

A Study on Patient Lifetime Value in Opd

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I. MEANING OF STUDY

Patient Lifetime Value (PLTV) is a metric used to estimate the financial value of a patient over their lifetime. It is a projection of the expected revenue that a patient will generate for a healthcare provider, hospital, or medical practice. PLTV considers various factors such as the patient's treatment history, potential future healthcare needs, and their likelihood to continue seeking care from the same provider. In this article, we will explore the meaning of PLTV, its importance, and how it is calculated.

PLTV is an important metric in healthcare because it helps providers understand the long-term financial value of each patient. By knowing the expected revenue that a patient will generate over their lifetime, healthcare providers can make informed decisions about how to allocate resources and invest in patient acquisition and retention strategies. PLTV can also help providers identify which patients are most valuable to their business and focus their efforts on retaining them.

The calculation of PLTV considers several variables, such as the patient's age, gender, medical history, and treatment patterns. PLTV is typically calculated using a combination of historical data, such as the patient's past healthcare utilization and spending, and predictive modelling based on factors such as demographics, medical conditions, and socio-economic status.

PLTV can be calculated using various methods, such as using the patient's average annual spending or projecting future spending based on their treatment patterns. One common method is to use a discounted cash flow (DCF) analysis, which considers the time value of money and calculates the present value of the expected future cash flows from the patient. This method considers the estimated costs of care, the

probability of future healthcare utilization, and the expected revenue generated by the patient over their lifetime.

To calculate PLTV, healthcare providers need access to comprehensive patient data, such as electronic medical records, insurance claims data, and demographic information. Providers can also use data analytics and machine learning techniques to analyse large amounts of patient data and identify patterns and trends that can help predict future healthcare utilization and costs.

In addition to helping providers allocate resources and make strategic decisions, PLTV can also help providers identify patients who are at risk of leaving their practice or seeking care from a competitor. By identifying these patients early on and implementing targeted retention strategies, providers can improve patient loyalty and increase their PLTV.

In conclusion, Patient Lifetime Value is a metric used to estimate the financial value of a patient over their lifetime. It considers various factors such as the patient's treatment history, potential future healthcare needs, and their likelihood to continue seeking care from the same provider. PLTV is an important metric for healthcare providers as it helps them make informed decisions about resource allocation, patient acquisition, and retention strategies, and identifying patients who are at risk of leaving their practice. The calculation of PLTV requires access to comprehensive patient data and can be done using various methods, such as discounted cash flow analysis and data analytics.

II. NEED FOR PLTV

There are several reasons why healthcare organizations should consider calculating and monitoring their patients' lifetime value: -

Financial Planning: Knowing a patient's lifetime value can help healthcare organizations plan for future revenue and expenses. It can help them allocate resources more effectively and make informed decisions about investments in technology, facilities, and personnel.

Patient Retention: Understanding a patient's lifetime value can help healthcare organizations identify their most valuable patients and focus on retaining them. By providing high-quality care and excellent customer service, organizations can increase the likelihood that patients will return for future care, and thus increase their lifetime value.

Marketing: Knowing a patient's lifetime value can also help healthcare organizations target their marketing efforts more effectively. They can focus on attracting and retaining patients with the highest lifetime value, rather than casting a wide net and hoping for the best.

Patient Outcomes: By tracking a patient's lifetime value, healthcare organizations can also identify areas where they can improve patient outcomes and reduce costs. For example, they can identify patients who are at high risk of readmission and take steps to prevent it, thus reducing costs and improving outcomes.

Overall, understanding a patient's lifetime value is essential for healthcare organizations that want to provide high-quality care, retain their most valuable patients, and achieve long-term financial sustainability.

III. INCREASE PATIENT LIFETIME VALUE

The following is a look at how healthcare providers can increase lifetime patient value through enhanced communication.

1. Communicate proactively to increase patient revenue

It is impossible to optimize patient value if you only communicate on an "as-needed" basis or simply respond to inbound prospective patient inquiries. In healthcare, patients have greater trust in a provider when they have genuine interest in the patients' well-being and maintain regular interaction. What is the

takeaway? Go beyond standard appointment reminders.

Proactive health communication includes sending out secure links to post-treatment care plans, Rx refill directives, impending screenings and other preventative care information that is based on age, health history, and other factors.

In addition to demonstrating that you care about your patients in a more holistic way, regular proactive communication creates an opportunity to increase incremental telephony-based reimbursements and improves relationships. It also keeps your practice and brand in front of patients to increase patient retention levels and expand new patient acquisition through positive referral and social ratings.

2. Identify patient segments

Communication is most effective when tailored to your audience. Patients have different needs, interests, and concerns. Gather data and insights on your patients to learn more about individual preferences, such as what types of communication they want, how they prefer to receive it, and whether they share information with others.

You can gather data based on how patients interact with your facility directly from your cloud-based communications platform and the various supported channels: web chat, inbound calls, social media, telehealth / video conferencing, SMS, and other communication methods. The integrated reporting capabilities of the cloud communications platform enables providers to measure and expand the data gathered by developing real-world data-supported surveys to further refine and capture specific insights that can be utilized to improve patient service delivery.

Satisfaction levels are additional dimensions on which you can segment your patients for ideal communication. Patients happiest with your healthcare organization are most likely to share their positive experiences with others. Leverage their satisfaction to generate word-of-mouth referrals.

Other patients may have adequate experiences, but they are open to other providers in the future.

Garnering feedback early gives you the chance to improve your service for this patient tier. Finally, you may have disgruntled patients who are dissatisfied with their experiences. It is vital to detect their dissatisfaction early so you can address their concerns and safeguard against negative word-of-mouth.

3. Listen and learn

Many providers send follow-up emails after appointments directing patients to complete lengthy surveys that have been mailed from third-party agencies like Press Ganey. While providers are generally required to have a minimum level of these types of patient satisfaction surveys completed, the results are only reported long after the patient encounter.

To generate faster and actionable patient feedback beyond these multi-page surveys, invite patients to provide feedback directly via phone-based surveys that can be facilitated directly from your cloud communications platform – which includes the contact center capabilities. This is an approved approach by the same Federal agencies that approve patient sentiment capture via snail-mailed hard copy survey completions. It is better to hear about any frustrations that get in the way of the ideal experience sooner rather than months later. Show a genuine interest and patients feel more comfortable telling you about their experiences.

4. Offer comprehensive cross-platform support

Communication takes place through a wide variety of channels. In-person, phone, email, web forms, social media and chat are primary ways through which patients communicate with providers. It is important to offer your patients Omni channel, cross-platform opportunities. Doing so ensures they can interact with you in the way they prefer or the manner that is most convenient at any time.

Unfortunately, historical strategies for offering multi-channel support were cumbersome and inefficient. Each channel functioned in a silo, with limited ability to correlate ongoing support across channels. Providers and patients were frustrated by this reality.

Now, you can create efficient, comprehensive, cross-channel support with a cloud-based solution from RingCentral. Equip your support agents with the ability to seamlessly shift service from one channel to the next. Capture data from each interaction such that agents can easily analyse a patient's case history regardless of the platforms through which they interact.

5. Provide 24/7 information and staff access

Sometimes, patients have questions or want information at night or when your practice is closed. There are a few ways you can offer access to information and communication during odd hours. The following are two key options:

- Patient health portals

A customized portal allows you to give patients information on their medical history, previous appointments, upcoming appointments, prescriptions, and more. You can also provide web chat features for 1:1 chat session during normal facility operational hours.

- AI chat

For 24-hour modelling, some of the questions patients have can be answered by an AI chat-bots, AI bots can detect common types of questions and give scripted answers, or direct patients to follow-up contacts or resources. They can fill any gaps when your practice does not offer live chat or 24-hour support access.

➤ CALCULATE PATIENT LIFETIME VALUE

The LTV equation is simple:

$$\text{❖ LTV} = V \times N \times Y$$

In this equation, **V**= the average value of a given appointment with the patient (i.e., the cost to the patient and/or their insurance for the visit). **N**= the number of these appointments the patient has each year. And **Y**= however many years of that relationship you would like to calculate or project.

This is, of course, only an estimate of potential LTV, but it should give you a decent idea of potential lifetime value.

IV. PATIENT LIFETIME VALUE SERVICE PROCESS

WORKFLOW OF PLTV:

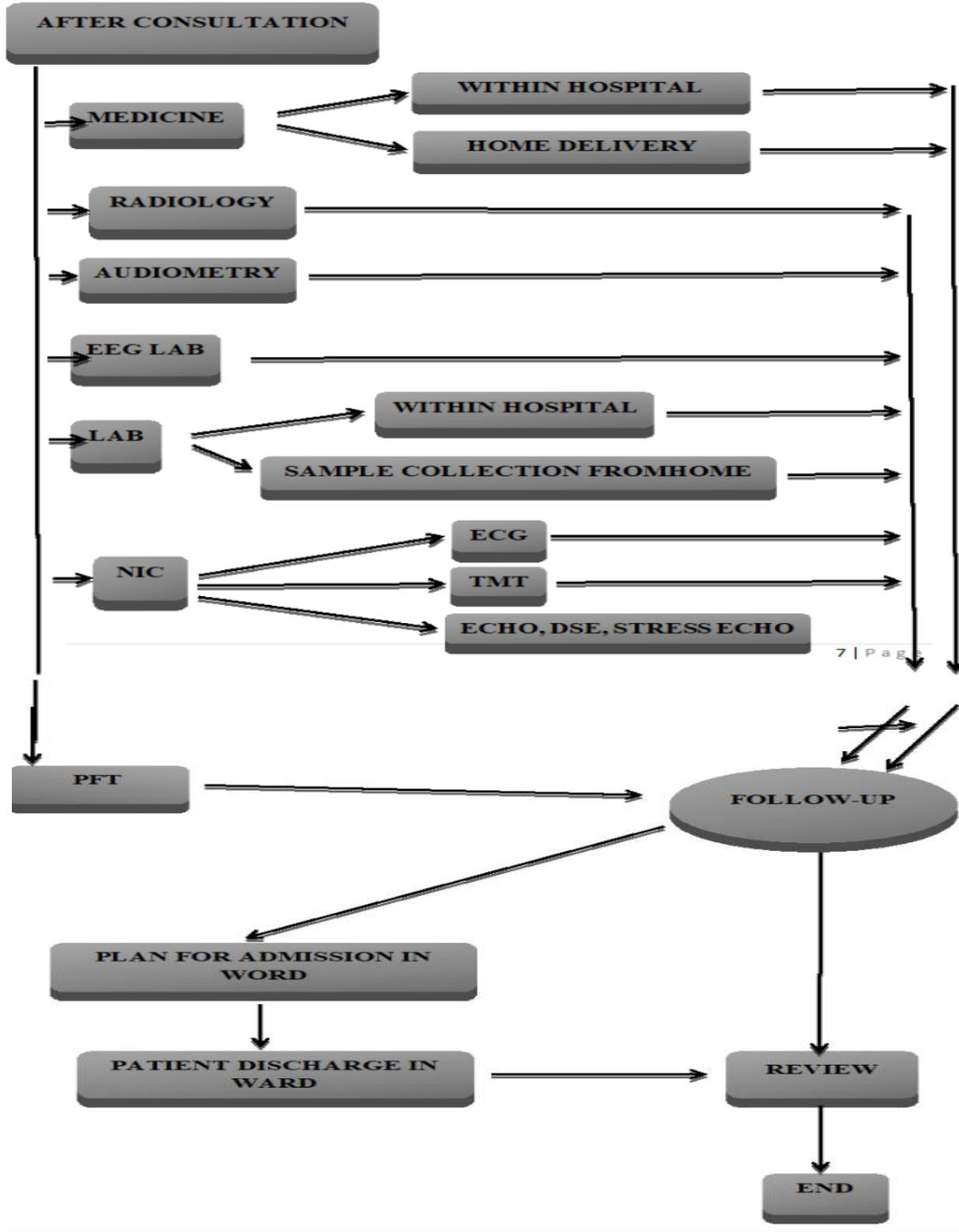


FIGURE 2.1

V. OBJECTIVES

- To find total conversion of patient from OPD consultations.
- To improving patient engagement.
- To find the usability diagnostic tackiness.
- To increasing patient satisfaction.
- To understand the patient acceptability of the hospital services.
- To help in patient satisfaction.
- To maximize the area of patient interaction.
- To maximize the hospital revenue.
- To improving financial performance of the hospital.
- To help to create a goodwill with the current patient.
- To quantify the total value a patient brings to a healthcare organization over their entire lifetime.
- To emphasizes the importance of building long-term relationships with patients.
- To encourages a patient-centred approach to healthcare delivery.

VI. METHODOLOGY

- ✓ Population: It was decided to study a sample of 26,005 people, and data from them was gathered.
- ✓ The sampling Frame: The Frame is a list of patients that the doctor has recommended for specific medications, laboratory tests, radiological tests, NIC, procedure and Admissions from 2nd May, 2025 to 4rd August, 2025.

- May total OPD = 8695
- June total OPD = 7802
- July total OPD = 9508
- ✓ Data Collection: Primary data was obtained through observation, whereas secondary data was obtained through previous records.

VII. RESULTS AND OBSERVATIONS
(ANALYSIS)

The process of categorizing, organizing, altering, and summarising data in order to get research results and test hypotheses is known as analysis.

This section's major goal is to deal with the analysis and interpretation of the 26,005 data points [N = 26,005] that were gathered throughout the study. The study was conducted to determine after consultation how many tests and medicine the doctors were prescribed, as well as how much admissions were prescribed.

Data presentation: To provide a solid foundation for the discussion of the study, a proper step-by-step methodology was used here, and the data was tabulated, arranged, organized, analysed, and interpreted using descriptive and inferential statistics. The study's findings are provided in the manner that follows.

TOTAL DOCTOR ADVICE AFTER CONSULTATION BY MONTH:

How many patients bought medicine from here and got tested and how many patients did not.

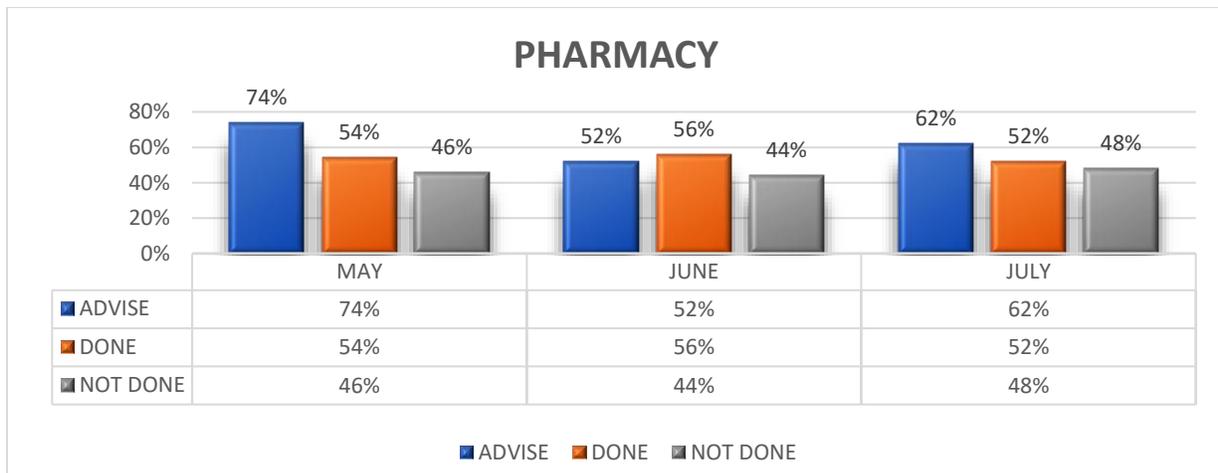


FIGURE 3.1

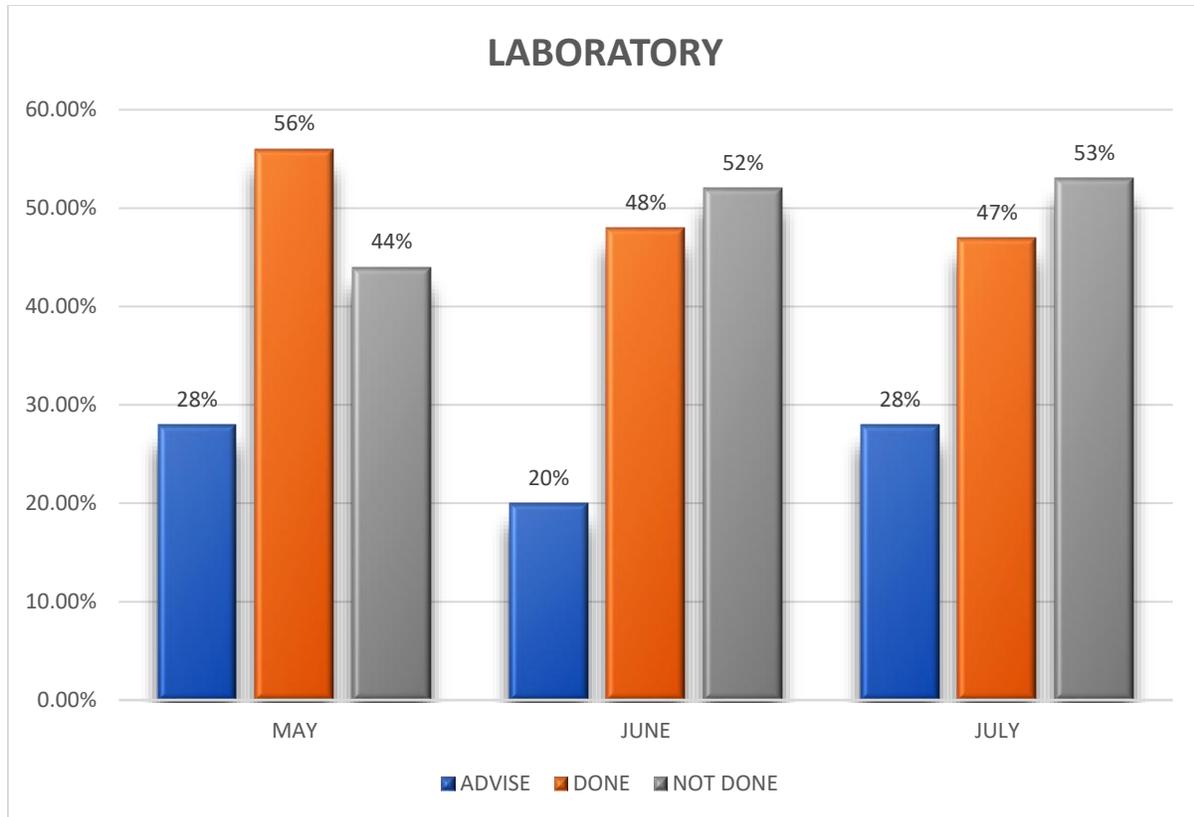


FIGURE 3.2

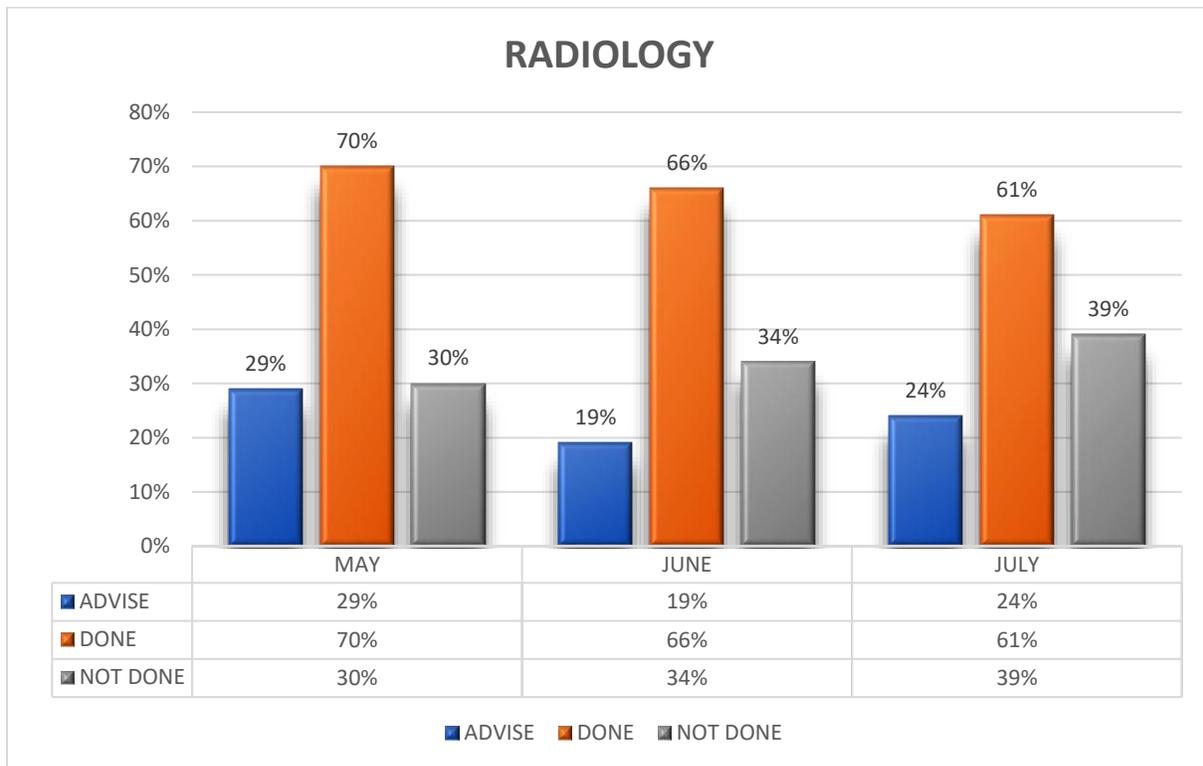


FIGURE 3.3

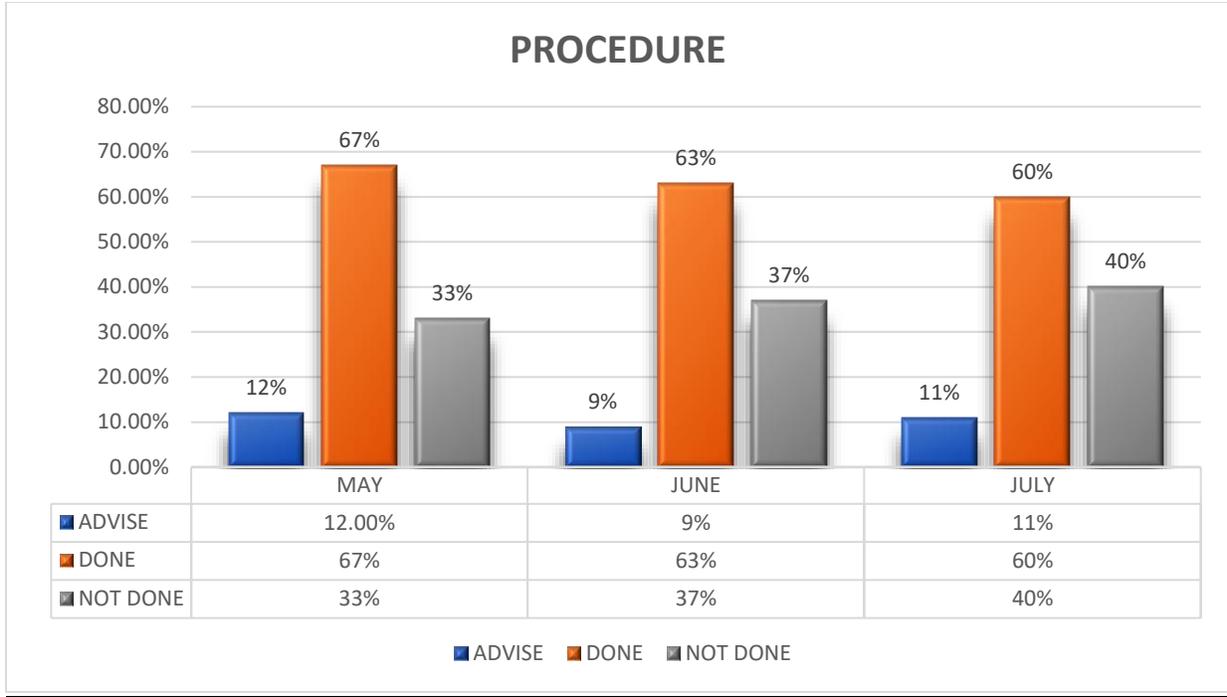


FIGURE 3.4

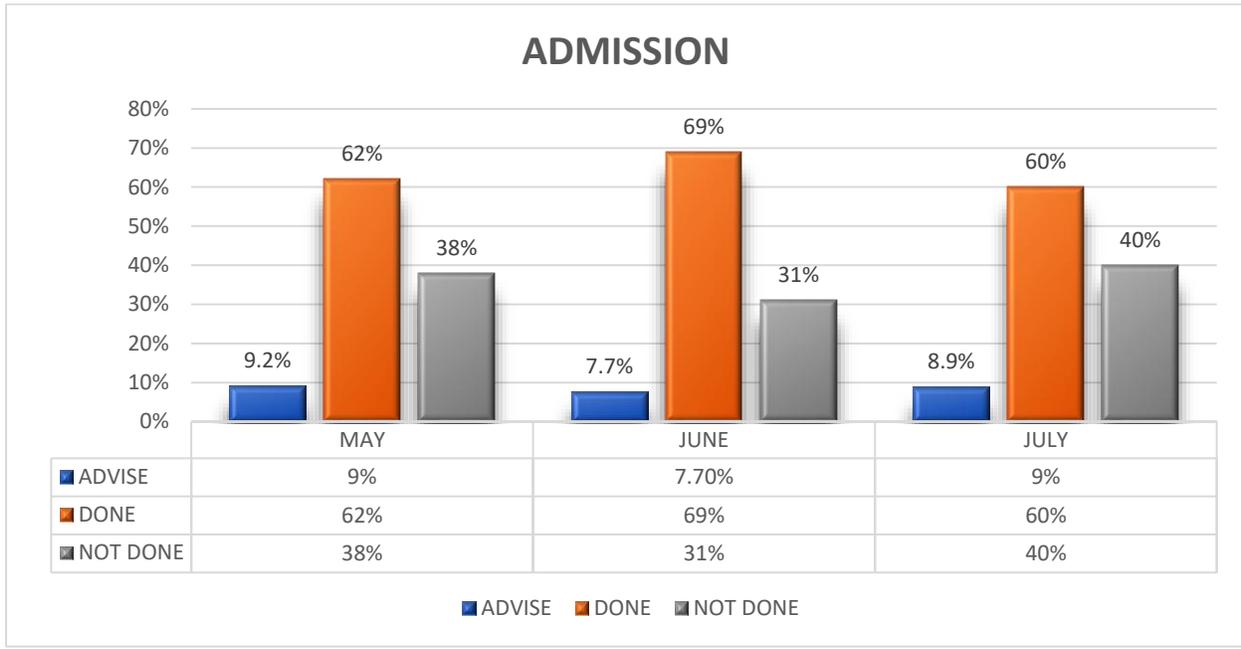


FIGURE 3.5

VIII. DISCUSSION AND RECOMMENDATIONS

o DISCUSSION: -

This study's primary goal is to see, how patients are guided in the OPD following doctor consultation. The burden to discuss the study falls on me as a third-year

bachelor's student in hospital management. The present discussion is on the study of, PROJECT REPORT ON "A STUDY ON PATIENT LIFETIME VALUE IN OPD"

- ✓ To see after consultation, the doctors are prescribed how many tests and medicine for patients.
- ✓ Guiding patients after doctor consultation in OPD. So that patients buy medicines and get tested from here.
- ✓ Many patients do not buy medicines and do not even get tested from here.
- ✓ We check the patient's billing to see how many patients are buying medicine and testing from here.
- ✓ We call for patients doctor follow-up.
- ✓ We help patients for sample collection from her/his home.
- ✓ We help Patients for medicine home delivery.

○ RECOMMENDATIONS

My recommendations are as follows considering the data I have just stated,

- I. There should be improved integration of centralised PLTV software.
- II. Need more man power for PLTV.
- III. According to the specific doctor, more persons are needed to keep accurate PLTV data.
- IV. Try to maintain regular PLTV data in an optimum manner.
- V. Try to maintain Excel sheet for PLTV for the per months.
- VI. Try to maintain the expenses of PLTV procedures.
- VII. Employees must be more engaged in their work responsibilities.
- VIII. Establish SOPs for PLTV.

IX. CONCLUSION

Project research looked at how Patient Lifetime Value refers to a healthcare organization over their lifetime as a customer. It considers various factors such as the revenue generated through medical devices, treatments, procedures, and potential future referrals.

PLTV analysis helps in understanding the financial impact of individual patients on the hospital's revenue. It is calculating the total revenue generated from a patient's visits, treatment, and other services.

Evaluating PLTV can provide insights into the effectiveness of different treatments and services

offered by the hospital by identifying the most profitable services or treatments.

PLTV can help in developing patient retention strategies by identifying high-value patients, hospitals can tailor their communication, follow-up care, and support to enhance patient satisfaction and loyalty, thus increasing the likelihood of long-term relationship and higher PLTV.

PLTV can help hospitals make decisions on how to allocate their resources. Hospitals can dedicate resources, like as specialised equipment or staff, to high-value patients, ensuring the greatest care for those who significantly contribute to the PLTV.