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# Client and Patient Satisfaction on the Services in the Radiology Department in Caraga Hospital Infant Care and Lying-In Center

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#### **ABSTRACT**

Customer satisfaction measurement is difficult. It's about offering an amazing service through a highly motivated and well-trained personnel, high-quality product, eco-friendly facilities, and an expert service provider who treats them as a "guest" not a "client." This quantitative research design made use of the descriptive, comparative design in assessing the significant difference in the satisfaction on the services of the radiology department of Caraga Hospital Infant Care and Lying-In Center (CHICLC), Butuan City for the Year 2019 among clients and patients. Based on the findings of the study, the clients were satisfied with quality of services in the radiology department. Specifically, they were satisfied with the aspects of tangibles, reliability, responsiveness, empathy but very satisfied with the assurance. Moreover, the patients the patients were satisfied with quality of services in the radiology department. Specifically, they were satisfied with the aspects of tangibles, responsiveness, and empathy but very satisfied with the reliability, and assurance. Finally, all of the aspects related to the quality of services such as the tangible, reliability, responsiveness, assurance and empathy were the not significantly different as perceived by the clients and patients. As an output of the study the strategic management plan was created.

**Keywords:** Clients, Descriptive-Comparative Design, Patients, Quality Service, Satisfaction.

# INTRODUCTION

Over the past two decades, people who go to hospitals or clinics for medical services have exhibited a transformation in the way they look at these facilities. Traditionally, these people where often lumped and referred to as "patients" and their only concern was focused on the medical service that they required. That was then, but now they have slowly been transformed from being "patients" to "clients / customers" (Lee, 2016). The focus then of hospitals was on the patients that arrived at the hospital. They somehow failed to realize that there were "other people" involved in bringing the patient to the hospital. This other group of people were ultimately the ones that decided for the patient on important matters such as "which medical facility to bring the patient", "who will be the doctors and medical staff that will manage the patient", and more importantly "the budget aspect for the medical services". This other group of people is now better known as "clients" and they are usually immediate family members of the patient. However, they can also include distant relatives, friends and recently, health care insurance providers. Considering the physical, mental or emotional state of the patient, oftentimes they are in no condition to make rational and critical decisions relative to their medical need. These "clients" in most instances decide for the patient (Lee, 2016). With this development, the medical industry has started to adjust its outlook towards the "users" of their services, the "patients" and the "clients". While the patient's well-being is still the focus of hospitals, many of them are now adjusting their systems to cater to the needs and wants of the "clients" considering that they are the decision-makers and in marketing practice they are the "customers". Just like business customers, medical clients have started to assert their right to choose their service providers. Their choice is anchored mostly on their perceptions and expectations not only on the way the patient was treated but also how "they" (the clients) experienced the quality of service they got from the medical facility. The experience they had is usually translated to customer satisfaction and the degree to which they felt it. Measuring customer satisfaction is a complicated process. It isn't just providing a customer need but giving them an exceptional service through a highly motivated and well-trained team, good quality product, environment – friendly facilities and an expert service provider that will treat them as "guest"



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not just a "customer".

Accordingly, customer satisfaction should be paramount for any hospital's marketing strategy to meet the quality of service. It is through satisfaction of customers that hospitals remain afloat and prosper. The quality of service is therefore important, because it influences all aspects of a hospital's operations. Hospitals that define their level of service quality and can realistically satisfy and monitor their customers' satisfaction give them that competitive edge against other hospitals. With many hospitals and specialty clinics to choose from, it has become harder for hospitals to create a competitive edge in the market. Client/customers have become smarter about what they demand, giving as much priority to service as to product range or options available at an outlet. In order to make sure the client prefers a hospital, he or she must enjoy the overall experience offered by the hospital.

In Butuan City, the Caraga Hospital Infant Care and Lying-In Center (CHICLC) is one of the hospitals that offers a variety of medical services. These services are often clustered and handled by specific departments. With a rich history of success in its chosen field of specialization, CHICLC is now positioning itself for the challenges in the new millennium. The different departments have been tasked to review and evaluate their systems relative to the quality of their services. The Radiology Department is one of the key departments of CHICLC. The Radiology Department is a part of the health service industry now often considered a revenue center. As a service provider, the department have several or various customers, both internal and external. Referring physicians are the primary or main customers of private radiology practice. While patients oftentimes may not be their primary customers, still patients are customers with the potential to create the most problems for departments if their demands are not met. It is the primary goal of the CHICLC Radiology Department to provide quality healthcare services to patients and making sure that they are satisfied with the services rendered to them. Service delivery is one of the primary functions of the radiology department. How service is delivered effectively, quickly and accurately affects the impression of the department in the eyes of its customers. From the time the hospital was established up to the present, customer satisfaction and the quality of services rendered by the radiology department has never been fully assessed. It was only through feedback and suggestion forms from anonymous patients when complaints or dissatisfaction were highlighted and addressed. These formal complaints however focused only on a few areas and did not include the total system. The need for a more encompassing and comprehensive way of measuring service quality of the department was what was lacking in the system.

The researcher being the current head of the Radiology Department of CHICLC saw it fit to have the topic for her research focus on the quality of service rendered by her department. Through this study, the researcher hopes to identify and fill the gaps, and formulate possible strategic plans to improve the health care services of the Radiology Department of CHICLC.

# **Research Objectives**

This study aimed to assess the levels of client and patient satisfaction on the services of the radiology department of Caraga Hospital Infant Care and Lying-In Center (CHICLC), Butuan City for the Year 2019. The findings of the study served as basis for the Proposed Strategic Management Plan for the 2nd quarter of 2019.

Specifically, it answered the following questions:

| 1. What ha | t was the | perceived | client s | satisfaction | to the | services | in the | radiolog | y department | of CF | HCLC : | ir |
|------------|-----------|-----------|----------|--------------|--------|----------|--------|----------|--------------|-------|--------|----|
| terms of   | •         |           |          |              |        |          |        |          |              |       |        |    |

- 1.1 tangibles;
- 1.2 reliability;
- 1.3 responsiveness;
- 1.4 assurance; and



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

- 1.5 empathy?
- 2. What was the patient satisfaction to the services in the radiology department of CHICLC in terms of:
  - 2.1 tangibles;
  - 2.2 reliability;
  - 2.3 responsiveness;
  - 2.4 assurance; and
  - 2.5 empathy?
- 3. Was there any significant difference on the perceived client and patient satisfaction on the services in the radiology department?
- 4. What strategic management plan was proposed based on the findings of the study?

#### **Statement of Null Hypotheses**

**Ho1:** There was no significant difference on the perceived client and patient satisfaction on the services in the radiology department.

#### Scope and Limitation of the Study

The study focuses on assessing client and patient satisfaction with the services provided in the Radiology Department of only two locae. It examines various factors influencing satisfaction, such as service quality, accessibility, and staff responsiveness. However, the study is limited to this specific healthcare facility and may not be generalizable to other institutions. Additionally, it does not account for external factors such as hospital policies, staffing levels, or financial constraints that may affect service delivery and patient satisfaction.

#### REVIEW OF RELATED LITERATURE AND STUDIES

Quality Service. According to Institute of Medicine (2001), healthcare quality can be assessed from two viewpoints: patients and technical or professional. The former includes assessment of service provider's ability to meet customer demand, customers' perception and satisfaction. Customer perception with respect to evaluation of healthcare quality has been supported by a number of researchers (Mashhadiabdol et al., 2014; Kitapci et al., 2014). Many studies observe that quality perceptions impact satisfaction, meaning that the service quality (SQ) is the preceding thing of satisfaction (Parasuraman et al., 1994; Kitapci et al., 2014; Dasanayaka et al., 2012). The Quality Digest (2001) introduces quality as fulfilling customer requirements at a lower cost with built-in preventive actions in the processes, ensuring the best product to the end user with timely delivery. According to Walters and Jones (2001), serious deficiencies are likely to occur if there is any attempt to achieve quality without fully understanding customer requirements and expectations. To remain customer-focused, one must review how a business is managed, i.e., begin with customer problems, needs and priorities. Rose et al. (2004) emphasize customer factors, organizational performance and healthcare and hospital SQ components. For patients, switching providers could be detrimental to their health, as treatment and non-compliance costs could influence healthcare outcomes and create psychological trauma owing to the uncertainty of adjusting to a new service provider (Ovretveit, 2000). Typical patient complaints include long waiting times, high costs and unfriendly, apathetic and uncaring staff. It is, therefore, important to identify healthcare quality parameters that are practically useful for the organization, patient and society. Improving quality of healthcare services and patient satisfaction apart from increasing accessibility and affordability to its population in the face of limited resources have become a major challenge for developing countries and have gained increasing attention in recent years (Badri et al., 2009, 2008; Narang, 2011; Talib et al., 2011; Dasanayaka et al., 2012; Zineldin, 2006; Kacak et al., 2014; Uzochukwu et al., 2004). Literature on healthcare quality stresses the importance of patient's views as an essential tool for assessing and improving service quality (SQ). It suggests that majority of



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healthcare institutions are going for a patient-centered attitude. Consequently, many studies have used patient satisfaction as an outcome in their studies to measure the performance of healthcare institutions (Azam et al., 2012b; Badri et al., 2009; York & McCarthy, 2011).

According to Padma et al. (2009), SQ means perceived SQ, the literature on healthcare SQ has considered evaluating services from patients' perception. Patients are interested not only in the quality of care but also in the quality of service. Generally, healthcare organizations do not pay significant attention to quality of services. Lim and Tang (2000) argued that SQ can be used as a strategic differentiation weapon for building distinctive advantages. The literature on SO suggest that it can be broken down into two distinct dimensions (Grönroos, 2000; Zineldin et al., 2011). They are: technical dimension and process/functional dimension. Technical dimension in the healthcare sector is defined primarily on the basis of the technical accuracy of the medical diagnoses and procedures, or the conformance to professional specification and standards. Functional dimension refers to the manner in which the healthcare service is delivered to the patients and quality of patient relationship with the organization. Parasuraman et al. (1988), who developed the widely used SERVQUAL scale, defined SQ as a judgment or evaluation relating to service superiority. They explained SQ on five dimensions i.e., tangibility, empathy, assurance, reliability and responsiveness. They further elaborated SQ as the gap between customers' expectations of service and their perception of the service experience. They proposed SERVQUAL framework to assess perceived SQ for variety of sectors. SERVQUAL quality is a multidimensional concept and in order to operationalize it, many variables have to be considered (Zineldin, 2006). According to Rust and Oliver (1994), SQ stems from service specific attributes or cues, while satisfaction involves a wider range of determinants, including quality judgments, needs and equity perceptions. They developed a three dimensional concept of SQ: service product, service environment and service delivery. While Otani et al. (2009) observed that the excellent service attributes that influence on patient satisfaction and loyalty are admission, nursing care, physician care, staff care, food and room. Similarly, Camgöz-Akdağ and Zineldin (2010) asserted that SQ in healthcare not only depends on the quality of physicians but also includes the staff, nurses, building, waiting room, equipment and machines used during care of patient. It can further be said that healthcare quality and patient satisfaction is more detailed than just dividing the quality of service into technical and functional dimensions.

The technical, functional and SERVQUAL quality models can be expanded into a structure of five quality dimensions namely quality of object-the technical quality, quality of processes-the functional quality, quality of infrastructure-the basic resources, quality of interaction-measures the quality of information exchange and quality of atmosphere-the relationship and interaction process between the parties are influenced by the quality of the atmosphere in a specific environment where they cooperate and operate (Zineldin, 2000). In a study conducted by Weiser (2005) on the quality of service rendered by six selected banks in Los Angeles, California, it was found out that while many of the clients were satisfied with the items that were outlined in the questionnaire, there were a few areas that needed improvement. These areas would not have been highlighted if the questionnaire was not based on the SERVQUAL Model. The areas highlighted were focused mostly on responsiveness and tangibles particularly on the lack of ample parking space. The parking space issue was common to the six subject banks. As a result most banks now incorporate parking spaces as a come on for their prospective clients.

The SERVQUAL model was originally designed for a bank's services, however in 2016, this was modified to be used in the Health Care Industry particularly hospitals. The author, Daniel Lee, identified key factors that the five areas of SERVQUAL would need in order to measure the level of satisfaction of a hospital's client. By simply changing the statements in the five areas with hospital activities the author was able to come up with a more comprehensive measurement of a customer's level of satisfaction. Just like in the bank study, responsiveness of the staff especially in the billing section was short of the expectations of the respondents. There were also items that were highlighted that normally would have slipped the attention of the hospital.

The fast food industry also uses the SERVQUAL Model to measure total customer satisfaction. In 2015, six well known branches of Kentucky Fried Chicken (KFC) in New Jersey participated in a test SERVQUAL survey. Its primary author Alfred Quill wanted a comprehensive format that was easy to answer and required only a little time to accomplish. The results showed that more people actively participated in the survey using the new format as compared to the previous format used. The ease to which the forms were answered and the



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data gathered prompted the local management group to adopt the SERVQUAL format for its customer satisfaction surveys.

Parasuraman et al. (1985) asserted that perceived SQ is an overall evaluation similar to attitude. They proposed that SQ is a function of the differences or gaps between customers' expectation and performance along the quality dimensions and therefore, this model is called 'gaps model'. Gaps model indicates five gaps during service delivery process, which may lead to dissatisfaction of the customers. Later, Parasuraman et al. (1988) refined their existing model and came up with a new scale to measure SQ known as 'SERVQUAL'. This scale consisted of five dimensions namely tangibles, reliability, responsiveness, assurance and empathy. The description of these dimensions is as follows: (a) tangibles-physical evidence in a service facility (e.g., personnel, equipment, etc.) (b) reliability-ability to provide services accurately and dependably (c) responsiveness-readiness or quickness in responding to customers' needs (d) assurance-courtesy and knowledge of the employees and their ability to convey trust and confidence (e) empathy-caring and individualized attention provided to customers. There are several SQ models that have evolved from different authors' works. But Parasuraman et al. (1985, 1988) SERVQUAL model is the prominent one.

Despite controversies regarding SERVQUAL validity and reliability (Purcărea et al., 2013; Newman et al., 2001; Cronin and Taylor, 1992); its application, with or without modification, is common especially in healthcare sector. Parasuraman et al. (1991) further addressed the issues raised by Babakus and Boller (1992) by vindicating the use of gap scores for measuring SQ. They modified the negatively worded items in their instrument to improve the overall reliability values of the scale. Cronin and Taylor (1992) disagreed with the gaps-score measurement and proposed that measuring SQ in terms of performance alone would be sufficient and developed performance-only measurement scale, which is known as 'SERVPERF' instrument. Parasuraman et al. (1994) responded to these concerns and again revised their original instrument accordingly. However, Carman (1990) arrived at a different dimensional structure while using SERVQUAL scale in a study pertaining to hospitals. Nine dimensions were found: admission service, tangible accommodations, tangible food, tangible privacy, nursing care, explanation of treatment, access and courtesy afforded visitors, discharge planning and patient accounting. These dimensions explained sufficient variance in SQ.

Furthermore, many researchers have identified the advantages of adopting SERVQUAL, some of them are (Isik et al., 2011; Rohini & Mahadevappa, 2006; Padma et al., 2009): (a) as it is accepted as a standard for assessing different dimensions of SQ (b) and has been shown to be valid for a number of service situations (c) it has been known to be reliable (d) the instrument is parsimonious in that it has a limited number of items. This means that customers and employers can fill it out quickly. (e) it has a standardized analysis procedure to aid interpretation and results.

During the past few decades, SQ has become a major area of attention to practitioners, managers and researchers owing to its strong impact on business performance, lower costs, customer satisfaction (CS), customer loyalty (CL) and profitability (Newman et al., 2001; Dagger & Sweeney, 2006; Kuo et al., 2009; Khan et al., 2014; Kitapci et al., 2014). There have been several important researches on SQ especially the application of SERVQUAL framework. Several attempts have also been made to apply this framework in different industries and sectors like healthcare, banking, hospitality, tourism and many others to assess customers' perceptions of SQ (Rohini & Mahadevappa, 2006; Duggirala et al., 2008a, 2008b; Kitapci et al., 2014).

Measuring SQ in healthcare industry is difficult to evaluate as understanding the patient perception and satisfaction is quite complex and significant (Padma et al., 2009). The plausible reason may be that in healthcare industry, different hospitals provide the same type of services, but they do not provide the same quality of services (Youseff et al., 1996). Thus, studying the SQ in healthcare is essential. Furthermore, consumers today are more aware of alternatives being offered and rising standards of services. These changes have increased their expectations (Lim and Tang, 2000). With increased competition due to globalize and tough market conditions as well as the need to satisfy patients, the elements of quality control, quality service and effectiveness of medical treatment have become vital (Suki et al., 2011). To overcome these issues, SERVQUAL scales have been widely used in healthcare studies to assess customers' perception of SQ in a number of service categories like patient satisfaction, acute care hospital, etc. (Lim & Tang, 2000; Taner & Antony, 2006; Zineldin et al., 2009; Dasanayaka et al., 2012; Mashhadiabdol et al., 2014). Its use in healthcare



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

has produced varied results suggesting that it need further improvement (Duggirala et al., 2008a; Purcărea et al., 2013; Kitapci et al., 2014).

Aagja and Garg (2010) developed a scale for measuring perceived SQ for a multi-specialty public hospital in Ahmedabad (India) from the user's (patient's) perspective. The objective was to measure perceived SQ of public hospitals. PubHosQual was developed to measure the five dimensions of hospital SQ: admission, medical service, overall service, discharge process and social responsibility. Duggirala et al. (2008a) proposed that healthcare SQ consisted of seven dimensions, namely, infrastructure, personnel quality, process of clinical care, administrative processes, safety indicators, overall experience of medical care and social responsibility. In a study conducted by Rohini and Mahadevappa (2006), applied SERVQUAL framework and factors in their study on Bangalore (India) hospitals. They obtained the perceptions of both the patients and the hospital management. The study concluded that there exists an overall gap between patient's perceptions and expectations and also between management's perception of patients' expectations and patient's expectations. Strawderman (2005) performed researched on human factors. To model SQ, six dimensions were proposed whereby the five dimensions of SERVQUAL were used (i.e., responsiveness, reliability, assurance, empathy and tangibles). A sixth dimension, usability, was added in a modified survey instrument termed SERVUSE. Both measurement tools, SERVQUAL and SERVUSE, were found to be significant predictors of SQ, satisfaction and behavioral intention in the healthcare setting.

Sohail (2003) measured the SQ in Malaysia using the SERVQUAL model and found that all scores for perception exceeded the expectations for all measures examined. This indicated that the perceived value of SQ has exceeded the initial expectation for all variables within all dimensions. This would suggest that hospitals in Malaysia provide services that exceed the expectations of their patients. The t-test confirmed the finding of the study. In another study by Eleuch (2011) assessed Japanese patients' healthcare SQ perceptions through a nonlinear approach. The study relies on a nonlinear approach to assess patient overall quality perceptions in order to enrich knowledge. Furthermore, the research was conducted in Japan where healthcare marketing studies were scarce owing to cultural and language barriers. Japanese culture and healthcare system characteristics are used to explain and interpret the results. Abuosi and Atinga (2013) examined two key issues in healthcare institutions, one to assess patients' hospital SQ perceptions and expectation using SERVQUAL and other to outline the distinct concepts used to assess patient perceptions. In doing so, they observed that patient expectations were not being met during medical treatment. Perceived SQ was rated lower than expectations for all variables.

Implying that the hospital managers should consider stepping up staffing levels by client-centered training programs to help clinicians deliver care to patients' expectations. In the local scene, a similar study was conducted by Umbao (2003) that assessed the quality of health care and customer services rendered by the Laboratory Center of the Philippines. The research revealed that although the clients of the said firm were generally satisfied with its services, there were certain areas that certainly needed improvements. These areas were not found in the original survey questionnaire used by the establishment. It showed some cases where they encountered moderate to serious problems and discovered that there was a need to improve and sustain its services to motivate and have an efficient work force. Over the years, SQ and patient satisfaction has gained increasing attention especially in healthcare context (Azam et al., 2012b; Badri et al., 2006, 2009; York & McCarthy, 2011; Owusu-Frimpong et al., 2010). Also, past studies showed that there is a strong link between SQ and patient satisfaction (Andaleeb, 2001; Badri et al., 2009; Kitapci et al., 2014). In the healthcare literature, SQ and patient satisfaction have been considered as two major issues. Importance of patient satisfaction especially service encounters is well documented in the marketing and management literature (Meirovich & Bahnan, 2008). SQ in service encounters is frequently depicted as being the outcome of an interactive process between the service provider and the service receiver. The interactive features of SQ in service encounters are thus, crucial to the ultimate outcome (Owusu-Frimpong et al., 2010). Patient satisfaction in healthcare organizations is considered crucial when planning, implementing, evaluating service delivery, as well as in quality improvement, overall customer relationship management (CRM) and strategic planning initiatives (Evenhaim, 2000). In fact, meeting patient's needs and developing healthcare standards are obligatory for high quality care (Badri et al., 2009).

A study by Boshoff and Gray (2004) on CS and loyalty among patients in the private healthcare industry in



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

South Africa observed that SERVQUAL dimensions like nursing staff empathy, assurance and tangibles, impact positively on patients' loyalty. A study by Hong and Goo (2004) observed the path  $SQ \rightarrow CS \rightarrow loyalty$ to be significant in Taiwanese service firms. Otani and Kurz (2004) concluded that nursing was more important in improving CS and behavioral intentions than other factors. Another study by Tam (2004) found that as customers' perceptions of the quality of the service increased, they felt more satisfied with the service and in turn perceived higher value. Ensuring excellent service quality is essential for the healthcare companies to achieve a competitive advantage and to differentiate themselves in the market (Hamed & Salem, 2014). Patient satisfaction is defined as the extent to which the patients feel that their needs and expectations are being met by the service provider. Patient satisfaction is an expression of the gap between expected and perceived characteristics of service (Lochoro, 2004). It is regarded as the most important indicator of the quality of healthcare and can be used to enhance programs within the healthcare facilities (Prakash, 2010). Interest has, therefore, increased not only in the assessment and treatment interventions by the healthcare givers, but also in the systematic evaluation of delivery of that care (Bosho & Gray, 2004). Patient satisfaction is an attitude. Though it does not ensure that the patient will remain loyal to the doctor or the hospital, it is still a strong motivating factor. Patient satisfaction is only an indirect or a proxy indicator of the quality of a doctor or hospital performance. Delivery of patient-focused care requires that we provide healthcare in a particular way, not sometimes or usually, but always. It must be on every patient every time. It is an ironic fact—the better you are, the better you must become. Quality does not stand still. It should be linear and always ascending. One should strive to provide better care and soar above each and every patient's expectation. "A satisfied patient is a practice builder" (Tam, 2007).

Departments play a major role in influencing patient satisfaction. Their high throughput, diverse mix of patient populations, disease entities, procedure-related is comfort including claustrophobia and the examination types ranging from routine imaging to emergency examination pose unique challenges (Jenkinson et al., 1994). With the development of healthcare reform, patients' care has been the major focus of most discussions, and this may be due to the need to reinforce strategies, whereby healthcare is of benefit to the patients and to enhance a more fulfilling practice among the healthcare providers. Patient satisfaction is a multi-dimensional concept affected by thoughts or even with previous experiences, which make its measurements and comprehension difficult as an isolated concept (Lang et al, 2013). Patient satisfaction is an important commonly used indicator for measuring the quality in healthcare. It affects clinical outcomes, patient retention, and medical malpractice claims. Also, it affects the timely, efficient, and patient-centered delivery of quality healthcare (Tam, 2007). Satisfaction questionnaires were used as a tool to evaluate whether the management of the department and their efforts made obtain a good result (Garcia et al., 2007). Radiology is a part of the health service industry, and hence, as a service provider one needs to understand the quality and delivery of service, which includes the knowledge of customer service, customer satisfaction, and its related issues (Hoe, 2007).

Radiological services can be defined simply as services which are rendered to a patient visiting the radiology department, which can be either routine services those carried out on a day-to-day basis or some special examinations that are carried out on special cases that require the use of contrast agents (Ugwu et al., 1994) within the hospital system, radiology. Implementing a process to continually assess patient satisfaction is a core component of practicing patient-centered radiology. Although there are many internal and external customers of imaging services, patients are arguably our most important customer. The five key factors that determine customer satisfaction for a given service are reliability (the ability to provide the service that was promised and to do so dependably and accurately), responsiveness (the willingness and ability to help customers promptly), assurance (the sense of confidence, competence, and courtesy that providers offer), empathy (the degree of caring and attention to individual customers), and tangibles (the physical appearance of facilities and the quality of the equipment) (Anderson & Zemke, 1998; Alderson, 2000). Press Ganey's Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) initiative provides a standardized survey instrument and data collection methodology for measuring patients' perspectives regarding hospital care. The survey is composed of items that encompass critical aspects of the hospital experience, including communication with doctors and nurses, responsiveness of hospital staff, cleanliness and quietness of the hospital, pain control, communication about medicines, and discharge information (Hospital CAHPS, 2012) In radiological services patient care which involves all the activities that are carried out before, during and after radiological diagnostic procedures to make the conditions of patient better had a great role in influencing patient satisfaction. From the practical experience it was noted, patients usually react to some factors that create problems in radiology department



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such as delay, neglect, use of harsh words on them, unnecessary repeats and preferential treatments. Patients arrived the radiology department are often worried or apparently in aggressive attitude (Chand & Pant, 2012).

#### **Synthesis**

Although there may be similarities in some points of this study with the aforementioned studies, they are not a duplication of them in the sense that the time, environment, and respondents are distinct and different from this work. Furthermore, the related literature acknowledges the significance of SQ and patient satisfaction and thus, the investigator may utilize this as feedback for further study in improving the performance of healthcare services.

#### RESEARCH METHODOLOGY

**Design.** This quantitative research utilized a descriptive-comparative research design in which it describes data and characteristics about the population or phenomenon being studied. Descriptive research design as used in this study aimed to determine the patient's level of satisfaction in the radiological services provided by the Caraga Hospital Infant Care and Lying-in Center. It also assessed the significant difference on the perceived client and patient satisfaction on the services in the radiology department4.

**Environment.** This study was conducted at the Caraga Hospital Infant Care and Lying-in Center (CHICLC). The medical facility is located in Nonan Village, J.C Aquino Subdivision, Butuan City, Agusan Del Norte. It was established in 1994. With a 16-20 bed capacity situated right at the heart of the city. The hospital is currently serving the Caraga region and its nearby cities and municipalities. It provides 24 hours emergency and ambulatory services, in and outpatient services, laboratory and radiological services including minor surgeries. The hospital also serves as a referral center from the nearby government hospitals for radiological and inpatient services.

**Respondents.** The research involved 461 clients/patients participated availing of the radiological services in Caraga Hospital Infant Care and Lying-in Center.

**Sampling Design.** No sampling was instituted in the selection of the respondents. Instead all those who qualify based on the inclusion and exclusion criteria were invited to participate in this study.

**Inclusion Criteria.** All the patients whether out-patients, in-patients, emergency or referrals are included in this study with the following inclusion criteria; must be 18 years old and above, visited and availed service during the data collection, and conscious patients who can communicate.

**Exclusion Criteria.** Those who do not meet these criteria or refuse consent are excluded. Participants can withdraw if uncomfortable with any part of the study.

**Instrument.** The study made use of the Service Quality (SERVQUAL) instrument. A researcher-modified questionnaire utilized the SERVQUAL Model served as the primary tool for data collection in this study for both the clients and patients. This questionnaire was designed to assess the level of satisfaction of the patients. It is divided into two parts. Part one is the profile of the respondents. The profile determines the age, gender, educational qualification, occupation, marital status, and monthly income. Part two is the level of satisfaction in the SERVQUAL areas of tangibles, reliability, responsiveness, assurance and empathy. It is a 25-item questionnaire composed of five dimensions, namely: tangibles (5 items), reliability (5 items), responsiveness (5 items), assurance (5 items), and empathy (5 items). It is answered using a five-point Likert scale where 1 is strongly disagree to 5 as strongly agree. Each question in the instrument was followed by a number of possible responses. Corresponding to each item were five numbers with the following qualitative equivalents. Parametric scores and interpretation were as follows: A score of 4.21-5.00 is (strongly agree) very satisfied (VS); 3.21-4.20 is (agree) satisfied (S); 2.61-3.20 is (neither disagree nor agree) neutral (N); 1.81-2.60 is (disagree) less satisfied (LS); and 1.00-1.80 is (strongly disagree) not satisfied (NS).

**Data Gathering Procedures.** The gathering of data commenced with the researcher seeking permission and approval from the Researcher's Adviser and the Dean of the Graduate School and Formal letters were submitted



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to them. After approval was granted, a formal request letter was also forwarded to the Medical Director of CHICLS which was personally delivered by the researcher for courtesy and formality and briefly discuss the purpose and objectives of the study. The researcher also asked the assistance of the medical staff in the predefined schedule for data gathering. After the questionnaires were formulated and verified, they were submitted to the panel during the proposal hearing for technical and ethical review and improvement. A dry-run was done to test its validity. It was answered by 10 people who were not part of the official list of respondents. Once the questionnaire was finalized, distribution of the instrument followed. Distribution was done over a specified period. The Researcher's assistant assisted in the distribution and administration of the questionnaires. Once the questionnaires were filled out, it was collected. All throughout the data gathering and analysis, strict compliance of the confidentiality of information was observed. Aside from the written answers, interviews were also conducted by the Researcher and her staff. The data was then gathered, retrieved for tabulation, presentation, analysis, and interpretation.

**Statistical Treatment of Data.** The statistical data were analyzed. In order to obtain the unweighted SERVQUAL score, the following steps were used: Mean score was used to analyze the scores on the levels of clients and patient satisfaction on the services of the radiology department. And, T-test of Independent Samples was used to determine the significant difference between the levels of clients and patient satisfaction on the services of the radiology department.

**Ethical Consideration.** The study was approved by the University of the Visayas--Institution Research Board. See the appendices for the ethical considerations.

# Presentation, Interpretation and Analysis of Data

Table 1 Perceived Client Satisfaction on the Services of the Radiologic Department

| Areas          | Mean | Interpretation |
|----------------|------|----------------|
| Tangibles      | 4.16 | Satisfied      |
| Reliability    | 4.07 | Satisfied      |
| Responsiveness | 3.89 | Satisfied      |
| Assurance      | 4.45 | Very Satisfied |
| Empathy        | 3.86 | Satisfied      |
| Grand Mean     | 4.09 | Satisfied      |

Note. n=461.

Legend: 4.21 – 5.00 Strongly Agree / Very Satisfied; 3.41–4.20 Agree/ Satisfied; 2.61–3.40 Neithe / Neutral; 1.81 – 2.60 Disagree/ Less Satisfied; 1.00 – 1.80 Strongly Disagree/ Not Satisfied (negative) correlation, and .00 to .30 (.00 to -.30) is negligible correlation.

The client satisfaction on the tangibles of the quality of services provided in the radiology department. Tangibles refer to the physical evidence of the service, for instance, the appearance of the physical facilities, tools and equipment used to provide the service; the appearance of personnel and communication materials and the presence of other customers in the service facility. This shows that clients were satisfied with the aspect of the tangibles of the quality of services provided in the radiology department. They strongly agreed that the reception and laboratory waiting areas were clean, floor well-maintained and shiny as well as well-lighted room with good ventilation. However, they only agreed that comfort room was clean and well maintained. As some of the patients complained about non-working toilet flush and sometimes the availability of water supply. A study conducted by the Picker Institute, cleanliness was the aspect of the environment that patients mentioned most prominently:



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

"Even the most unsophisticated patient recognizes the relationship between cleanliness and health, and patients see neglect of this basic principle as a major failure" (Gerteis et al., 1993).

The clients were satisfied with the aspect of responsiveness of the quality of radiology services. As noted, clients strongly agreed that they were advised of the test results as soon as they ready thru text or social media. They agreed that they could provide immediate real time solutions if there were patient concerns and requests were attended to right away. However, they neither agreed nor disagreed that items dropped in the suggestion box were acted upon with immediate haste. Responsiveness in the Radiology department is the willingness and ability to help customers promptly. In Radiology, this means being able to get appointments for patients quickly, as well as referring doctors' receiving films and reports soon after examinations. Long waiting times for appointments and taking more than a couple of hours to generate an urgent report are generally not acceptable (Hoe, 2007). The above results implies that patient's requests and concerns should be acted upon immediately. Likewise, there should be a systematic approach on setting up or scheduling of appointments and regularly opening the suggestion box

The clients were satisfied with the aspect of reliability of the quality of services provided in the radiology department. They strongly agreed that services were done professionally and right the first time and the records were accurate and well maintained. However, they only agreed that medical schedules of patients were diligently followed, delays rare, corrective actions taken right away when there were customer complaints and concerns, and bill for services accurate and well-detailed. Abuosi and Atinga (2013) examined two key issues in healthcare institutions, one to assess patients' hospital SQ perceptions and expectation using SERVQUAL and other to outline the distinct concepts used to assess patient perceptions. In doing so, they observed that patient expectations were not being met during medical treatment. Perceived SQ was rated lower than expectations for all variables. Implying that the hospital managers should consider stepping up staffing levels by client-centered training programs to help clinicians deliver care to patients' expectations.

The physical environment can have a significant impact on a patient's experience, and a supportive environment may serve to help prevent illness and alleviate stress and depression (Winkel & Holahan, 1985). Humanizing the hospital's physical environment can be accomplished through the use of windows, skylights, indoor plants, fountains with running water, and landscaping (Gerteis, 1993). Waiting rooms should be designed to allow occupants to converse, watch television, and read or nap, with easy access to telephones, reading material, movable chairs and sofas, and special chairs for the elderly and handicapped. Patient-centered design features for diagnostic and treatment areas include placing nature scenes or relaxing images in the patient's line of sight to provide distraction; using sheets and pillows to minimize patient contact with cold metal equipment; making available a variety of musical selections through earphones or headsets; monitoring room temperature so that patients are comfortable in gowns; and ensuring privacy before, during, and after examinations and procedures (Sentient Website, 2015). With the above results, this implies that much attention is needed to the hospital ancillary services to maintain the cleanliness of the restrooms. Additional manpower services are needed for maintenance of the physical facilities to satisfy the growing number of patients as well as the clients.

The clients were satisfied with the aspect of responsiveness of the quality of radiology services. As noted, clients strongly agreed that they were advised of the test results as soon as they ready thru text or social media. They agreed that they could provide immediate real time solutions if there were patient concerns and requests were attended to right away. However, they neither agreed nor disagreed that items dropped in the suggestion box were acted upon with immediate haste. Responsiveness in the Radiology department is the willingness and ability to help customers promptly. In Radiology, this means being able to get appointments for patients quickly, as well as referring doctors' receiving films and reports soon after examinations. Long waiting times for appointments and taking more than a couple of hours to generate an urgent report are generally not acceptable (Hoe, 2007). The above results implies that patient's requests and concerns should be acted upon immediately. Likewise, there should be a systematic approach on setting up or scheduling of appointments and regularly opening the suggestion box.

The clients were very satisfied with the aspect of assurance of the quality of radiology services. As noted, clients strongly agreed that they x-ray, CT scan, and Ultra-sound machines were state of the art and the latest models, accurate and calibrated regularly. Meanwhile, they also strongly agreed that technicians were all professionals



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

and regularly updated in their training and highly skilled in their job. Finally, they strongly agreed that customers got the best value for their money. In assurance, customers must feel comfortable with the competence of service providers. Customers want to feel that they are dealing with the best; they must have confidence in the service. In radiology, this means that the staff members must not only be technically competent but have interpersonal skills and must be able to interact with both patients and referring doctors (Hoe, 2007). In radiology, because of the high capital cost of equipment, it is not always possible to have the best equipment, but it is always important that whatever equipment is being used is used correctly and that the quality of work produced is high (Hoe, 2007).

The clients were satisfied with the aspect of empathy of the quality of radiology services. As noted, clients strongly agreed that staff showed respect and consideration for the customer's comments of the laboratory services. However, they only agreed that they considered customers special request or instructions, provided personalized attention to patents questions and clarifications, offered alternative solutions on patient's concerns, and handled customers query one on one and with full attentiveness. This implies that the staff must show some degree of caring and attention to the customers. And this will highlight the importance of interpersonal skills, from front-desk receptionists to radiologists. Sohail (2003) measured the SQ in Malaysia using the SERVQUAL model and found that all scores for perception exceeded the expectations for all measures examined. This indicated that the perceived value of SQ has exceeded the initial expectation for all variables within all dimensions. This would suggest that hospitals in Malaysia provide services that exceed the expectations of their patients. The t-test confirmed the finding of the study.

The clients were generally satisfied with quality of services in the radiology department. Specifically, they were satisfied with the aspects of tangibles, reliability, responsiveness, empathy but very satisfied with the assurance. Clients probably felt comfortable with the competence of the service providers. That the service providers are not just technically competent but have interpersonal touch/skills that they were able to interact with the clients. In a study conducted by Rohini and Mahadevappa (2006), applied SERVQUAL framework and factors in their study on Bangalore (India) hospitals. They obtained the perceptions of both the patients and the hospital management. The study concluded that there exists an overall gap between patient's perceptions and expectations and also between management's perception of patients' expectations and patient's expectations. Strawderman (2005) performed researched on human factors. To model SQ, six dimensions were proposed whereby the five dimensions of SERVQUAL were used (i.e., responsiveness, reliability, assurance, empathy and tangibles). A sixth dimension, usability, was added in a modified survey instrument termed SERVUSE. Both measurement tools, SERVQUAL and SERVUSE, were found to be significant predictors of SQ, satisfaction and behavioral intention in the healthcare setting.

Table 2 Patient Satisfaction on the Services of the Radiologic Department

| Areas          | Mean | Interpretation |
|----------------|------|----------------|
| Tangibles      | 4.16 | Satisfied      |
| Reliability    | 4.26 | Very Satisfied |
| Responsiveness | 4.09 | Satisfied      |
| Assurance      | 4.54 | Very Satisfied |
| Empathy        | 4.04 | Satisfied      |
| Grand Mean     | 4.22 | Very Satisfied |

Note. n= 461.

Legend: 4.21 – 5.00 Strongly Agree / Very Satisfied; 3.41 – 4.20 Agree/ Satisfied; 2.61 – 3.40 Neither /

Neutral; 1.81 – 2.60 Disagree/ Less Satisfied; 1.00 – 1.80 Strongly Disagree/ Not Satisfied.



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

Results reveals that the discharged patients were satisfied with CHICLC's services in terms of the tangibles. They strongly agreed that the reception and laboratory waiting areas were clean, floor well-maintained and shiny as well as well-lighted room with good ventilation. However, they only greed that comfort room was clean and well-maintained. Cleanliness, well-lit and ventilated rooms were the prominent aspect of the environment that the patients considered. According to Gerteis et al. (1993), "Even the most unsophisticated patient recognizes the relationship between cleanliness and health, and patients see neglect of this basic principle as a major failure". The physical environment can have a significant impact on a patient's experience, and a supportive environment may serve to help prevent illness and alleviate stress and depression (Winkel & Holahan, 1985).

The patients were very satisfied in this area of reliability. As defined, reliability is the ability to perform the promised service in a dependable and accurate manner. The service is performed correctly on the first occasion, the accounting is correct, records are up to date and schedules are kept. The quality of its services is unquestionable. The patients strongly agreed that services were done professionally and right the first time, records accurate and well- maintained, medical schedules of patients diligently followed, rare delays, and corrective actions taken right away when there were customer complaints and concerns. However, they only agreed that bills for services were accurate and well- detailed. In a study conducted by Rohini and Mahadevappa (2006), applied SERVQUAL framework and factors in their study on Bangalore (India) hospitals. They obtained the perceptions of both the patients and the hospital management. The study concluded that there exist an overall gap between patient's perceptions and expectations and also between management's perception of patients' expectations and patient's expectations. Strawderman (2005) performed researched on human factors. To model SQ, six dimensions were proposed whereby the five dimensions of SERVQUAL were used (i.e., responsiveness, reliability, assurance, empathy and tangibles). A sixth dimension, usability, was added in a modified survey instrument termed SERVUSE. Both measurement tools, SERVQUAL and SERVUSE, were found to be significant predictors of SQ, satisfaction and behavioral intention in the healthcare setting.

The patients were satisfied in the area of responsiveness. The patients agreed that services were provided immediately as real time solutions if there were patient concerns, patient's requests attended to right away, items dropped in the suggestion box acted upon with immediate haste and setting up medical appointments was systematic and efficient. However, they strongly agreed that patients were advised of the test results as soon as they ready through text or social media. Though some of the patients were concerned about the problem setting up an appointment for ultrasound procedures due availability of the schedule of the radiologists. Few patient concerns and requests were not immediately attended to due to inadequate number of personnel and perhaps loaded with responsibilities and patients waiting for their procedures. Sohail (2003) measured the SQ in Malaysia using the SERVQUAL model and found that all scores for perception exceeded the expectations for all measures examined. This indicated that the perceived value of SQ has exceeded the initial expectation for all variables within all dimensions. This would suggest that hospitals in Malaysia provide services that exceed the expectations of their patients. The t-test confirmed the finding of the study.

The patients were very satisfied in the area of assurance. They strongly agreed that x-ray, CT scan, and Ultrasound machines were state of the art and the latest models, and accurate and calibrated regularly. They also strongly agreed that technicians were all professionals and regularly updated in their training, highly skilled in their job, and customers got the best value for their money. Abuosi and Atinga (2013) examined two key issues in healthcare institutions, one to assess patients' hospital SQ perceptions and expectation using SERVQUAL and other to outline the distinct concepts used to assess patient perceptions. In doing so, they observed that patient expectations were not being met during medical treatment. Perceived SQ was rated lower than expectations for all variables. Implying that the hospital managers should consider stepping up staffing levels by client-centered training programs to help clinicians deliver care to patients' expectations.

The patients were satisfied in the area of empathy. They strongly agreed that personnel showed respect and consideration for the customer's comments of the laboratory services. However, they only agreed that staff considered customers special request or instructions, provided personalized attention to patents questions and clarifications, offering alternative solutions on patient's concerns, and handled customers query one on one and with full attentiveness. This implies that the customers were satisfied with the degree of care, concern and attention demonstrated to them by the service provider. In the local scene, a similar study was conducted by Umbao (2003) that assessed the quality of health care and customer services rendered by the Laboratory Center



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

of the Philippines. The research revealed that although the clients of the said firm were generally satisfied with its services, there were certain areas that certainly needed improvements. These areas were not found in the original survey questionnaire used by the establishment. It showed some cases where they encountered moderate to serious problems and discovered that there was a need to improve and sustain its services to motivate and have an efficient work force.

The patients were satisfied with quality of services in the radiology department. Specifically, they were satisfied with the aspects of tangibles, responsiveness, and empathy but very satisfied with the aspects of reliability and assurance. Patient satisfaction is regarded as the most important indicator of the quality of healthcare and can be used to enhance programs within the healthcare facilities (Prakash, 2010). Interest has, therefore, increased not only in the assessment and treatment interventions by the healthcare givers, but also in the systematic evaluation of delivery of that care (Bosho & Gray, 2004). A study by Boshoff and Gray (2004) on CS and loyalty among patients in the private healthcare industry in South Africa observed that SERVQUAL dimensions like nursing staff empathy, assurance and tangibles, impact positively on patients' loyalty. A study by Hong and Goo (2004) observed the path  $SQ \rightarrow CS \rightarrow$  loyalty to be significant in Taiwanese service firms. Otani and Kurz (2004) concluded that nursing was more important in improving CS and behavioral intentions than other factors. Another study by Tam (2004) found that as customers' perceptions of the quality of the service increased, they felt more satisfied with the service and in turn perceived higher value. Ensuring excellent service quality is essential for the healthcare companies to achieve a competitive advantage and to differentiate themselves in the market (Hamed & Salem, 2014)

Table 3 Significant Difference between the Levels of Perceived Client and Patient Satisfaction on the Services of the Radiologic Department

| Variables         | Groups  | Mean        | T-value | df | p- value | Decision               | Interpretation  |
|-------------------|---------|-------------|---------|----|----------|------------------------|-----------------|
| 1. Tangible       | Client  | 4.17        | 0.14    | 9  | 0.894    | Failed to<br>Reject Ho | Not Significant |
|                   | Patient | 4.16        |         |    |          | reject 110             |                 |
| 2. Reliability    | Client  | 4.07        | 0.18    | 6  | 0.860    | Failed to<br>Reject Ho | Not Significant |
|                   | Patient | 4.26        |         |    |          | reject 110             |                 |
| 3. Responsiveness | Client  | Client 3.89 |         | 6  | 0.904    | Failed to<br>Reject Ho | Not Significant |
|                   | Patient | 4.09        |         |    |          | 110,000 110            |                 |
| 4. Assurance      | Client  | 4.45        | 0.27    | 6  | 0.784    | Failed to<br>Reject Ho | Not Significant |
|                   | Patient | 4.54        |         |    |          | 110,000 110            |                 |
| 5. Empathy        | Client  | 3.86        | 0.19    | 6  | 0.834    | Failed to<br>Reject Ho | Not Significant |
|                   | Patient | 4.04        |         |    |          |                        |                 |

Legend: Significant if p value is  $\leq .05$ .

As shown in the table, all of the aspects related to the quality of services such as the tangible, reliability, responsiveness, assurance and empathy were the not significantly different. Patient satisfaction is an important commonly used indicator for measuring the quality in healthcare. It affects clinical outcomes, patient retention, and medical malpractice claims. Also, it affects the timely, efficient, and patient-centered delivery of quality healthcare (Tam, 2007). Over the years, SQ and patient satisfaction has gained increasing attention especially in healthcare context (Azam et al., 2012b; Badri et al., 2006, 2009; York & McCarthy, 2011; Owusu-Frimpong et al., 2010). Also, past studies showed that there is a strong link between SQ and patient satisfaction (Andaleeb, 2001; Badri et al., 2009; Kitapci et al., 2014). In the healthcare literature, SQ and patient satisfaction have been considered as two major issues. Importance of patient satisfaction especially service encounters is well



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

documented in the marketing and management literature (Meirovich & Bahnan, 2008). SQ in service encounters is frequently depicted as being the outcome of an interactive process between the service provider and the service receiver. The interactive features of SQ in service encounters are thus, crucial to the ultimate outcome (Owusu-Frimpong et al., 2010). Patient satisfaction in healthcare organizations is considered crucial when planning, implementing, evaluating service delivery, as well as in quality improvement, overall customer relationship management (CRM) and strategic planning initiatives (Evenhaim, 2000). In fact, meeting patient's needs and developing healthcare standards are obligatory for high quality care (Badri et al., 2009). Survey questionnaires on satisfaction were used as a tool in this study to evaluate or re-evaluate whether the management of the department and their efforts obtained good results and impression in satisfying their patients and clients.

#### CONCLUSION AND RECOMMENDATIONS

Conclusion. The results of this study show that the clients were satisfied with quality of services in the radiology department. Specifically, they were satisfied with the aspects of tangibles, reliability, responsiveness, empathy but very satisfied with the assurance. Moreover, the patients the patients were satisfied with quality of services in the radiology department. Specifically, they were satisfied with the aspects of tangibles, responsiveness, and empathy but very satisfied with the reliability, and assurance. Finally, all of the aspects related to the quality of services such as the tangible, reliability, responsiveness, assurance and empathy were the not significantly different as perceived by the clients and patients. This implies that the radiology department of the hospital has provided quality services both to the clients and the patients. There was no variance in the satisfaction level between the patient and the clients. They do not differ at all in their level of satisfaction. Indeed, SERVQUAL model is an important tool in assessing the satisfaction of the clientele of the hospital. Thus, the strategic management plan was created to address the findings of the study.

**Recommendations.** The results of this study guide the following suggestions are offered:

- 1. The proposed strategic management plan should be reviewed and evaluated by hospital administrators to enhance the quality of radiology services towards clients and patient satisfaction.
- 2. As for the radiologist, it is necessary to understand the difference between service quality and service delivery. Service quality is one of the components of service delivery in radiology. Enhancement on the knowledge on the quality assurance and knowing how to implement and maintain a quality level based on standards set as well as knowing how to implement continuous quality improvement programs (part of TQM) in the department is needed and be implemented to ensure high quality and good service delivery to its customers besides improving financial performance of the department. The increased costs of implementing a quality program in a department may be offset by increased patient revenues or cost efficiencies elsewhere
- 3. Re-visit, reformulate and re-enhance the policies of the department
- 4. Finally, the following topics are suggested for future research undertakings:
- 4.1 Feasibility of the Strategic Management Plan in the Radiology Department;
- 4.2 Evaluating the Implementation of the Strategic Management Plan in the Radiology Department;
- 4.3 Contextual Influences of the Quality of the Services in the Radiology Department;
- 4.4 Financial Management in the Radiology Department; and
- 4.5 Experiences of Hospital Administrators in Managing Radiology Department.

### Strategic Management Plan

#### **Rationale**

The process of determining how satisfied a consumer is can be quite involved. It is not simply meeting a



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

customer's requirement; rather, it is providing them with an exceptional service by means of a highly motivated and well-trained team, a product of high quality, facilities that are friendly to the environment, and an experienced service provider who will treat them as a "guest" rather than merely a "customer." As a result, the contentment of customers has to be of the utmost importance for the marketing strategy of any hospital in order to fulfill the quality of service. The contentment of patients and visitors is essential to the continued existence and growth of hospitals.

Because of this, attention should be paid to the quality of the services provided by a hospital because it affects every facet of its functioning. The ability of a hospital to define the degree of service quality they provide, provide it in a way that can actually please their patients, and measure how satisfied their patients are gives them a competitive advantage over other hospitals. Findings of the study revealed that they were only satisfied with the aspects of tangibles, reliability, responsiveness, and empathy but very satisfied with the assurance. Thus, the creation of this strategic management plan.

## **General Objective**

This strategic management plan is primarily for the purpose of introducing mechanisms in order to improve and sustain a high level of satisfaction on the quality service provided in the radiologic department of the hospital.

#### **Specific Objectives**

This strategic management plan intends to achieve the following specific objectives:

- a. To increase the level of satisfaction and sustain the high level of satisfaction on tangibles specifically on the maintenance of cleanliness of the comfort rooms;
- b. To increase the level of satisfaction and sustain the high level of satisfaction on reliability specifically on the medical schedules, corrective actions for complaints, and on bill services;
- c. To increase the level of satisfaction and sustain the high level of satisfaction on responsiveness especially on providing immediate real time solution, attending to patients' requests, acting upon suggestions, and systematic and efficient setting up of medical appointment; and
- d. To increase the level of satisfaction and sustain the high level of satisfaction on empathy especially on considering customers special request, providing personalized attention, offering alternative solutions to concerns, and handling customer queries.

| Concerns   | Specific<br>Objectives  | Actions   | Persons<br>responsible  | Resources  | Time<br>Frame                   | Success<br>Indicators   |
|--|---|---|---|--|---------------------------------|---|
| A satisfied level on tangibles with only agree on the comfort rooms are clean and well maintained. | To increase the level of satisfaction and sustain the high level of satisfaction on tangibles specifically on the maintenanc e of cleanliness of the comfort rooms. | Personally-initiated activities  Read articles or view videos about SERVQUAL specifically on the satisfaction on tangibles.  Attend webinars relating to SERVQUAL.  Hospital-initiated activities | <ul> <li>Hospital Adminis trators</li> <li>Human Resource e Department</li> <li>Department Head of Radiology</li> <li>Radiology Staffs</li> </ul> | <ul> <li>Internet connection</li> <li>Laptops, desktops, tablet, or android cellphone</li> <li>Posters or signages.</li> <li>Php 5,000.00 for the webinar.</li> <li>Php 15,000.00 - 20,000.00 /</li> </ul> | First<br>quarter<br>of<br>2019. | <ul> <li>Saved articles or videos.</li> <li>Certificate of participati on in the webinars.</li> <li>MOA with an able services.</li> <li>Minutes of meetings.</li> </ul> |



# INTERNATIONAL JOURNAL OF RESEARCH AND SCIENTIFIC INNOVATION (IJRSI) ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

|   |   | Commission an abler service to periodically clean the comfort rooms.      Post posters or signages about "Keep this area clean" in all comfort rooms.      Provide trash bins in the comfort rooms.   |   | month for the Able Services  SERVQUAL instrument  |                        | • | High<br>levels of<br>satisfactio<br>n on<br>tangibles.   |
|---|---|---|---|---|------------------------|---|--|
| A satisfied level only on reliability with only agree on:  a. The medical schedules of patients are diligently followed. Delays are rare.  b. Corrective action is taken right away when there are customer complaints and concerns.  c. The bill for services is accurate and well detailed. | To increase the level of satisfaction and sustain the high level of satisfaction on reliability specifically on the medical schedules, corrective actions for complaints, and on bill services. | Personally- initiated activities  Read articles or view videos about SERVQUAL specifically on the satisfaction on reliability.  Attend webinars relating to SERVQUAL  Hospital-initiated activities  Strictly follow the medical schedules of patients.  Develop an SOPP on acting complaints.  Provide a suggestion box. | Hospital Adminis trators     Human Resourc e Departm ent     Departm ent Head of Radiolog y     Radiolog y Staffs | <ul> <li>Internet connection</li> <li>Laptops, desktops, tablet, or android cellphone</li> <li>Php 5,000.00 for the webinar.</li> <li>SOPP on complaints.</li> <li>Suggestion box</li> <li>Customer service desk</li> <li>Customer feedback form.</li> <li>SERVQUAL instrument</li> </ul> | First quarter of 2019. | • | Saved articles or videos  Certificate of participati on in the webinars.  Records of medical schedules.  Updated SOPP on complaint s.  Installed suggestion box.  Installed a customer feedback desk.  Posted procedural flow.  Customer feedbacks.  Minutes of meetings.  High levels of satisfaction on reliability. |
| A satisfied level on responsiveness with only agree on:   | To increase<br>the level of<br>satisfaction<br>and sustain  | Personally-<br>initiated activities   | Hospital     Adminis     trators  | Internet connection.  | First<br>quarter<br>of | • | Saved articles or videos.  |



# INTERNATIONAL JOURNAL OF RESEARCH AND SCIENTIFIC INNOVATION (IJRSI) ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

| a. Providing immediate real time solutions if there are patient concerns.  b. Patient's requests are attended to right away.  c. Items dropped in the suggestion box are acted upon with immediate haste.  d. Setting up medical appointments is systematic and efficient.        | the high level of satisfaction on responsive ness especially on providing immediate real time solution, attending to patients' requests, acting upon suggestion s, and systematic and efficient setting up of medical appointme nt.  | Read articles or view videos about SERVQUAL specifically on the satisfaction on responsiveness.  Attend webinars relating to SERVQUAL  Hospital-initiated activities  Conduct a study on the turnaround time in the radiology.  Providing a help desk.  Review procedure and process on medical appointments making sure that it is systematic and efficient. | Human Resourc e Departm ent     Departm ent Head of Radiolog y     Radiolog y Staffs                              | <ul> <li>Laptops, desktops, tablet, or android cellphone.</li> <li>Php 5,000.00 for the webinar.</li> <li>SOPP on complaints.</li> <li>Suggestion box.</li> <li>Customer service desk.</li> <li>Customer feedback form.</li> <li>SERVQUAL instrument.</li> </ul> | 2019.                  | • | Certificate of participati on in the webinars.  Records of medical schedules.  Updated SOPP on complaint s.  Installed suggestion box.  Installed a customer feedback desk.  Posted procedural flow.  Customer feedbacks.  Minutes of meetings.  High levels of satisfactio n on reliability. |
|---|--|---|---|--|------------------------|---|---|
| A satisfied level on empathy with only agree on:  a. Considering customers special request or instructions.  b. Providing personalized attention to patients questions and clarifications.  c. Offering alternative solutions on patient's concerns.  d. Handling customers query | To increase the level of satisfaction and sustain the high level of satisfaction on empathy especially on considerin g customers special request, providing personalize d attention, offering alternative solutions to concerns, and | Personally- initiated activities  Read articles or view videos about SERVQUAL specifically on the satisfaction on empathy.  Attend webinars relating to SERVQUAL  Hospital-initiated activities  Conduct a webinar on personalized  | Hospital Adminis trators     Human Resourc e Departm ent     Departm ent Head of Radiolog y     Radiolog y Staffs | <ul> <li>Internet connection.</li> <li>Laptops, desktops, tablet, or android cellphone.</li> <li>Php 5,000.00 for the webinar.</li> <li>SOPP on complaints.</li> <li>Suggestion box</li> <li>Customer service desk</li> </ul>                                    | First quarter of 2019. | • | Saved articles or videos  Certificate of participati on in the webinars.  Records of medical schedules.  Updated SOPP on complaint s.  Installed suggestion box.  |



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV March 2025 | Special Issue on Public Health

| one on one and with full attentiveness. | handling<br>customer<br>queries. | customer service.  • Develop SOPP for customer   | Customer feedback form. | Installed a customer feedback desk.  |
|---|----------------------------------|--|-------------------------|--|
|   |                                  | for customer feedback mechanism  Help desk.  Conduct periodic meetings.  Reassess the level of satisfaction, utilizing the same instrument after | SERVQUAL instrument     | <ul> <li>Posted procedural flow.</li> <li>Customer feedbacks.</li> <li>Minutes of meetings.</li> <li>High levels of satisfactio n on reliability.</li> </ul> |
|   |                                  | 6 months from<br>the<br>implementation<br>of this plan.  |                         |  |

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Page 454