



## Patient Waiting Time and Associated Factors in the Out Patient Department at a Public Hospital in Northern Philippines

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### ABSTRACT

**Introduction.** Patient waiting time is the length of time from when a patient enters the outpatient department to when they leave. A hospital is a healthcare institution that provides treatment to patients with specialized staff and equipment that play an important role in society. The outpatient department (OPD) is one of the most important parts of a hospital, as it is the first point of contact for many patients. The Outpatient department (OPD) is visited often by a large section of the community. Long patient waiting times are a problem in both developed and developing countries, and they can discourage patients from returning to the clinic for care. In many healthcare systems around the world, patients often have to wait a long time to access medical services. This can make them frustrated and uncomfortable, and it can also lead to poorer health outcomes.

**Methods.** A quantitative, cross-sectional design was used to determine Patient waiting time and its associated factors in 61 respondents from the Outpatient Department of a Public hospital in Northern, Philippines.

**Results.** Most of the respondents demographic profile to which there were females. The respondent's age varies from 18 to over 57 years old. The majority of the respondents were unemployed, It shows that the level of perception of patients during their time in the Outpatient department includes how clearly they understand the Outpatient service flow and the instructions given by medical staff. The data shows that the respondents with laboratory requests tend to have an average of 172 minutes of waiting time, which is significantly longer than those without laboratory requests who only waited an average of 79 minutes. However, even with longer waiting times. Respondents still had positive perceptions of the Outpatient department process. It was also revealed that there is no significant relationship between the waiting time and associated factors such as OPD flow, OPD operation, and Patient factors in a public hospital setting.

**Conclusion.** This study provides valuable insights for future studies to explore additional factors potentially contributing to longer waiting time, such as resource limitations, staffing levels, equipment availability, and facility layout could contribute to delays. Patient characteristics may also contribute such as medical complexity, arrival patterns, and patient behavior might influence waiting time. Even administrative procedures such as appointment scheduling, data management, and communication processes could play a role. However, the data showed that it has no sufficient evidence to suggest that the investigated factors have statistical significance on patient waiting time within the OPD setting. Other factors, not included in the study might be more relevant in understanding the variations in waiting time.

*Keywords: patient waiting time, associated factors, respondent, outpatient department*

### INTRODUCTION

Patient waiting time is the length of time from when a patient enters the outpatient department to when they leave. A hospital is a healthcare institution that provides treatment to patients with specialized staff and equipment that play an important role in society. The outpatient department (OPD) is one of the most important parts of a hospital, as it is the first point of contact for many patients. The Outpatient department (OPD) is visited often by a large section of the community.

Long patient waiting times are a problem in both developed and developing countries, and they can discourage patients from returning to the clinic for care. In many healthcare systems around the world, patients often have to wait a long time to access medical services. This can make them frustrated and uncomfortable, and it can also lead to poorer health outcomes.

The long waiting time is a worldwide phenomenon that needs much more to be done to reduce patient waiting time in public hospitals (Broyles & Roche, 2008).

This study focuses on one of the key activities of a hospital. The Outpatient department (OPD) and its operation. Outpatient service departments provide diagnostic, curative, preventive, and rehabilitative services to patients. The Outpatient department departments typically face several challenges. Such as a high volume of patients. Patients arrived based on scheduled appointments or as walk-in patients. What further complicates the waiting time of patients at the OPD is patients who are coming late on appointments or delayed release of laboratory workups.

Secondly, the services are a combination of procedures from medical and surgical departments. Thus the existence of these challenges often results in overcrowded Outpatient Departments thus contributing to long waiting times for patients. The long waiting time may lead to a loss of time and other hospital resources. Hence, Hospital administrators and policymakers are becoming more proactive in the management of Out Patient Department patient waiting time.

Patient waiting times in tertiary hospital outpatient departments (OPDs) are a significant concern, impacting patient satisfaction and potentially discouraging healthcare utilization. Studies across various regions highlight this issue. For instance, Fekadu Aseefa et al. (2011) in Ethiopia found that while 82.7% of patients were satisfied with doctor services, only 77% were satisfied with overall services, with waiting times being a major complaint. Similarly, Sarkar J et al. (2011) in India reported that waiting areas and times were a source of dissatisfaction for outpatients, despite positive experiences with consultations and doctor communication. These findings are further corroborated by Bilkish N.P. Shelke SC et al. (2012) in India, who observed a direct correlation between shorter waiting times and increased patient satisfaction with OPD timings. Anand D Kaushal SK et al. (2012) in India also identified long waiting times as a key factor contributing to lower satisfaction levels, alongside inadequate OPD timings and inefficient registration processes. Anand Kaushal et al. (2012) found high satisfaction with doctors' courtesy and overall service effectiveness in Indian healthcare facilities. However, waiting times for consultations, registration, and pharmacy services significantly dampened patient satisfaction, especially at secondary and rural levels. Similar trends were observed in studies by Krupal Joshi et al. (2013) and Nirmalya Manna et al. (2013), who reported high satisfaction with doctor consultations but dissatisfaction with waiting times in pharmacies and OPD timings. This aligns with economic models viewing "time price" as a crucial factor influencing healthcare demand. As out-of-pocket costs decrease, waiting times become a more significant barrier, potentially deterring patients like in the models proposed by Acton (1975) and Blundell & Windmeijer (2000). The latter suggests waiting times act as a "hassle cost," driving patients towards alternative care or discouraging them from seeking care altogether. Furthermore, the Grossman model (1972) views health as both a consumption good and an investment, with time playing a critical role. When waiting times encroach on valuable time resources, individuals may choose to reduce healthcare demand to prioritize other activities, as suggested by Ranjeeta Kumari et al. (2015) who found that 42% of patients were dissatisfied with accessibility due to excessive waiting times.

The presence of health insurance, as Grossman argued, essentially eliminates monetary price as a barrier to healthcare access. However, this doesn't imply unfettered access. Instead, healthcare is rationed through waiting times and travel distances. As wages increase, the opportunity cost of seeking care rises, making individuals with higher incomes more likely to utilize alternative healthcare options like private hospitals with potentially shorter wait times. For those with lower incomes, long wait times may force them to trade off healthcare for income by reducing their healthcare demand.

Grossman's model also proposes that individuals invest time in producing their own health. When wages increase, the cost of this time rises, leading individuals to reduce their investment in personal health production and consequently increase their demand for medical care. However, excessive waiting times can also make medical care itself time-expensive, prompting individuals to seek alternative care options with shorter wait times, such as over-the-counter medications or home remedies.

The importance of managing waiting times effectively is further emphasized by various studies. The Institute of Medicine recommends that at least 90% of patients be seen within 30 minutes of their appointment, yet this standard is often unmet, particularly in developing countries where patients can wait for hours in outpatient departments. Research by Dansky et al. and Rondeau et al. highlights the strong negative association between waiting times and patient satisfaction, underscoring the need for healthcare organizations to prioritize efficient clinic flow and patient comfort during wait times.

While health insurance removes the financial barrier to healthcare, waiting times emerge as a new rationing mechanism. Understanding the impact of waiting times on individuals' choices and overall healthcare utilization is crucial for policymakers and healthcare providers seeking to improve access, satisfaction, and ultimately, health outcomes.

These studies and models paint a clear picture: excessive waiting times act as a significant barrier to healthcare utilization, impacting patient satisfaction, accessibility, and ultimately, the overall quality of care. Addressing this issue through improved scheduling, streamlined processes, and efficient patient flow management is crucial for enhancing patient satisfaction and ensuring equitable access to healthcare.

### ***Theoretical Framework***

Access to healthcare, this theory posits that individuals' access to healthcare is determined by a variety of factors, including their socioeconomic status, geographic location, and insurance status. People with lower socioeconomic status, who live further from healthcare facilities, and who are uninsured or underinsured are more likely to have difficulty accessing healthcare services, including outpatient care.

Efficiency of healthcare systems, this theory posits that the efficiency of healthcare systems is influenced by a several factors, including the availability of resources, the organization of healthcare services, and the management of healthcare systems. Public hospitals in the Philippines often face challenges with resource availability and efficiency, which can lead to longer waiting times for patients.

Demand for healthcare, this theory posits that the demand for healthcare services is influenced by a some of factors, including the prevalence of disease, the availability of healthcare services, and the cost of healthcare. The demand for outpatient care is often high in public hospitals, as it provide affordable healthcare services to a large population.

The study draws on these theories that patients with lower socioeconomic status, who live further from the hospital, and who visit during peak hours are more likely to have longer waiting times for outpatient care. This also hypothesizes that patients who require more complex care are more likely to have longer waiting times, and that patients with lower educational status, who lived far from the hospital, and who arrived early in the morning were more likely to have longer waiting times. If the study's findings are significant and have implications on the healthcare services. Policymakers and healthcare administrators may use this as a tool for health program development. The findings also suggest that there is a need to improve the efficiency of public hospitals in the Philippines to reduce the factors that contribute to longer waiting times, such as socioeconomic status, geographic location, and time.

### ***Conceptual Framework***

The Dependent Variable in this study is the hospital located in the North of the Philippines. This variable will be measured and analyzed about other factors to determine its impact on healthcare accessibility, quality and efficiency. The location of the hospital in the Northern region of the Philippines may have unique characteristics and challenges that could affect its performance and outcomes.

The Independent Variable is the waiting time in the Outpatient Department, which is the amount of time a patient has to wait before being seen by a healthcare provider. This variable can be influenced by factors such as the number of patients, staff availability and the efficiency of the healthcare system. It is an important factor to consider in improve healthcare services and patient satisfaction.

### ***Statement of the Problem***

1. What is the demographic profile of Outpatient Department in terms of:
  - 1.1. Age
  - 1.2. Gender
  - 1.3. Educational Attainment
  - 1.4. Profession/Job.
2. What is the level of perception on waiting time in patients presenting in the Outpatient Department at Public Hospitals in the Philippines?
3. What are the level of associated factors in terms of:

3.1 Time intervals from the arrival of the patient to the disposition of care includes the patient's registration followed by assessment by the medical professional until the patient's discharge from the outpatient department.

3.2 The perception of patients regarding the OPD process which includes from registration to waiting times, available tests, and treatment.

3.3 Patient factors about the OPD operations in the public hospitals include the accessibility of the physician, vital sign taking, attitude of the OPD staff in dealing with the patient.

4. What is the significant relationship between level of perception, and associated factors among Outpatient Department at Public Hospitals on waiting time and associated factors in patients?

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### **Objective of the study**

1. To identify the demographic profile of Outpatient Department in terms of:
  - 1.1 Age
  - 1.2 Gender
  - 1.3 Educational Attainment
  - 1.4 Profession/Job.
2. To determine the level of perception on waiting time in patients presenting in the Outpatient Department at Public Hospitals in the Philippines.
3. To identify the level of associated factors in terms of:
  - 3.1 Time intervals from the arrival of the patient to the disposition of care includes the patient's registration followed by triage and assessment by the medical professional and assignment of patient to an appropriate room or area.
  - 3.2 The perception of patients regarding the OPD process which includes from registration to waiting times, available tests, and treatment.

3.3 Patient factors about the OPD operations in the public hospitals include the accessibility of the physician, vital sign taking, attitude of the OPD staff in dealing with the patient.

4. To evaluate the significant relationship between Demographic profile, level of perception, and associated factors among Outpatient Department at Public Hospitals on waiting time and associated factors in patients.

### *Definition of Terms*

- **Waiting time** was the time a patient had to wait at registration, consultation, laboratory, and other diagnostics units and at the pharmacy to receive service.
- **Outpatient Department:** A department in a hospital where patients are seen for non-emergency care.
- **Public Hospital:** A hospital that is owned and operated by the National and or local government.
- **Cross sectional study:** A type of study that collects data from a sample of people at one point in time.
- **Patient :** A person receiving or seeking medical treatment. Referring to someone who requires professional medical care
- **Respondent :** a person who participated in a surveys or polls.
- **Patient satisfaction:** A measure of how satisfied patients are with the care they receive in the OPD.
- **Survey questionnaire** is a written documentation that is administered either in person, on paper (through the mail), by phone, or online. Survey research is a quantitative method that uses predetermined questions that aim to describe or explain features of a group.
- **Associated factor** in cross-sectional studies refer to variables that are correlated with the outcome of interest.

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### **Scope and Limitation of the Study**

The study covered the effect of waiting time at the hospital on the demand for health care from the hospital. By estimating a model of the factors that influence the demand for health care, the study determined the direct effect of waiting time on health care. Indirect effect of waiting time was estimated on the use of health insurance in seeking health care and the choice of public hospitals in the Philippines. The study was undertaken in a Public Hospital in Northern, Philippines. A sample size of 61 respondents was included in the study.

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### **Methods**

This study employed a quantitative, cross-sectional study involving 61 respondents from October to November 2023. Data were collected through survey questionnaires and descriptive statistics were used to analyze the data, and the results of the study were presented in the form of tables and charts. This study covers the following topics: research design, research location, subjects or participants, research instrumentation, data collection procedure and study limitation.

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### **Study Design**

This study was mostly descriptive in nature and employed a cross-sectional, quantitative research design. The purpose of this study was to ascertain the attitudes and perceptions of patients who were in the Outpatient Departments (OPD) of public hospital in Northern Luzon, Philippines. Additionally, the study sought to evaluate the significant correlation between the level of perception, associated factors, and demographic profile. It was also carried out to ascertain the variables and outcomes of various interventions. Surveys were used to gather data, and statistical analysis was done to examine the findings and draw conclusions.

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### **Research Locale**

The study was conducted in the Outpatient Department of a public hospital in Northern Philippines. This region is known for its diverse population and varying healthcare needs, making it an ideal location for studying the waiting time and its associated factors. The respondents were patients in the Outpatient Department who are seeking medical attention, who have been diagnosed with a specific condition and/or receiving medical treatment. These patients were asked to participate in a survey to gather data on their experiences and opinions of the healthcare services provided. The results of this survey were used to identify the areas for improvement and to better understand the needs and perspectives of patients in the outpatient department. The study will primarily focus in patients at a public hospital in Northern Philippines - Out Patient Department. The respondents are patient on the Outpatient Department (OPD) who meet the following criteria: patients who are older than 18 years old; patients who possess mental stability; have the capacity to read and write. The exclusion criteria include Patient who are mentally unstable, in critical condition, in need of emergency care, not younger than 18 years old, and or incapable of reading or writing are not included in this study.

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## Instrument

The research instrument used in this study was a duly validated researcher-made questionnaire (Annex A) that was given to respondents in the outpatient department. The questionnaire includes questions about the patients' experience at the outpatient department, including how long they waited to see a doctor, time spent in the laboratory, time re-seen by the doctor, and their overall satisfaction with the waiting time. The questionnaires were distributed to those patients who are willing to join the study based on the inclusion and exclusion criteria.

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## Data Collection Procedure

A survey questionnaire (Annex A) was used to collect data from the patients in the Outpatient Department. The questionnaire was designed to collect demographic information such as age, gender, and occupational status. The survey is administered by hospital personnel, and the data is collected using a structured questionnaire about the experience of patients in the outpatient department. Furthermore, it includes questions relating to the health services received in the outpatient department, and patient satisfaction with the services. The data collected is placed and secured confidentially and securely stored for future reference.

### *Ethical Considerations*

Ethical approval is obtained from the public hospital Outpatient Department and all respondents. Respondents who were willing to participate in the study were given a survey questionnaire. Confidentiality of the data was ensured by not mandatorily requiring information that would lead to the identification of the respondents.

### *Statistical Treatment of Data*

The data were subjected to appropriate statistical tools through a computer-based program. The Minitab18 statistical software was used to analyze the coefficient of correlation and P-value or probability values.

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## Result and Discussion

The statistical results obtained in the statement of the problem, are findings relating to the relative waiting time of patients in the Outpatient Department of a public hospital in Northern Luzon, the Philippines. This study presents and describes the most important findings concerning patient waiting time. The significance of the findings is then interpreted and explained in the data analysis through statistics and interpretation, and then the implication of research results relating to the level of associated factors in terms of the demographic profile is discussed and explained.

The waiting time of patients in the outpatient department of the selected public hospital in the Philippines has revealed a relevant factor in this study. This data can be used to assess the efficiency of hospital services, identify areas of improvement, and ultimately improve the quality of healthcare. By understanding the factors that contribute to long wait times, hospitals can work to reduce them and provide better care for their patients.

The survey data was arranged and analyzed to identify the demographic profile, to determine the degree of patient perception regarding waiting times for patients who present to the Out Patient Department of the selected Public Hospital in the Philippines, to identify the degree of associated factors concerning time intervals, to establish the degree of patient perception regarding the OPD process, to gain a clear understanding of the patient operations in the OPD, to identify the patient factors regarding the OPD operations in the Public Hospital, which include lengthy wait times, consultations, and laboratory testing, and lastly, to assess the statistical significance of the relationship between the demographic profile, the degree of perception, and associated factors among Out Patient Department at Public Hospital regarding waiting time.

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## Analysis of the Questionnaire

Closed-ended survey questions with numerical answers were the type used in the data collection. This was accomplished through question analysis, quantitative result cross-tabulation, results visualization using tables and charts, and insight interpretation.

**Table 1. Demographic Profile**

Profile		With Laboratory	Without Laboratory	Total
Age	18-27	8	11	<b>19</b>
	28-37	7	2	<b>9</b>
	38-47	3	10	<b>13</b>
	48-57	4	6	<b>10</b>

	above 57	4	6	<b>10</b>
Gender	Male	10	11	<b>21</b>
	Female	16	24	<b>40</b>
Occupational Status	Employed	6	8	<b>14</b>
	Unemployed	10	15	<b>25</b>
	Self-employed	7	8	<b>15</b>
	Others	3	4	<b>7</b>

Table 1. The table above shows the demographic profile of the respondents: age, gender and occupational status

The table above displays the demographic profile of the respondents, of which there were a total of 61 individuals with 40 females and 21 males. The range of the respondents varied from 18 to over 57 years old. The largest group of respondents was in the 18 - 27 age range, with 19 individuals, followed by 38 - 47 with 13 respondents. The 48 - 57 and >57 age group tied for third place, each with 10 respondents. Lastly, the 28 - 37 age range had 9 respondents.

The data also showed that the majority of the respondents were unemployed, with 25 out of 61 total respondents falling into this category. The next largest group was self-employed, with 15 respondents. This was followed by 14 respondents who were employed, and only 7 respondents who reported having other occupations. These findings suggest that there was a high level of unemployment in the surveyed population.

**Table 2. Level of Perception**

	Mean Score	Remarks
With Laboratory	3.69	Very Good
Without Laboratory	3.62	Very Good
Over-all Perception	3.68	Very Good

Table 2. The table above shows the level of perception on waiting time in patients presenting in the Outpatient Department at a Public Hospital in Northern Luzon, Philippines. with a scale of 1.00 – 1.75 Poor, 1.76 – 2.50 Fair, 2.51 – 3.25 Good, 3.26 – 4.00 Very Good

The data in the table above shows the level of perception of patients during their time in the Outpatient department. This includes how clearly they understand the treatment process, the instructions given by medical staff, and their overall experience. The table provides valuable insight for healthcare facilities to improve their services and ensure patients have a positive experience. Also, a scale of 3.68 in overall perception represents a remarkable improvement to the facilities.

**Table 3. Time Intervals**

	Average Time Intervals (in minutes)	
	With Laboratory	Without Laboratory
T1-T2	11	11
T2-T3	13	11
T3-T4	29	27
T4-T5	21	0
T5-T6	50	0
T6-T7	28	0
T7-T8	20	29
Total	172	79

Table 3. The table above shows the time intervals of the patient's arrival until discharge. The legend are T1- Time of Arrival, T2 - Time of patients' record secured, T3 - Time seen by OPD Staff, T4 - Time seen by doctor, T5 - Time Laboratory Tests started, T6 - Time Lab Results were released, T7 - Time re-seen by doctor, T8 – Time discharged.

The data shows that the patients with laboratory requests had to wait for an average of 172 minutes, which is significantly longer than those without laboratory requests who only waited an average of 79 minutes.

The table also shows that the times are in minutes which include the following intervals: time of arrival, time of patients' record secured, time seen by OPD Staff, time seen by doctor, time Laboratory tests started, time Laboratory results were released, time re-seen by doctor, time discharged from the

outpatient department, and total time from arrival to discharge. This information helps healthcare providers identify areas where they can improve efficiency and reduce waiting times for patients.

3.1. Time intervals from the arrival of the patient to the disposition of care includes the patient's registration, triage, assessment by the medical personnel and assignment of patient to a specific medical doctor.

3.2. The perception of patients regarding the OPD process which includes registration, waiting times, available tests, and treatment.

**Table 4. Perception of Patients regarding Outpatient Department process.**

	Mean Score	Remarks
With Laboratory	3.73	Very Good
Without Laboratory	3.73	Very Good
Over-all Perception	3.73	Very Good

Table 4. The table above shows the perception of patients regarding the outpatient department process which includes registration, waiting times, available tests, and treatment with a scale of: 1.00 – 1.75 Poor, 1.76 – 2.50 Fair, 2.51 – 3.25 Good, 3.26 – 4.00 Very Good

The data above indicates that patients have positive perceptions of the outpatient department process, with an overall mean score of 3.73. Patients are satisfied with various aspects of the process, including registration, waiting time, available tests, and treatment.

**Table 5. Operations of the patients in the OPD**

	Mean Score	Remarks
With Laboratory	3.72	Very Good
Without Laboratory	3.62	Very Good
Over-all Perception	3.66	Very Good

Table 5. The data has a scale of of 1.00 – 1.75 Poor, 1.76 – 2.50 Fair, 2.51 – 3.25 Good, 3.26 – 4.00 Very Good.

This data indicates that the patients in the Out Patient Department have an understanding of the OPD operations, with the average rating of 3.66, indicating a very good understanding. This mean score of 3.72 for patients with laboratory request and 3.62 for those without, means that the communication and rapport between outpatient department personnel and patient is consistent and effective. This is further supported by a high average rating of 3.66, indicating a positive attitude from OPD personnel towards their patients.

**Table 6. Patient factors in the OPD operations in the public hospital**

	Mean Score	Remarks
With Laboratory	3.64	Very Good
Without Laboratory	3.56	Very Good
Over-all Perception	3.59	Very Good

Table 6. The patient factors about the OPD operations in the public hospitals include long waiting time, consultations, and laboratory testing are seen in the table above. With the scale of 1.00 – 1.75 Poor, 1.76 – 2.50 Fair, 2.51 – 3.25 Good, 3.26 – 4.00 Very Good.

The data above shows that on average, Patients with laboratory testing have longer consultation time thus contributing to overall longer waiting time with an average score of 3.64. On the contrary, even without laboratory request, the mean score is at 3.56. which still indicate very good overall patient perception on OPD waiting time and operations.

**Table 7. Significant relationship between waiting time and level of perception of patients**

	Perception of Patient towards Associated Factors	Correlation Coefficient	P-value	Remarks
Waiting time	OPD Flow	0.071	0.589	Not Significant
	OPD Operation	0.072	0.58	Not Significant
	Patient Factor	0.133	0.306	Not Significant
	Over-all perceptions	0.107	0.412	Not Significant

Table 7. The table above shows the significant relationship between the waiting time and level of perception of patients on the associated factors such as OPD flow, OPD operation, and patients factor.

### **Statistical Analysis**

Correlation: Waiting Time, OPD flow

Correlations

Pearson correlation 0.071

**P-value 0.589**

Correlation: Waiting Time, OPD Operation

Correlations

Pearson correlation 0.072

**P-value 0.580**

Correlation: Waiting Time, Patient Factor

Correlations

Pearson correlation 0.133

**P-value 0.306**

Correlation: Waiting Time, Associated Factors

Correlations

Pearson correlation 0.107

**P-value 0.412**

**Interpretation:** The P-value or probability value are all greater than the 0.05 level of significance threshold therefore this study shows no significant relationships between the waiting time and the associated factors such as OPD flow, OPD operation, and Patient factor.

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### Limitation of the Study

The respondents who will participate in this study are the patients in the Outpatient Department of a Public Hospital in Northern Luzon, Philippines. The study will only cover 61 respondents of the chosen public hospital. There was limited data produced as this study utilized structured questionnaires with close-ended questions. Thus, the results cannot always represent the actual occurrence in a generalized form. Also, the respondents had limited options of responses based on the selection made by the researcher.

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### CONCLUSIONS

This study provides valuable insights for future studies to explore additional factors potentially contributing to longer waiting time, such as resource limitations, staffing levels, equipment availability, and facility layout could contribute to delays. Patient characteristics may also contribute such as medical complexity, arrival patterns, and patient behavior might influence waiting time. Even administrative procedures such as appointment scheduling, data management, and communication processes could play a role. However, the data showed that it has no sufficient evidence to suggest that the investigated factors have statistical significance on patient waiting time within the OPD setting. Other factors, not included in the study might be more relevant in understanding the variations in waiting time. This study could be strengthened by including a larger sample size and a better healthcare systems which is crucial for the broader applicability of the conclusions. It is also important to acknowledge that statistical significance does not equate to practical significance. Even non-significant relationships might have a small but impactful influence on waiting time. We recommend doing further research on Identifying and investigating additional factors potentially influencing waiting time, Operational improvements to analyze and address resource limitations and administrative procedures to optimize patient flow, Data collection and analysis to develop and implement robust data collection and analyze the systems to track and understand waiting time variations and Patient engagement to communicate effectively with patient about potential waiting times and expectations to improve their experience. By taking these steps, healthcare providers can gain a deeper understanding of factors contributing to waiting time and develop effective strategies to improve patient experience and optimize OPD operations.

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## APPENDIX

### A. QUESTIONNAIRE

Annex A  
SY 2023-2024

SBLIC Students in  
Master in Hospital Administration

#### QUESTIONNAIRE Survey in Waiting Time in the Outpatient Department at Public Hospitals in the Philippines

**Disclaimer:** This questionnaire is intended to collect data about the factors affecting patients' waiting times in the Public Hospitals Outpatient Department. Typically, our respondents are clients and patients waiting inside the OPD. Questions are easy to understand by the general public.

Name (optional): \_\_\_\_\_ Region: \_\_\_\_\_ Province: \_\_\_\_\_

**Gender:**  Male  Female  Others **Age:**  18-27  28-37  38-47  48-57  57 and above

**Occupational Status:**  Employed  Unemployed  Self-employed  Others

#### A. Time intervals

Time of arrival: \_\_\_\_\_ Time laboratory test started: \_\_\_\_\_  
Time of patient's record secured: \_\_\_\_\_ Time lab results were released: \_\_\_\_\_  
Time seen by OPD staff: \_\_\_\_\_ Time re-seen by doctor: \_\_\_\_\_  
Time seen by doctor: \_\_\_\_\_ Time discharged: \_\_\_\_\_

Please tick in the box with your corresponding answers:  
4 – Very Good      3 – Good      2 – Fair      1 – Poor

#### B. OPD Flow

		1	2	3	4
1.	Effectiveness of medical records in the distribution of patient information				
2.	The laboratory staff performs the necessary lab procedures.				
<i>Presentation of Lab requests</i>					
3.	The amount of time spent waiting for Lab requests to be released				
4.	Effectiveness of the pharmacy staff in providing customers with the medications they have been prescribed				

#### C. OPD Operations

1.	OPD starts up and stays on schedule throughout its operations.				
2.	The personnel at the OPD take our complaints and vital signs with ease.				
3.	During the course of the OPD consultation, the doctor is easily accessible.				
4.	The doctor spends considerable time assessing and managing each patient.				
5.	The physician is completely aware of the patient's anxiety regarding the check-up.				
6.	Patients and staff in the OPD can communicate with one another without any problem.				
7.	Attitude of OPD staff/doctor in dealing with me as a patient.				

#### D. Patient Factor

1.	I understand and fully aware of the flow of OPD consultation				
2.	I am fully oriented in the processing of laboratory request				
3.	I can patiently wait for some delay in the OPD process				

#### E. Comments/Suggestions/Recommendations:

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Thank you!

## B. CERTIFICATION

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COLLEGE OF SCIENCE  
PSYCHOLOGY DEPARTMENT

### CERTIFICATION

This is to certify that the instrument for the research entitled, "**Waiting time and Associated Factors in patients presenting in the Outpatient Department at Public Hospitals of the Philippines: A Cross-Sectional Study**", prepared by Angelica Capillan, Jun Beda Malecdan, Bennyson Miña, Sherwyn Acosta, and Karen Vargas has been validated by the undersigned.

This further attests that the research instrument(s) is/are valid and can be used for the pilot testing or any research-related activity.

  
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