. Ayush Pathak PG/21/021, a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. He is submitting this dissertation titled **"The Personal Health Record Mobile App Improves the Service Delivery efficiency of Hospital Systems- A Study of Artemis PHR App"** at **"Artemis Hospital Gurugram"** in partial fulfillment of the requirements for the award of the PGDM (Hospital & Health Management). This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



Dr Punit Yadav,  
Professor,  
IIMR, Delhi



Mr. Abdul Rahman  
Team Lead, Operations  
Artemis Hospital

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,  
NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled The Personal Health Record Mobile App Improves the Service Delivery Efficiency of Hospital Systems- A Study of Artemis PHR App at Artemis Hospital Gurugram and submitted by Ayush Pathak, PG/21/021 under the supervision of Dr Punit Yadav for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 25/01/23 to 30/04/2 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.



Signature

### FEEDBACK FORM

Name of the Student: Ayush Pathak

Name of the Organization in which Dissertation Has Been Completed:

Artemis Hospital, Gurugram

Area of Dissertation: Homecare Operations (A Study of Artemis PHR app)

Attendance: 100%.

Objectives achieved: Yes

Deliverables: Satisfactory

Strength: Communication, Data Analysis, Dedicated

Suggestion for improvement: Interact more in decisions taking,  
More more participation

Suggestion for improvement (course curriculum, industry interaction, placement, alumni)  
Add more industry related study

Sign of Organization Mentor (Dissertation)

Date: 28 June 2023

Place: Gurugram



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## PREFACE

### ABSTRACT

Mobile health applications (mHealth apps) have grown significantly in popularity in recent years, providing users with potential chances to actively participate in managing their health and wellbeing. The design and development of a user-centered health application with the goal of enhancing individual wellbeing are the main topics of this dissertation. The goal of this study is to investigate how mobile technology might enable people to monitor and improve their health while offering a unique and engaging user experience.

To acquire information and assess the efficacy of the created health application, the research uses a mixed-methods approach that combines qualitative and quantitative techniques. The user's wants, preferences, and expectations are prioritised during the development process thanks to the user-centered design (UCD) technique. The application's functionality and interface are adjusted through an iterative design process that involves user interviews, usability testing, and feedback sessions in order to meet user needs.

Through quantitative metrics such as user satisfaction surveys, usability testing, and the impact on health-related outcomes, the success of the produced health application is evaluated. Qualitative data analysis also investigates users' perceptions, preferences, and difficulties encountered when using the application. This all-encompassing review strategy allows a thorough comprehension of the application's advantages, disadvantages, and areas for development.

By offering insights into the creation of a user-centered health application, the findings of this dissertation advance the field of mHealth. For designers, developers, and healthcare experts looking to create efficient, interesting, and customized digital health interventions, the research has some practical consequences. The ultimate goal of our effort is to encourage people to actively manage their health, hence having a good effect on their general well-being.

## **Role of Digital Applications in Hospital Sector**

The hospital industry has undergone a transformation thanks to the use of digital health applications that have increased productivity, improved patient care, and simplified processes. For increased efficiency, the following are some important functions that digital health applications play in the healthcare sector:

1. Digital health applications offer a platform for developing and managing electronic health records, or EHRs. EHR systems allow medical personnel to readily and centrally access patient data such as medical history, test results, and treatment plans. As a result, there is no longer a need for manual record-keeping, there is less paperwork, and data management is more accurate and effective.
2. Telemedicine and Remote Monitoring: Thanks to digital health applications, healthcare professionals may now deliver remote consultations, diagnoses, and monitoring. Doctors can remotely evaluate patients, offer counselling, and track their progress using video calls, chat features, and secure data transmission. This lessens the need for in-person visits, cuts down on wait times, and enhances patient management in general.
3. Online appointment scheduling and reminders are made possible by digital health applications, which ease administrative responsibilities and speed up the appointment procedure. Reminders and notifications sent automatically reduce no-shows, maximise resource use, and raise patient satisfaction.
4. Medication management capabilities include reminders, dosage tracking, and refill notifications in digital health applications. These programmes aid in improving patient outcomes, lowering medication mistakes, and increasing overall medication management efficiency by encouraging

adherence to prescribed prescription schedules.

5. At the point of care, clinical decision support systems (CDSS), which are integrated into digital health applications, give healthcare practitioners suggestions and guidelines based on the best available research. As a result of these systems' assistance with diagnosis, treatment planning, and medication selection, decisions are made more intelligently, patient safety is increased, and errors are decreased.
6. Integration with Medical Devices: Digital health applications can seamlessly transfer data between them and a variety of medical devices, allowing for real-time data monitoring. Applications, for instance, can collect data from wearables like glucose or heart rate monitors and give medical practitioners the most recent information for monitoring and treatment planning. This connection simplifies remote patient care, improves diagnostic precision, and promotes patient monitoring.
7. Applications for digital health support efforts to improve healthcare quality and ensure compliance with legal requirements. They support the recording and reporting of clinical outcomes, protocol adherence, and regulatory standard compliance. This makes it possible for hospitals to pinpoint problem areas, put corrective measures in place, and guarantee compliance, thereby improving patient safety and happiness.

In conclusion, digital health applications have improved patient care, streamlined processes, and increased overall efficiency in the hospital sector. They encourage patient interaction, enable distant consultations, provide healthcare personnel with real-time information, and optimise resource use. These applications have the potential to revolutionise healthcare delivery by utilising technology, which would eventually improve patient outcomes and hospital sector efficiency.

## **DISSERTATION TRAINING**

### **1.1. Introduction of Organization**

Artemis Hospital, established in 2007, spread across 9 acres, is a 600 plus bed; state-of-the-art multi-speciality hospital located in Gurgaon, India. Artemis Hospital is the first JCI and NABH accredited Hospital in Gurgaon.

Designed as one of the most advanced hospitals in India, Artemis provides a depth of expertise in the spectrum of advanced medical & surgical interventions, comprehensive mix of inpatient and outpatient services.

#### **➤ Vision Statement**

To create an Integrated World Class Healthcare System, Fostering, Protecting, Sustaining and Restoring Health through Best-in-Class Medical Practices and Cutting-Edge Technology developed through in-depth Research carried out by the World's Best Scientific Minds.

The corporate value system at Artemis is founded on three pillars – Service, Compassion and Integrity.

- Care for customer
- Respect for Associates
- Excellence through Teamwork
- Always Learning
- Trust Mutually
- Ethical Practices

#### **➤ Mission**

- Deliver world class patient care services
- Excel in the delivery of specialized medical care supported by comprehensive research and education
- Be the preferred choice for the world ' s leading medical professionals and scientific minds
- Develop, apply, evaluate and share new technology
- Be an active partner in local community initiatives and contribute to its well-being and development.

## **1. DISSERTATION REPORT**

### **2.1. Introduction**

- The purpose of this study is to evaluate the influence and performance of a health application used in a hospital setting.
- Health applications have evolved as potent instruments to improve patient care, expedite procedures, and boost overall hospital efficiency as a result of the growing integration of technology in healthcare.
- This study evaluates the implementation process, user satisfaction, and outcomes connected to the health application using a combination of quantitative and qualitative methodologies.
- Surveys, interviews, and metrics analysis from the system were used to gather data. Positive user feedback, enhanced communication, and increased productivity in several hospital areas are revealed by the findings.
- The study also identifies issues and potential areas for improvement, offering suggestions for improving the functioning of the programme and addressing potential adoption hurdles.
- The study's findings add to the expanding body of knowledge about the use and effects of health applications in hospital settings and will help to direct future efforts to improve patient care and operational excellence.

For conducting this, the aim of the study was, “To study the Artemis PHR application that how it is benefiting the patients as well as the Artemis Hospital” for 3 months, from the month of Feb to April 2023, at Artemis Hospital”

To fulfill the above aim, several objectives are there. The objective is:

- ❖ To study how the patients are utilizing the application and how much is the utilization.
- ❖ To study the PHR application and how it is syncing with the government framework or regulations.
- ❖ To understand the process and flow of the PHR mobile application.
- ❖ To study what are the various facilities of the application.
- ❖ To analyse the gaps in the PHR application, if any.

## **2.2. Literature Review**

Personal health record (PHR) mobile app usage in hospital systems has drawn a lot of interest because to their potential to increase the effectiveness of service delivery. This review of the literature looks at studies and research results that particularly address the effect of PHR apps on the effectiveness of service delivery in hospital systems. This review intends to shed light on the advantages and difficulties of implementing PHR apps and their impact on the provision of healthcare services by analyzing the pertinent literature.

**Improved Access to Patient Information:** Studies have shown that PHR mobile apps increase patient information accessibility, resulting in more effective service delivery. PHR applications made it simple to access medical records, test results, and treatment plans, according to a Smith et al. (2019) study assisting medical professionals in making timely, educated judgements. This improved patient information access decreased care delivery delays and increased hospital systems' overall service effectiveness.

PHR apps have been demonstrated to improve communication and care coordination between healthcare providers, which increases the effectiveness of service delivery. PHR apps offered secure chat platforms and real-time updates, enabling better collaboration among care teams, according to studies by Patel et al. (2018) and Greenhalgh et al. (2020). The streamlined communication and better care coordination led to a drop in errors, a reduction in effort duplication, and an overall improvement in hospital system efficiency.

**Streamlined Workflow and Time Savings:** PHR app adoption has been linked to streamlined hospital system workflows and time savings. PHR applications that were connected with hospital information systems decreased the need for manual data entry and enhanced data sharing capabilities, according to studies by Ruland et al. (2017) and Zhou et al. (2019). Healthcare



personnel were able to spend more time to direct patient care activities thanks to the time savings from the improved workflow, which ultimately increased the effectiveness of service delivery.

**Patient Empowerment and Engagement:** PHR apps engage patients by allowing them to actively participate in their care and give them access to personal health information, which can improve the effectiveness of service delivery. PHR applications improved patient engagement, medication adherence, and self-management, which led to a decrease in hospital visits and improved resource use within hospital systems, according to studies by de Souza et al. (2018) and Robles-Bykbaev et al. (2020). Patients who feel empowered and engaged help to deliver care more effectively and produce better results.

While PHR apps have many advantages, there are also a number of difficulties and things to take into account. The significance of data security and privacy in PHR apps was emphasized in studies by Volkman et al. (2017) and Lau et al. (2020). For implementation to be successful, these issues must be addressed and effective data protection mechanisms must be put in place. To increase app acceptance and efficacy inside medical systems, usability and user experience should also be taken into account.

### **2.3. Methodology**

**Study location:** Artemis Hospital, Sector 51 Gurugram

**Study units:** Patients who had come for their hospital visit.

**Keywords:** PHR App, Efficiency, benefits, tele-consultation and Panel patients.

**Sampling Technique:** Convenience Sampling

**Sample size:** 210

**Study Duration:** 3 months (Feb-March-April, 2023)

**Sampling Criteria:**

Inclusion Criteria: Out-Patients

Exclusion Criteria: Excluded the In-patients.

**Study Tool:** Survey data

**Study Analysis:** Microsoft Excel and Microsoft Forms.

Figure 2.3.1. Survey for the study

A study of Artemis Hospital PHR app.

\* Required

1. Informed Consent

Information by interviewer

Hi! I am a student of IIHMR, a institute of health management in Dwarka, New Delhi. I would like to ask you a few questions regarding Artemis Personal Health Record application. The research is in relation to digital health record application; Its various usage and to study how it aids in easing the hospital and their stakeholders. Your participation in the survey is voluntary. The questions you will be asked usually take about 5-10 minutes. All the answers you give will be confidential and will not be shared with anyone other than the members of our survey team. Your name and identity will not be recorded. You may refuse to participate in research or opt out of survey at any time without consequence. You are free to decline to answer any particular question that you do not wish to answer for any reason. You will not receive any direct or indirect benefit from participating in this research study. However, your feedback may help us learn more about the topic which may also be beneficial to you in the future as technology advances. Therefore, I request you to kindly participate in this study.

In case of any query, you may contact the institute at 01130418900 or IIHMR. Plot no 3, Sector 18A, Dwarka Phase 2, New Delhi 110075.

Informed consent by the participant

"I understand that my participation in this study is completely voluntary, and I may choose to withdraw

A study of Artemis Hospital PHR app.

\* Required

Demographic Details

2. Email address

Enter your answer

3. Gender \*

☐ Male

☐ Female

☐ Prefer not to say

4. Which Age group do you belong to \*

☐ Below 20

☐ 21 - 40

☐ 40 - 60

☐ Above 60

5. Do you have a SmartPhone? \*

☐ Yes

☐ No

Ratings of the application.

10. Are there any features or functionalities that you think are missing from the application? \*

Enter your answer

11. How satisfied are you with the performance and speed of the application? \*



12. How responsive is the application to your inputs and commands? \*



13. Have you experienced any crashes, bugs, or technical issues while using the application? \*

☐ Yes

☐ No

14. If yes, please describe.

Enter your answer

15. How well does the application meet your needs or solve the problem it intends to address? \*

\* Required

Participants selected Yes as an Option.

Participant has a smartphone

6. How easy was it to download and install the application?

☐ Extremely easy

☐ Somewhat easy

☐ Neutral

☐ Somewhat not easy

☐ Extremely not easy

7. How often do you use the application?

☐ Daily

☐ Weekly

☐ Monthly

☐ Seasonal

8. How intuitive was the application's user interface?

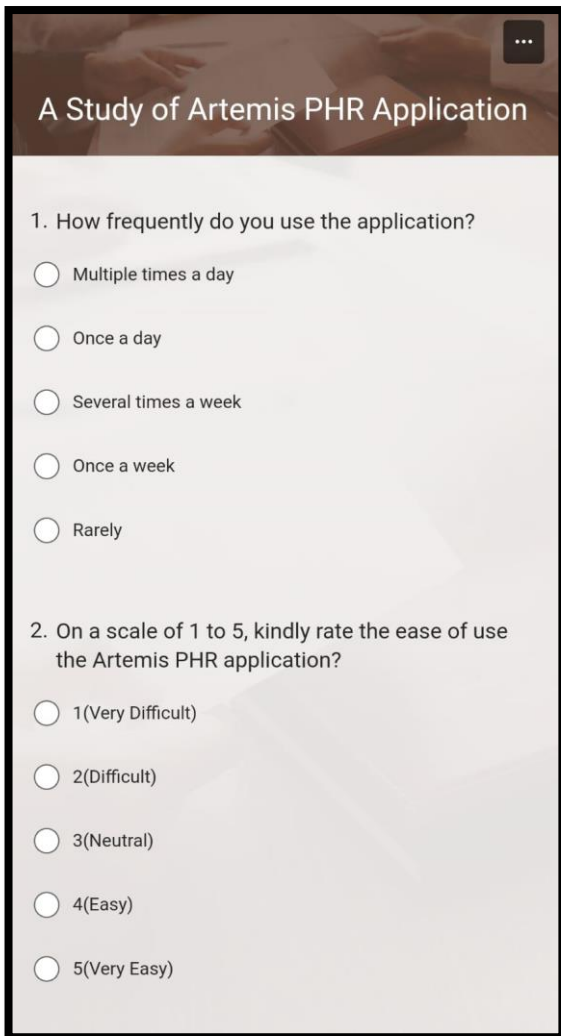
☐ Extremely easy

☐ Somewhat easy

☐ Neutral

☐ Somewhat not easy

## Survey Questionnaire for the Staff



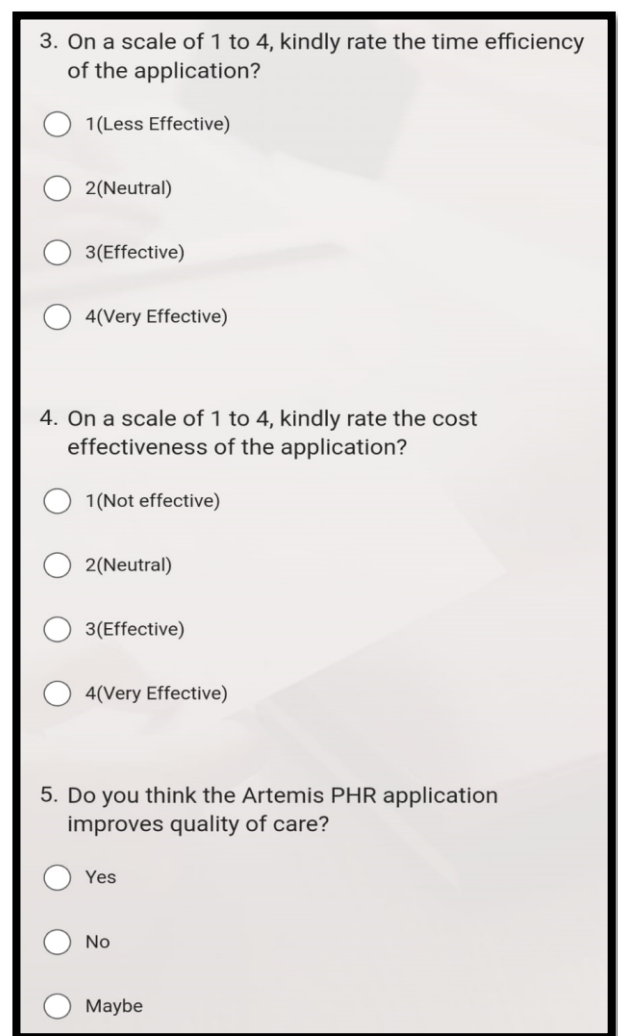
A Study of Artemis PHR Application

1. How frequently do you use the application?

- ☐ Multiple times a day
- ☐ Once a day
- ☐ Several times a week
- ☐ Once a week
- ☐ Rarely

2. On a scale of 1 to 5, kindly rate the ease of use the Artemis PHR application?

- ☐ 1(Very Difficult)
- ☐ 2(Difficult)
- ☐ 3(Neutral)
- ☐ 4(Easy)
- ☐ 5(Very Easy)



3. On a scale of 1 to 4, kindly rate the time efficiency of the application?

- ☐ 1(Less Effective)
- ☐ 2(Neutral)
- ☐ 3(Effective)
- ☐ 4(Very Effective)

4. On a scale of 1 to 4, kindly rate the cost effectiveness of the application?

- ☐ 1(Not effective)
- ☐ 2(Neutral)
- ☐ 3(Effective)
- ☐ 4(Very Effective)

5. Do you think the Artemis PHR application improves quality of care?

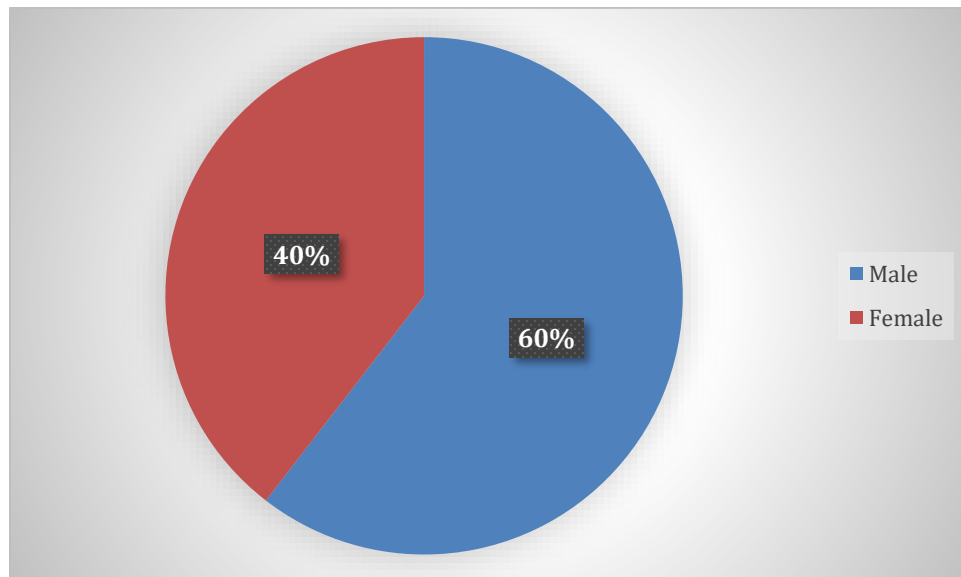
- ☐ Yes
- ☐ No
- ☐ Maybe

## 2.4. Results

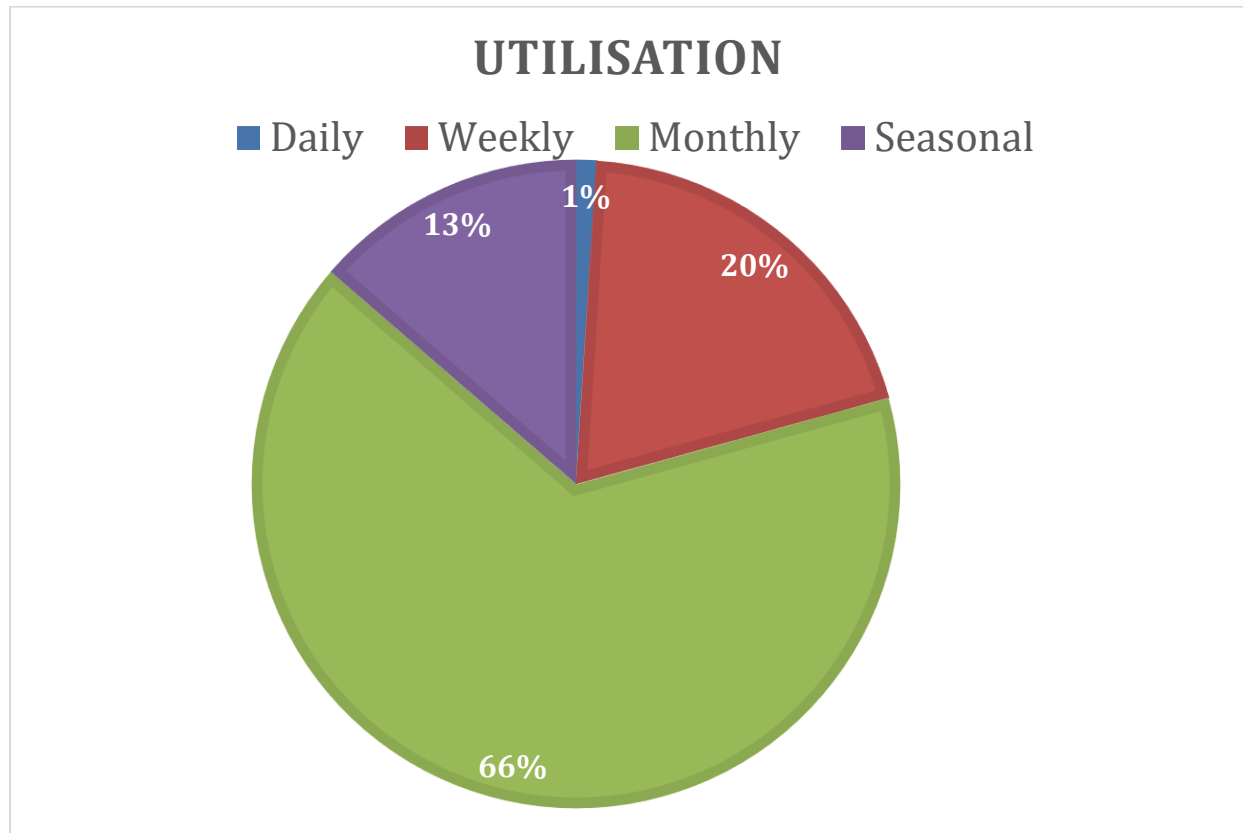
### ➤ Government regulations

- a. Personal Data Protection Bill, 2019: The Personal Data Protection Bill (PDPB) is a comprehensive data protection law that seeks to regulate the processing of personal data, including health data.
- b. Bionworks Technologies is the service provider via its mobile applications.
- c. Artemis PHR app has stringent security measures in place to protect the loss, misuse and alteration of the information on the app. The app and the hospital servers are secured with 256-bit Secure Socket Layer (SSL) encryption technology.

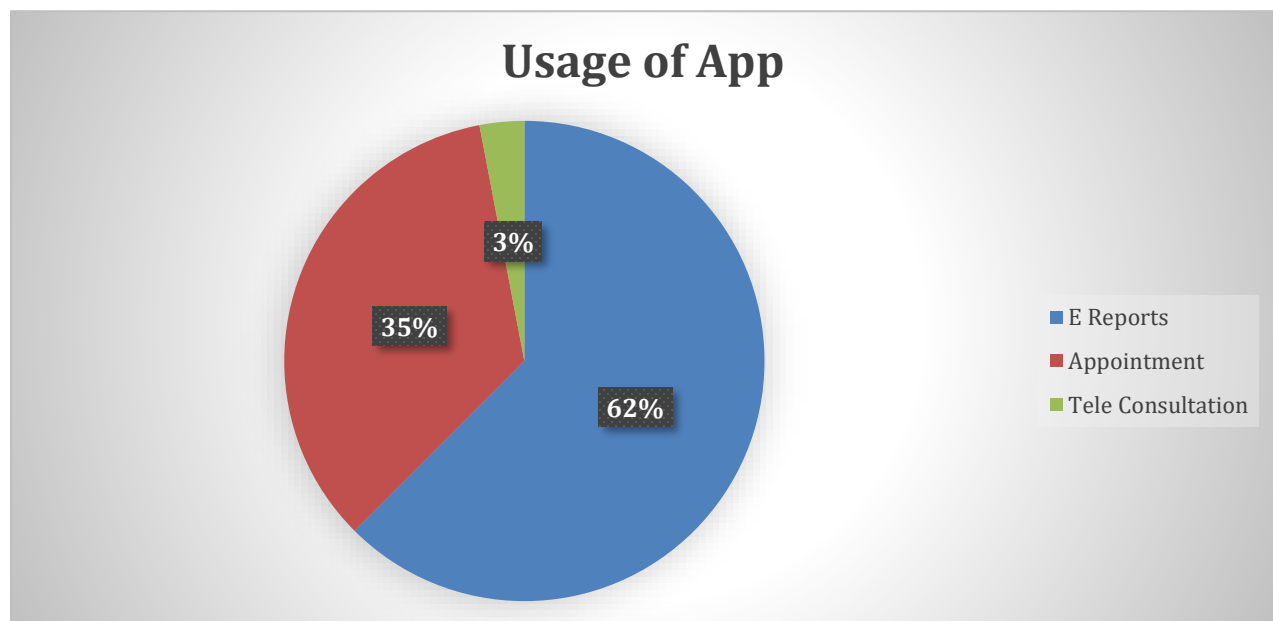
- Gender Classification:



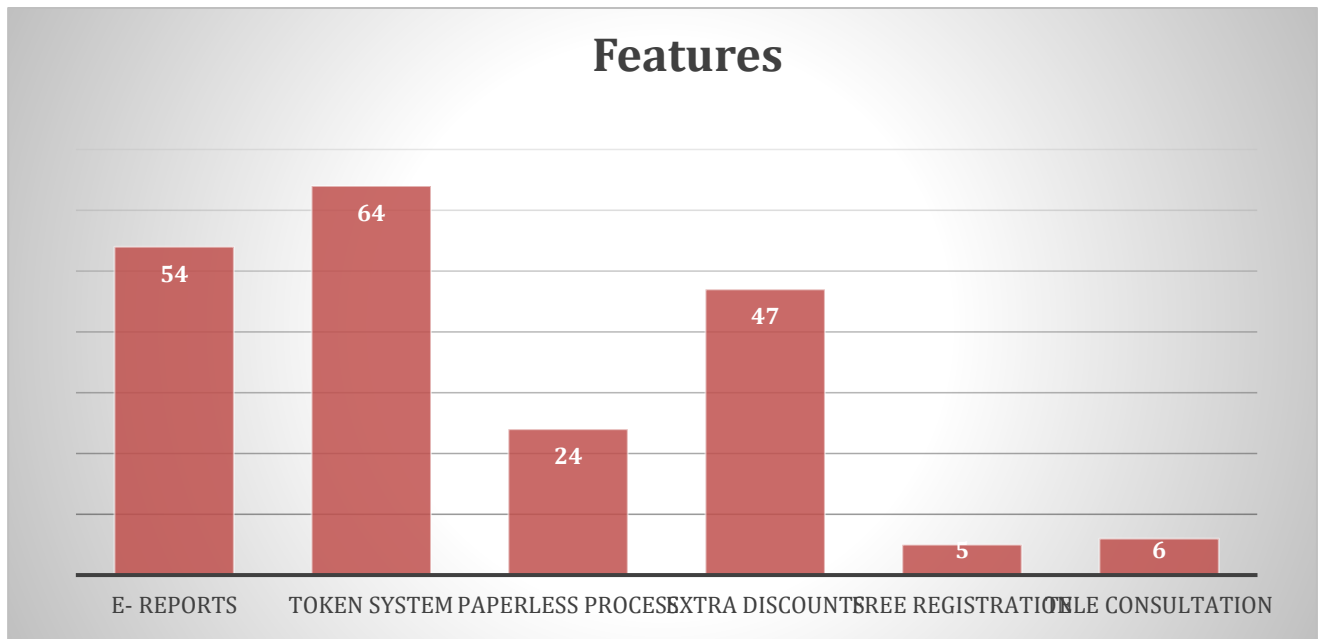
➤ Utilisation of the application:



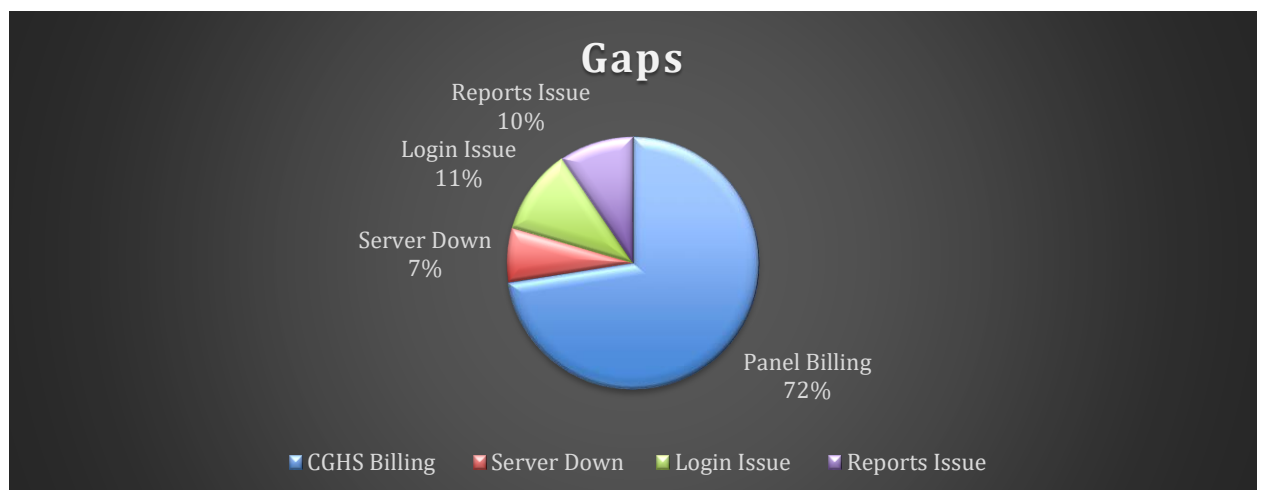
○ Usage of the Application:



- Features of the Application:

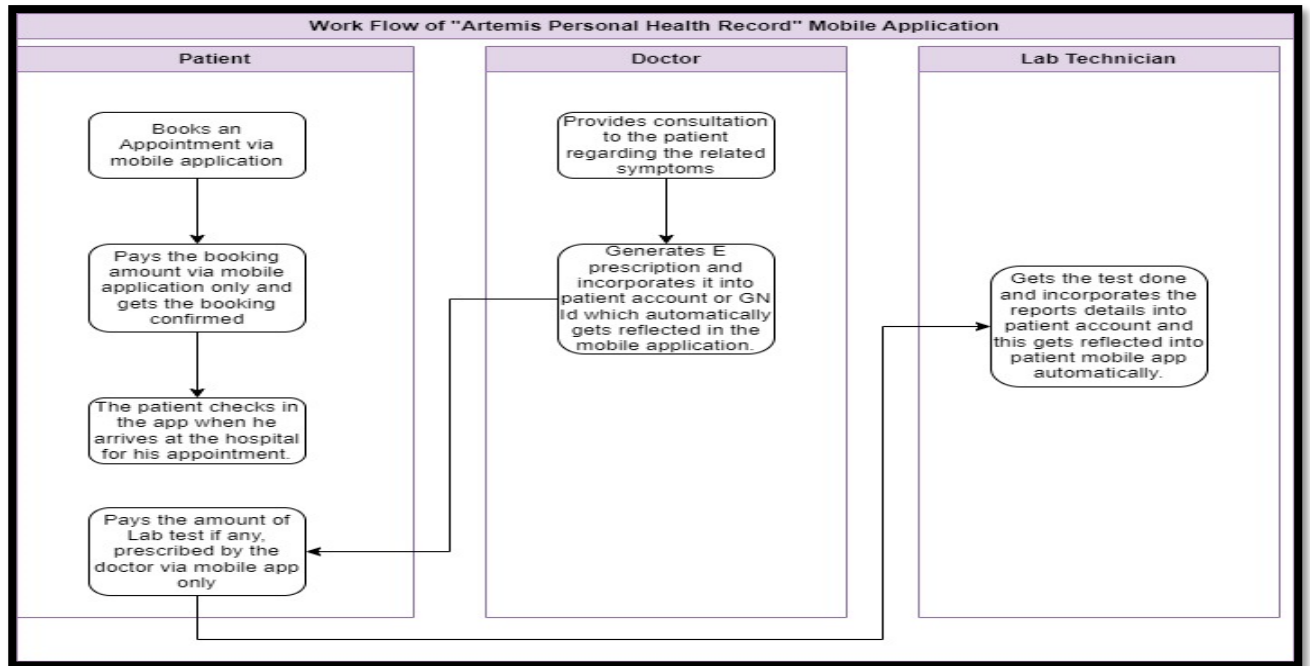


- Various Gaps analyzed after evaluating:

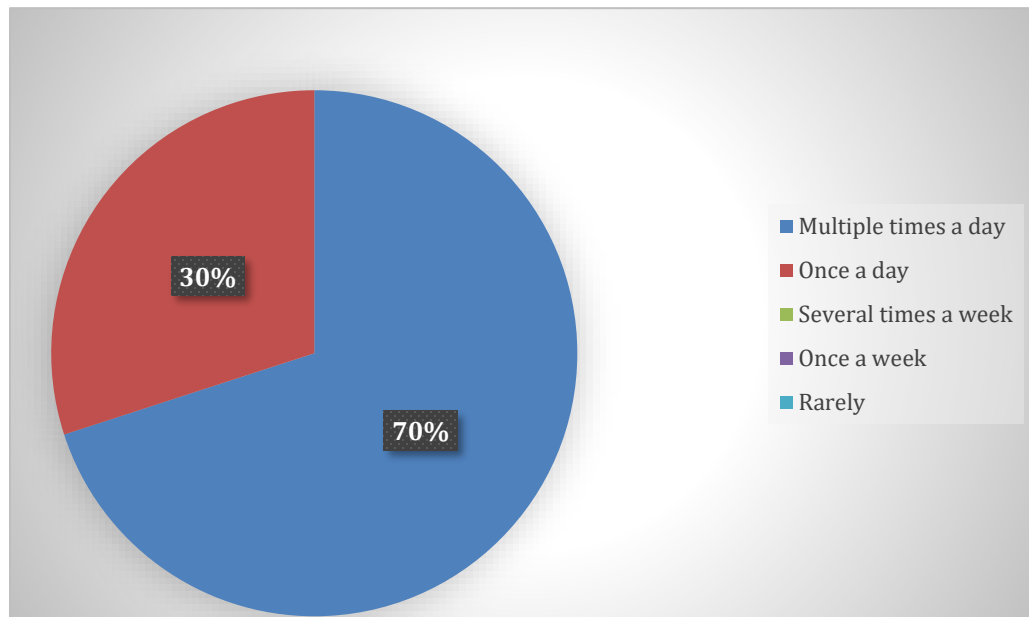




- Work Flow of Artemis Personal Health Record Application:

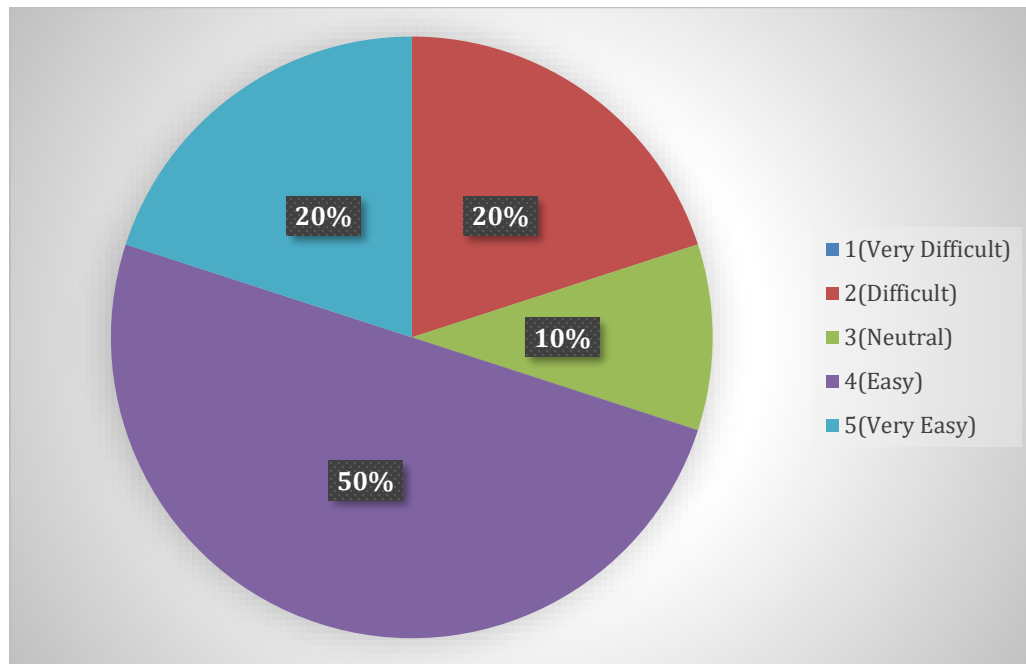


- Frequency of usage of the application by the hospital staff.



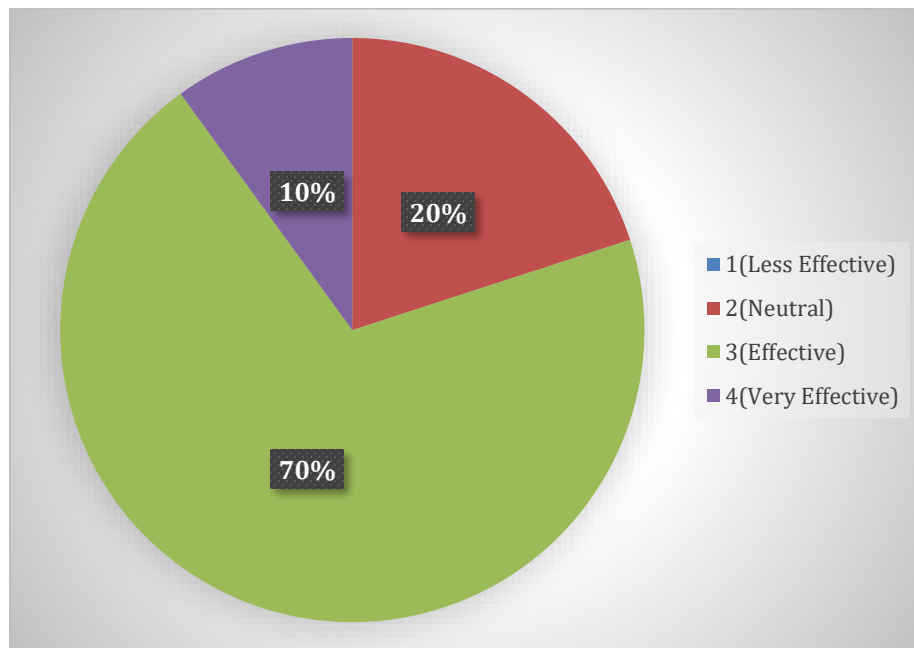
- a) From the above figure, following things can be concluded:
- It has been witnessed that 70% of the hospital staff has found the application to be very useful as they are using the application multiple times a day.
  - While rest of the 30% of hospital staff is using the application only once a day.

- Ease of using the application



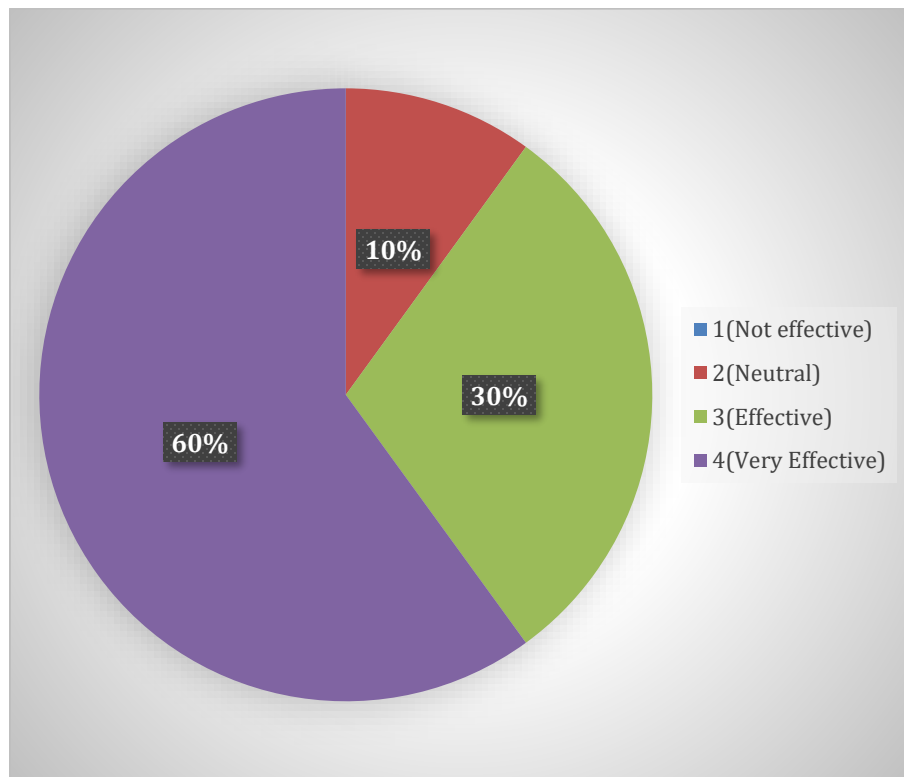
- From the above figure, following things can be concluded:
  - It has been noticed that 50% of the hospital staff faced no issues while operating the application as they find easy to use.
  - While 20% of the hospital staff find it to be very easy to operate the application.
  - On the other hand, 20% of the hospital staff found it difficult to operate the application, while remaining 10% of the hospital staff were neutral.

- Time Efficiency of the application



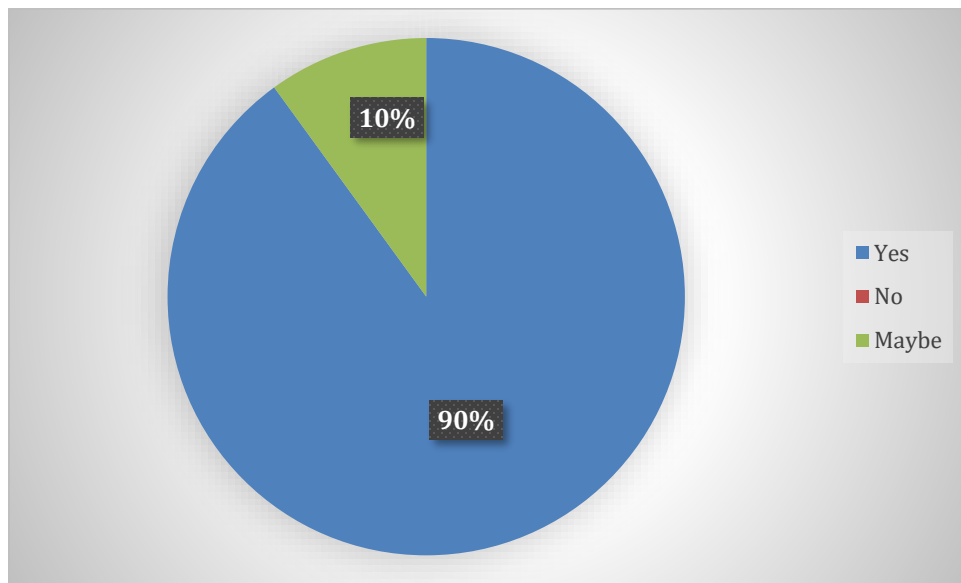
- From the above figure, following things can be concluded:
- It has been observed that, 10% of the hospital staff think that the usage of the application is very time effective.
  - While 70% of the hospital staff think that the usage of the application is effective and only 20% of the staff were neutral.

- Cost-Effectiveness of the application



- From the above figure, following things can be concluded:
  - It has been noticed that, 60% of the hospital staff found out that the application is very effective as it saves time and money.
  - While 30% of the hospital staff think that the application is effective.
  - Rest 10% of the hospital staff is at neutral stage.

- Is the application improving the quality of care



- From the above figure, following things can be concluded:
  - It has been observed that 90% of the hospital staff are satisfied with application as its improves quality of care.

## BENEFITS

ARTEMIS  
HOSPITALS

REGISTRATION CARD  
(To be filled in capital letters, preferably by the Patient)

GNID: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_  
(First Name) (Middle Name) (Last Name)

Son/Daughter/Wife of: \_\_\_\_\_

Age: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ Gender: Male ☐ Female ☐

Marital Status: ☐ Single ☐ Married ☐ Other ☐

Nationality: \_\_\_\_\_ Passport No.: \_\_\_\_\_  
(Foreign Nationals)

Address for Correspondence: \_\_\_\_\_

City/Town: \_\_\_\_\_ District: \_\_\_\_\_

State: \_\_\_\_\_ Pin Code: \_\_\_\_\_ Country: \_\_\_\_\_

Email ID: \_\_\_\_\_

Phone No.: \_\_\_\_\_ Mobile No.: \_\_\_\_\_

Have you travelled in the last 14 days? Yes ☐ No ☐

If Yes, ☐ National ☐ International

Have you experienced any of the following symptoms during or post visit?

☐ Fever ☐ Cough ☐ Cold ☐ Diarrhea

☐ Bodyache ☐ Throat Pain ☐ Breathing Difficulty ☐ Hospitalization

(In case of any symptoms, kindly visit Emergency Medical Officer in Emergency department)

How did you hear about Artemis?

☐ Advertisement ☐ Corporate (Name) \_\_\_\_\_

☐ Doctor (Kindly Provide Name) \_\_\_\_\_

☐ Website ☐ Others (Kindly Specify) \_\_\_\_\_

Blood Group: \_\_\_\_\_ Rh Factor: \_\_\_\_\_

Known Allergy, if any: \_\_\_\_\_

Person to Notify in case of Emergency:

Name: \_\_\_\_\_

Relationship (Please tick):

Father/Mother/Wife/Brother/Son/Daughter/Husband/Other

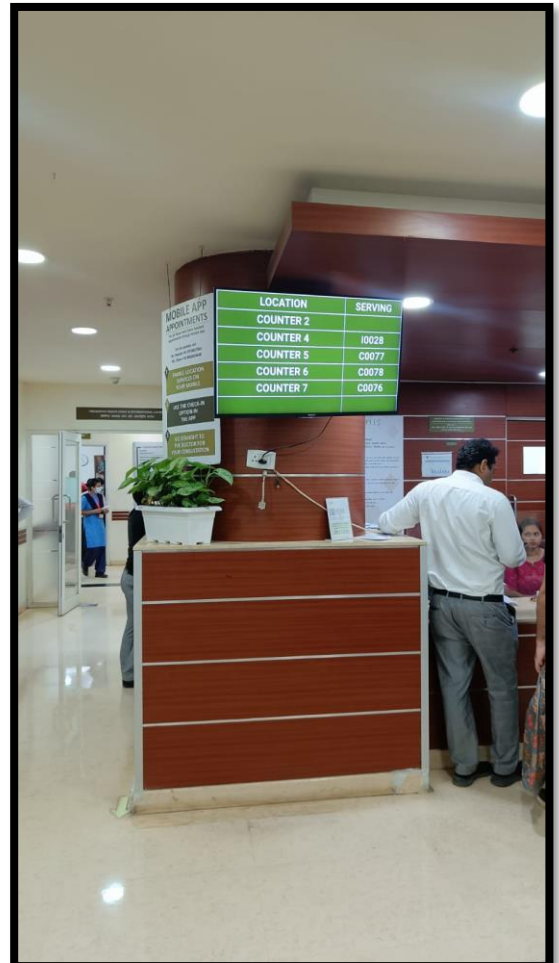
Phone No. \_\_\_\_\_ Mobile No. \_\_\_\_\_

Patient brought by: \_\_\_\_\_

Relationship, if any: \_\_\_\_\_

Mode of Payment: Credit Card ☐ Cash ☐ Corporate/Insurance ☐

Page 1 of 2



## **ADVANTAGES and DISADVANTAGES**

### **Advantages:**

- 1) It helps the patients to avoid the waiting time in the long queues at the counter to get the appointment, reports as well as billing.
- 2) It helps the hospital to avoid overcrowding of patients into the hospital.
- 3) It promotes eco-friendly environment.
- 4) It helps the patients to access their health in into their hands.
- 5) It cuts carbon footprint by minimizing the use of paper.

### **Dis-advantages:**

- 1) Not every patient uses smartphone which can reduce its usage.
- 2) Absence of Panel billing is the biggest dis advantage of the application.
- 3) Patients might be worried about their privacy breach and authenticity.
- 4) Reliance on Technology: Health applications heavily depend on technology.



## **2.5. Discussion**

1. Most of the patients utilising the application on a monthly basis for accessing their E- reports which are securely available on the application.
2. Booking an online consultation appointment reduces the queue in hospital resulting in more efficiency of the hospital.
3. There are many features which are benefiting patients and their attendants.
4. Digital records can significantly cut administrative costs.
5. Panel billing is the biggest gap in the application.
6. Server down, login issues and sometimes accessing E- reports serve as a discomfort to the patients

## **2.6. Recommendations**

After analyzing the results, it is found that there is scope for improvement and a few changes can lead to better patient satisfaction.

Some suggestions can be:

- To improve application technology which eliminate the risk of any technical error.
- Should listen issues of the patient's reviews and act instantly to resolve them.
- To integrate AI technology into the application.
- To introduce Panel billing in the application if possible.
- To make application more user friendly for the old age patients.
- Should provide prior information for maintenance period to avoid any server down issues.

## **SUMMARY and CONCLUSION**

The Personal Health Record (PHR) Mobile App has become a potential option for improving the effectiveness of healthcare systems' service delivery. The purpose of this study is to assess how the Artemis PHR App affects hospital service delivery effectiveness. Patients can access and manage their health records, keep track of their medical history, connect with healthcare professionals, and make appointments using the full Artemis PHR App, a mobile application.

Using a combination of methodologies, the efficiency of the Artemis PHR App was examined. Both patients and healthcare professionals completed questionnaires that were used to acquire quantitative data; focus groups and interviews were used to gather qualitative data. A sample of patients and medical staff from several institutions that used the Artemis PHR App were included in the study.

The study's conclusions showed that using the Artemis PHR App has a number of advantageous effects. First off, patients now have much easier access to health data and information, which helps them better comprehend their ailments and course of treatment. This greater patient engagement and empowerment as a result of the increased access allowed for better informed decision-making and active patient involvement in their healthcare. include establishing well-defined protocols and workflows, implementing efficient communication systems between radiologists and referring physicians, utilizing advanced image viewing and reporting software, ensuring appropriate staffing levels, and The Artemis PHR App also improved care coordination and decreased administrative hassles by streamlining communication between patients and healthcare professionals. The software eliminated the need for phone calls and paperwork by enabling encrypted messaging, appointment scheduling, and prescription reminders. Healthcare personnel reported increased productivity in handling patient encounters and office work as a

result.

Thirdly, the Artemis PHR App had a favorable effect on healthcare systems' general service delivery effectiveness. The program decreased wait times, removed duplication in data collecting, and reduced mistakes brought on by human record-keeping. These enhancements enhanced hospital workflow and resource allocation, which ultimately improved the standard and timeliness of patient treatment.

The use of the Artemis PHR App has the potential to significantly increase the effectiveness of service delivery in hospital systems, to sum up. The software promoted seamless communication between patients and healthcare professionals, improved resource allocation, and improved patient access to health information. These results imply that integrating PHR mobile applications, such as Artemis, into hospital systems can result in more effective and patient-centered care delivery. To maximize the benefits of PHR apps across healthcare settings, more study and wider adoption are advised.

## **2.7. Conclusion**

- Continuous betterment in the application will help in reducing the burden on the hospital.
- Paperless process will cut cost as well as promotes ecofriendly environment.
- Digital Health apps is a game changer in the healthcare industry.
- Reducing the overcrowding issue in hospital premises.
- According to the perception of the hospital staff, the application is time effective, cost effective and improves quality of care to the patients.
- Reducing the burden on the Out Patient Department staff with the help of token system.
- Improving the application and introducing new useful features will improve better patient satisfaction.
- Hospital can be in your palms.

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## **ANNEXURE**

- **OBSERVATIONS AND LEARNINGS**

1. Refined the existing SOPs

I was given the duty of improving the operations department's policies and procedures as part of my responsibilities. To find areas for improvement and streamline procedures, this entailed a thorough assessment and analysis of current practices. I was able to identify the difficulties and bottlenecks in the department by directly collaborating with team members and stakeholders.

I focused on increasing clarity, efficiency, and compliance when I was refining policies and processes. I updated and examined documents to make sure they appropriately reflected current procedures and complied with rules and regulations. Standard operating procedures (SOPs), workflow diagrams, and instructions for various jobs and scenarios were all included in this documentation.

I wanted to increase operational effectiveness, reduce errors, and encourage uniformity in operations through this process of refining. To promote easier collaboration and efficient problem-solving, I put in place clear criteria for decision-making, escalation procedures, and communication protocols.

Overall, I intended to create a more structured, open, and productive work atmosphere by improving policies and processes within the operations department. As a result, there was an improvement in both productivity and customer satisfaction, and a culture of following best practises was also promoted.

## 2. Camp Visits

We performed camp visits in Gurgaon's residential neighborhoods as part of our operations management plan to carefully monitor our operations.

These visits meant going to the residential areas where our services were being offered in person to make sure everything was running smoothly and to handle any problems.

We talked to the residents during these trips, heard their opinions, and promptly answered any questions or ideas they had.

With this practical method, we were able to monitor service delivery, evaluate the efficiency of our operations, and pinpoint opportunities for development.

We sought to create a strong sense of community, establish trust, and make sure that our services surpassed residents' needs and expectations by interacting with them directly.

These camp visits also gave us important information and statistics that helped us make decisions and improve our operations for higher client satisfaction.





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