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A Work Project, presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics.

ENHANCING CUSTOMER EXPERIENCE: KEY CRITICAL FACTORS IN HOSPITALIZATION

REDESIGNING CUSTOMER EXPERIENCE IN A PRIVATE HEALTHCARE GROUP – THE CASE OF CUF

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20-12-2023

Abstract

In the evolving landscape of healthcare, focusing on enhancing customer experience is crucial. By analyzing customer touchpoints and feedback systems at CUF, it identifies areas for improvement such as consultation, hospitalization, and home hospitalization. Moreover, it highlights key determinants shaping the hospitalization experience, including treatment clarity, communication with staff, post-treatment quality, and staff responsiveness. The research advocates for a unified, patient-centered approach to healthcare delivery, fostering long-term engagement and satisfaction.

Keywords: Hospitalization, Customer-Centric Healthcare, Healthcare Customer Experience, Hospitality in Hospitals, Customer Journey

I would like to express my gratitude to my advisor, Prof. Sérgio Guerreiro, for his support and encouragement. I am thankful to Iara and Mariana for their insights and collaboration. My heartfelt appreciation goes to my Mother and Father, Paula and Fernando, whose support, encouragement, and sacrifices made this academic journey possible. Your love has been my anchor, and your belief in my abilities has fuelled my perseverance. A special thanks to my sister, Francisca, for always believing in me more than myself and for illuminating my life. I am grateful to my cousin, João, for always being there. I am grateful to my family for their love. I am grateful to Sandra without her comprehension this thesis wouldn't have seen the daylight.

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

Chapter 1 - Redesigning Customer Experience in a private Healthcare Group – The case of CUF

1.1. Introduction

Consumer profile has evolved into a surprisingly knowledgeable and demanding figure in recent years. Its transition affects a wide range of industries, including healthcare, which is an important and necessary service. Customers are becoming more engaged and participating in their medical journeys as they want a pleasant experience in the health industry (Betts, Korenda and Giuliani 2020, 25-60).

The impact of modernity on health may be seen in the way individuals interact with private clinics like CUF, where the quality of treatment is judged not just in medical terms, but also by characteristics that contribute to the total experience.

The increasing availability of information has the potential to turn clients into fully educated consumers. Access to internet tools and information on medical diseases, treatments, and healthcare providers empowers people and allows them to make more informed decisions.

This recognition increases the desire for skilled specialists and customer-centered service in the context of private clinics. Furthermore, empathy emerges as a critical aspect; customers require not only competent medical care but also a humanized approach that acknowledges their concerns and emotional requirements.

In order to grow in the same way that clients expect it was proposed a “Field Work” through a partnership between NOVA SBE University and the CUF network of hospitals and clinics. This project is being developed in the post-COVID context with the objective of improving customer journeys of the customer in CUF Hospital.

The world has witnessed an accelerated digital transformation in recent years, as well as the establishment of disruptive technologies.

The objective of this project is to identify opportunities and challenges affecting CUF

healthcare group, as well as various challenges related to consumer satisfaction.

1.2. About CUF

1.2.1. CUF History

CUF was created in 1898 by Alfredo da Silva through the combination of *Companhia Aliança Fabril*, established in the late 1880s, and Companhia União Fabril, founded in 1865. After the founder died in 1942, Manuel de Mello, his son-in-law, took over as president of CUF. His grandchildren, Jorge, and José Manuel de Mello managed the corporation from the mid-1960s until 1975, when it was nationalized. Alfredo da Silva distinguished himself as an industrial, entrepreneurial, and cosmopolitan visionary with a revolutionary commercial strategy and a core leadership mentality. His initiatives were essential for Portugal's industrial revolution in the 20th century (José de Melo n.d.).

CUF invested in technological modernization, professional training, and scientific knowledge as part of an industrial strategy focused on the use and transformation of national raw materials, logistics, transport, distribution, banking and insurance activities, international trade in materials and products, global connections, and export markets. Alfredo da Silva developed an empire that, in the 1970s, was the largest corporate organization in the Iberian Peninsula, spanning roughly 180 firms with 40 to 50 thousand people, under the mottos "More and Better" and "What the country doesn't have, CUF creates." CUF produced and sold a diverse range of goods, including fertilizers, vegetable oils, olive oils, soaps, candles, feed, and textiles. Tabaqueira, Lisnave, Setenave, Banco Totta, and Companhia de Seguros Império were among the significant enterprises in the group. CUF actively participated in various national and international industrial shows as part of its communication strategy to market its industrial monopoly.

The headquarters of Companhia União Fabril were constructed between 1959 and 1969.

Barreiro's industry complex has been transforming the region into a sophisticated industrial metropolis since 1907.

Between 1908 and 1933, the CUF's New Workers' Neighborhood displays Alfredo da Silva's concern for worker housing. Although Luís Cristino da Silva began investigations in 1945, the final project was given to Fernando Silva.

Luís Cristino da Silva designed the Alfredo da Silva Mausoleum, which was dedicated in 1944. The CUF Tejo succeeded the CUF Hospital, which opened in 1945.

Tabaqueira, a CUF subsidiary, was founded in Lisbon in 1927 and relocated to Albarraque in 1963. The Church of the Sagrada Famlia in Tabaqueira, which opened in 1965, is notable for its contemporary architecture.

CUF entered the shipbuilding business with Lisnave in 1961. The shipyards, which opened in 1963, helped to modernize the national commercial fleet.

CUF's industrial heritage is seen in trade promotion, such as the establishment of the first "Pó de Açúcar" supermarket in Lisbon, the consequence of a 1970 cooperation with the Brazilian Group (Biblioteca de arte Glubenkian n.d.).

1.2.2. CUF in the health sector

CUF's history in the health sector began in 1945 with the CUF Infante Santo Hospital, in Lisbon, intended for workers and their families. Over the years, CUF has expanded its presence with several units, including hospitals, clinics and dental centers in various regions of Portugal. The expansion includes the management of Hospital Fernando Fonseca, strategic acquisitions, such as the CUF Porto Institute, and the opening of hospitals such as CUF Descobertas, CUF Torres Vedras, CUF Sintra, CUF Tejo, CUF Viseu, CUF Coimbra, among others. In 2023, CUF continues to grow with the opening of new clinics in Leiria and Santarém (CUF, n.d.).

CUF is now a market leader in providing high-quality healthcare in Portugal, with a network of

24 hospitals and clinics. The CUF network includes eleven hospitals, twelve clinics, and an institution in Lisbon, Porto, Almada, Montijo, Oeiras, Cascais, Sintra, Mafra, Torres Vedras, Santarém, Leiria, Coimbra, Viseu, S. João da Madeira, Matosinhos, and the Azores.

CUF is deeply devoted to its customers, partners, suppliers, the State, and society. Its purpose is to promote high-quality health care while preserving life and the environment. CUF considers its workers as its biggest competitive asset, believing that efficient personnel management adds to the company's long-term success. CUF is built on three pillars of excellence: human talent, service, and operations and systems. Recognizing its position in the country, CUF launched the CUF Inspira Program, adhering to the United Nations' three pillars of sustainable development: social, environmental, and economic. The company is also devoted to building a long-term business plan that promotes ethical and sustainable business activity in accordance with its Mission, Vision, and Values (CUF, n.d.).

Based on the statement by Salvador de Mello, President of the Board of Directors of CUF, maintaining customer trust is CUF's main challenge.

Although it has faced challenges and changes over time, CUF has remained resilient, evolving to align with changing needs and expectations. His historical path and perseverance continue to inspire generations of entrepreneurs and industrialists in Portugal.

1.3. Methodology

To fulfill the goals of this thesis, a comprehensive research methodology was implemented, which includes a literature review to understand the existent studies about the improvements and hospitality practices used in Consultations, Hospitalization, and HH. Also, the integration of the findings from group members individual thesis, benchmark with hospitals and other industries and the integration of the customer journey as a central framework for research orientation.

Primary it was done extensive literature research related to the utilization of hospitality principles in hospitals and in HH. It also searches about the key factors to improve the customer journey of consultations customers, hospitalized customers, and HH customers. Secondly, interviews were developed to gather preliminary insights about the factors that customers consider the key to improving the customer experience and interviews with different CUF teams.

The information was acquired from our individual thesis with the data obtained during the fieldwork at CUF. The on-site engagement offers an extensive perspective that complements the theoretical insights. From the intricacies of meal management in the kitchen, passing through the hospitalization rooms and ending with a visit to a home hospitalized client, the fieldwork provided us with a holistic overview of the hospital's inner workings. These interactions give us a comprehensive understanding of the day-to-day operations. This comprehensive understanding was pivotal to identifying potential bottlenecks and challenges that affect the overall customer experience. The visit to different CUF units, CUF Tejo and CUF Descobertas was strategic to immerse into the healthcare ecosystem of CUF.

Benchmarking played a crucial role in our methodology. It leveraged data from industries beyond healthcare, such as hotels, airlines, and other service industries to identify best practices in customer service. This comparative analysis aims to highlight successful strategies that can be adapted to enhance the customer journey within a healthcare setting like CUF.

The central framework for research orientation was the integration of the customer journey of CUF clients. Through this framework, it was analysed the sequential touchpoints, experiences, and interactions within the customer journey. The adopted approach allowed for a comprehensive understanding of the patient experience.

After this process, there was the chance to validate our framework through a presentation to

CUF board of directors. This involves receiving feedback from stakeholders within CUF, including healthcare professionals and management. This ensures that our recommendations are not only viable but also align with the overarching goals of the CUF.

The common part of our thesis answer to the RQ2 - Redesigning the Customer Experience in a Private Healthcare Group (The case of CUF) - contributes to improving customer experience at CUF. The use of an integrated approach aims to ensure the relevance and personalization to CUF group.

1.4. Consultation

1.4.1 Customer journey CUF - Consultation

During our fieldwork, it was possible to discern and understood the consultation customer journey at CUF by closely observing the reception employees. Specifically, it was possible to accomplish this with the reception manager.

As stated in Iara's individual part, the customer journey during CUF Consultations can be divided into multiple phases, each of which has a crucial impact on the entire customer experience. At CUF, the customer journey begins with scheduling the appointment, offering flexibility through online platforms, particularly the MyCUF app, or through telephone assistance to find a convenient time. Subsequently, the customer has the option to choose between the traditional check-in process at the reception, where they can take a ticket and wait for service or choose to make the check-in at the available automatic machines. After completing the check-in, the next stage involves waiting for the healthcare professional's call.

The following step in the journey is the actual consultation, a moment that, out of respect for customer privacy, we did not have the opportunity to observe directly. Following the consultation, the sequence continues with the payment for the services received, including any parking fees for customers who utilize the parking service.

After analyzing the customer journey and the interviews conducted with CUF clients, it was possible to identify critical challenges in check-in, wait times, and payment processes. Check-in complexities, driven by advancing digitization, can cause confusion due to technical issues and unclear instructions. Effective communication is vital during consultations, but language barriers and medical complexity may lead to misunderstandings. These challenges can negatively impact the customer experience. The recommendation includes targeted improvements in these areas, emphasizing customer experience enhancement. It was also suggested the integration of best practices from the hotel industry for overall optimization.

1.4.2.1. Suggestions for improvement in the check-in process:

1.4.2.1.1. Enhancing the User-Friendliness of the Check-In System

The prevalence of automation in the hospitality industry is growing, and CUF has closely monitored this development. Nevertheless, via our observations of CUF clients, it was possible to identify an increasing reliance on the host assistant that aids customers upon entry. This discovery has prompted us to contemplate how the medical experience may glean insights from the hospitality business.

The check-in process, whether done through the MyCUF app or physical devices, provides substantial advantages for clinic administration by decreasing labor expenses, optimizing documentation, and saving time (Czajka 2022).

The hospitality industry now considers minimal interaction technology to be an indispensable requirement, and hospitals are actively working to implement it by leveraging Artificial Intelligence. As progress unfolds in the realm of automation and artificial intelligence, a deficiency in understanding and knowledge of these technologies becomes evident. Given the higher frequency of hospital visits among older adults, this can directly impact the customer experience.

An advisable enhancement is to improve the clarity and visibility of instructions for clients. As an alternative, rather than simply showing the text "insert ID card" at the lower portion of the screen that is often not inside the direct line of sight, the screen may present a video of a client inserting their ID card in the appropriate spot while the screen is not in use. Upon contact with the screen, an auditory cue could instruct, "Kindly place your identification card beneath." This idea seeks to enhance user experience by creating a more user-friendly and intuitive check-in procedure that is both efficient and fun. The sounds would create a comforting atmosphere, emulating the aid that a human would bring.

1.4.2.1.2. Enhancing the Inclusivity of the Check-In System

English holds a key position in the era of globalization. The significance of this extends beyond national boundaries and encompasses other industries, serving as a vital component in facilitating communication among individuals from diverse nationalities. This language phenomena extends beyond personal, academic, or professional domains and is also prevalent in critical areas such as healthcare (Pinto 2019).

In the healthcare domain, proficiency in English extends beyond mere linguistic skills; it directly contributes to enhanced and safer healthcare services for overseas patients. Undoubtedly, in a world that is becoming more interconnected, acquiring proficiency in English has become a crucial aptitude for individuals. Proficiency in English is crucial for ensuring the welfare of clients and achieving professional excellence in the medical industry within a worldwide environment. Therefore, possessing fluency in English is not only a benefit but an essential requirement to be taken into account in the immediate, intermediate, and distant future. Through our fieldwork at CUF and customer interviews, it was possible to determined that there is a lack of English labeling in the facilities. This is especially significant because there are multiple recurring international clients who are proficient in English. During the interviews,

these consumers expressed that they consistently encounter individuals with whom they can engage in English conversation. Nevertheless, they emphasized that the absence of English signage and the sole use of Portuguese in the check-in devices occasionally causes them to feel disoriented and uneasy.

This insight highlights the significance of using the English language in signs and check-in equipment to improve the experience of our foreign clientele. Implementing this approach will not only make it easier for customers to navigate the facilities, but also showcase a dedication to supporting a broad and multilingual audience.

1.4.2.2. Suggestions to Improve Waiting Times

1.4.2.2.1. Anxiety Management and Waiting Times

Davis and Heineke (1998) observed that the first phase of direct connection between consumers and service providers is characterized by the waiting period. Research regularly shows a negative association between extended waiting times and customer satisfaction (Chebat and Filiatrault 1993; Katz, B. Larson, and R. Larson 1991).

Studies on customer satisfaction provide compelling findings, indicating that in some situations, the duration of waiting is more significant than the inherent excellence of the service, influencing the assessment of service encounters (Davis and Vollman 1990; H. Friedman and L. Friedman 1997). The change in focus signifies a gradual transformation in consumer preferences as time progresses.

Presently, the wait duration surpasses its practical purpose to become a greatly esteemed factor for consumers. Waiting lineups are considered a concrete measure of the quality of the service provided (McDonnell 2007). Although convenience has traditionally been the main focus in customer decision-making, it is becoming evident that the amount of time spent waiting is a crucial element in building customer loyalty (Berry, Seiders, and Grewal 2002). The

diminishing tolerance of consumers for prolonged waiting times necessitates the optimization of these procedures in order to uphold high levels of satisfaction and customer loyalty.

It is essential to effectively handle anxiety while waiting and to manage client expectations regarding wait times. We suggest the use of a system similar to the Ztech Queue Management System, which, like restaurants, utilizes the MyCUF app to deliver reminders to consumers regarding their upcoming appointment time. Individuals who do not possess the application could receive a notification via SMS.

This method would enable clients to effectively manage their time, hence reducing prolonged periods of waiting in the waiting area. Through the reception of an SMS notification, the client can ensure timely arrival at the hospital or utilize the waiting period more efficiently, so minimizing unnecessary delays.

The objective is to enhance the customer experience by increasing convenience and reducing stress, empowering them with greater authority over wait times.

The Cleveland Clinic has implemented a message and alert system that utilizes text messaging to keep consumers informed about the current status of their appointment schedules. This feature proves invaluable for clients, enabling them to schedule their arrival efficiently and minimize any potential waiting time.

Similarly, Marriott Hotels take a proactive approach by providing guests with room status updates, notifying them when their room is ready upon arrival. This not only enhances the overall guest experience but also eliminates the need for any unnecessary waiting time.

Another example is Amazon, that ensures a seamless customer experience by delivering notifications to consumers through various channels such as text messages, emails, or in-app notifications. These updates comprehensively inform customers about the progress of their deliveries, providing real-time information on dispatch, transit, and delivery of their packages.

Engaging consumers with distractions during periods of waiting has been demonstrated as a

successful tactic for diminishing the perception of time and improving the overall customer experience (Chebat and Filiatrault 1993; Katz, B. Larson, and R. Larson 1991). By offering captivating activities or informative content, customers are inclined to be less attentive to the passage of time. An exemplary instance is the implementation of interactive displays or customized material for amusement during periods of waiting. In addition, the implementation of themed surroundings in waiting areas, interactive games, and cultural exhibitions has proven to be successful in diverting customers' attention, hence creating the perception that time is elapsing more rapidly (Davis and Heineke 1998; Massachusetts General Hospital - real-world illustration). These tactics not only enhance the enjoyment of wait times but also contribute to the enhancement of overall customer satisfaction (Alberta Children's Hospital - real-world example; Katz, B. Larson, and R. Larson 1991).

1.4.2.3. Suggestions to Improve Payment processes

1.4.2.3.1. Managing Expectations for Paid Additional Services

Service organizations endeavor to provide flawless services to optimize client satisfaction and foster enduring partnerships. However, even for the most exceptional companies, it is challenging to completely avoid errors during the service delivery process. Consequently, the efficient recovery of services is crucial for companies' efforts in customer retention and building lasting relationships. Studies have demonstrated that the majority of customers have the capacity to accept some service faults and that errors by themselves do not result in dissatisfaction However, the refusal to implement service recovery measures is the main reason for customer dissatisfaction. Therefore, it is crucial that companies take effective measures to convert dissatisfied customers into satisfied customers when errors occur. Research findings suggest that the inability of an organization to restore services is a substantial factor in customer attrition, conversely, effective service recovery has the potential to decrease customer attrition

and enhance customer retention and satisfaction (Wen and Chi 2013).

These are actual examples of companies that have implemented compensation policies to address delays, interruptions, or inconveniences that may result in customers' time loss. These policies aim to maintain customer satisfaction and demonstrate accountability for issues that are within the control of the companies.

As an example, British Airways has an existing compensation policy for passengers who experience significant flight delays or cancellations due to operational issues of the airline. Passengers may be entitled to financial compensation in accordance with the regulations of the European Union.

Similarly, the Marriott hotel chain has a reservation guarantee policy that ensures guests the availability of rooms upon arrival. If the hotel fails to fulfill this guarantee, they provide guests with a free stay on a later date, along with an apology.

Another example is the public transportation system in London, known as Transport for London (TFL), has a policy in place to provide compensation to passengers for significant delays or disruptions in the metro and bus services. Passengers can request reimbursements or credits on their Oyster cards in the event of significant delays.

The issue of parking cost is frequently emphasized during interviews and is a concern confirmed by the CUF Front-office team. Customers do not mind paying for parking when everything goes as planned and within the expected schedule. However, when appointments are delayed through no fault of the clients, they feel that they are being treated unfairly by paying a high fee for parking, often exceeding the cost of the appointment itself.

One possible proposal would be to offer clients a parking voucher based on the additional waiting time in cases where the clinic is responsible for the delay. This would not only demonstrate a commitment to customer satisfaction, but also alleviate customer's concerns about unexpected parking costs. It is crucial to ensure that the customer experience is not only

efficient but also fair and transparent, demonstrating a commitment to excellent service.

1.4.2.4. Suggestions for Overall Experience Improvement

1.4.2.4.1. Celebrating Customer Birthdays

In order to foster consumer loyalty, it is imperative to deliver a favorable purchasing encounter, give high-caliber merchandise at equitable pricing, and ensure that customers feel esteemed. A significant number of customers actively pursue unique emotions and sensations while engaging in purchasing activities, aiming to replicate the experience of realizing a long-held aspiration. Customers' perpetual desire for significance can be met through actions that exhibit gratitude, such as acknowledging them on significant events, fostering an emotional connection between the client and the organization (Aragão 2009).

Following the effective strategies employed by other organizations, it was possible to contemplate the feasibility of providing a token of gratitude to customers who book an appointment on their birthday. As an illustration, CUF may furnish a voucher encompassing coffee and cake, presenting a little indulgence to commemorate the noteworthy event. This strategy not only fosters a favorable experience for the customer but also instills a sense of worth and acknowledgement.

An alternative approach we may consider is providing a discount ticket for a future visit as a gesture of goodwill to commemorate the customer's birthday, which is a customary practice in certain industries, such as optometry. This gesture not only demonstrates appreciation for the customer's confidence but also offers a concrete advantage that can enhance the availability of medical services.

As an example, Starbucks, a worldwide coffee franchise, has a loyalty program known as "Starbucks Rewards." On their birthday, members are entitled to a complimentary product, which may consist of either a beverage or a snack item.

Similarly, Sephora, a retail company specializing in beauty products, provides members of its loyalty program with a free birthday present. This gift can consist of a makeup product, lotion, or another item linked to beauty.

Another example is Amazon Prime, which members get a range of perks, such as exclusive discounts on specific items throughout their birth month.

Finally, InterContinental Hotels Group (IHG), one of the major hotel chains globally, provides members of its loyalty program, "IHG Rewards Club," with a free night at the hotel they are currently staying in on their birthday.

1.5. Hospitalization

1.5.1. In-patients Customer journey

The journey of a client admitted to a CUF unit is divided into three major moments: the Pre-Clinical Act, the Clinical Act and the Post-Clinical Act (Fig.1, App.4). The first moment begins with the client's awareness of the need for surgery and ends with the moment of surgical admission (Fig.2, App.4). This moment is divided into 5 phases. The first phase, the appointment of surgery in consultation, where during the consultation, the client becomes aware of the need for surgical intervention. This is followed by the surgical estimate phase, where the client receives an estimate of the cost of the procedure and informations about the process. The next phase is pre-surgical Contact, where the medical team contacts the client to provide pre-surgical instructions. This is followed by the pre-surgical consultations phase where the client undergoes additional consultations to assess their state of health prior to surgery (CUF 2023).

The second stage begins with the client's admission to hospital, where he undergoes preoperative procedures and ends when he is discharged (Fig 3, App.4). The second phase is divided into 6 stages, the first being the admission phase, where the client is admitted to the hospital. This is followed by the waiting phase, where the client waits for surgery in the

designated area. This is followed by the surgery phase, where the client is taken to the operating room and the surgery is performed by the specialized medical team. After surgery, the recovery phase follows, where the client is transferred to the recovery room. This is followed by the hospitalization phase, where the client is admitted for recovery. Finally, the client is discharged from hospital. Guidelines for post-discharge care and medication are provided (CUF 2023).

After surgery, the client's journey continues in the Post-Clinical Act Phase (Fig.4, App.4). This phase translates into Post-Surgical Contact where the CUF team contacts the client after discharge to check on their state of health and clarify any doubts. It is important to note that the client journey is personalized and depends on each client and the specialty of the surgery.

1.5.2 Key factors to improve in-patient customer journey

The findings of the Carolina study revealed that respondents identified several crucial factors in assessing healthcare experiences. The four key factors, ranked in descending order of importance, were the clarity of treatment information (4.60), quality of post-treatment care (4.56), effective communication with hospital staff (4.5), and the friendliness and responsiveness of staff (4.48). Beyond these four key factors, three elements surpassed the benchmark of 4 points. In decreasing order of significance, these were room comfort (4.3/5), ease of scheduling follow-up appointments (4.27/5), and personalized services (4.03/5). While six other factors did not attain a level of importance reaching 4, all received ratings above 3.38, listed in descending order: available recreation and entertainment options (3.84), support for families in the caregiving process (3.73), timeliness of services (3.71), quality of meals (3.61), responsiveness to previously communicated special requests (3.54), and cultural sensitivity in addressing needs and preferences (3.38).

1.5.3 Improvements suggested to improve the CUF in-patient customer journey

The suggested improvements are organized according to the sequential order of the in-patient customer journey. Consequently, the initial set of recommendations pertains to enhancements for the pre-clinical phase, followed by those for the clinical phase, and ultimately culminating in recommendations for the post-clinical phase.

1.5.3.1. Suggestion for improvement in the Pre-clinical Phase

1.5.3.1.1 Offering a clear and detailed surgical price proposal

The initial proposed enhancement involves providing customers with a transparent and detailed surgical cost estimate. As observed in the fieldwork, CUF currently provides clients with a reference estimate for surgical interventions. However, the lack of specificity and a wide price range complicates financial planning and informed decision-making for clients. Moreover, these estimates are only communicated via email three working days after the request, with no alternative means of accessing the price list. This suggestion introduces a transformative approach by presenting a clear and detailed indicative surgical price, with a narrower margin of less than €500. The objective is to elucidate all aspects involved in the procedure, encompassing estimated costs and potential complications. The proposed method involves presenting the estimate online, either through the website or the MyCUF app. Clients would fill in necessary information through a brief questionnaire to ensure the accuracy of the estimate.

This suggested improvement aligns with the primary factor identified as crucial by respondents, as evidenced by Carolina's research, where the clarity of treatment information scored a significance level of 4.6. This suggestion finds support in Collins' (2006) affirmation that customers actively seek information regarding potential complications, recovery timelines, and financial implications. The findings from interviews conducted in Carolina's study emphasized the importance placed by clients on the significance of possessing transparent treatment information, with interviews affirming the clarity of treatment information is crucial for

establishing a sense of control and predictability, particularly in situations that pose challenges. Mayo Clinic serves as a benchmark in the hospital sector, as their website allows for estimating the cost of various surgeries, personalized to each insurance/health subsystem for increased estimate accuracy. Also, MSC Cruises serves as a benchmark due to the clarity and detailed information provided to their customers.

This proposed change aims to enhance the customer experience by providing a clear estimation, customers would feel more valued and respected. Moreover, this change would simplify the process of requesting an estimate, preventing customers from having to visit the health unit in person. The anticipated impact for CUF is significant, as it not only reinforces customer confidence and trust in the CUF brand but also stimulates sales and demand, as illustrated by Kobayashi et al. (2019).

1.5.3.1.2 Creation of a helpline, staffed by specialized professionals, to reassure the client before the surgery (beyond administrative contact)

The proposed improvement entails establishing a pre-surgery contact team tasked with reaching out to clients before their procedures. This team aims to provide crucial information, address inquiries, and extend emotional support to alleviate pre-surgery stress and anxiety. Presently, CUF currently employs a surgical manager. However, this position only handles issues and concerns related to administration. This recommendation is in line with one of the four key factors identified for a positive hospitalization experience, namely, the friendliness and responsiveness of hospital staff, as revealed in Carolina's research, where these qualities scored a significance level of 4.48. This improvement is further supported by the findings that 58.1% of patients experience preoperative anxiety (Jiwanmall et al. 2020) and that having a committed support team—as recommended by Svensson, Nilsson, and Svantesson (2016) —emerges as a successful tactic to reduce preoperative anxiety and enhance the quality of life for patients who

are waiting for surgery. Mayo Clinic serves as a benchmark in the hospital sector because it offers a staff of psychologists, therapists, and other specialists who help their patients emotionally. Emirates Airline was cited as an example outside of the hospital benchmark due to its proactive customer communication and the presence of a customer support team that follows up with consumers to offer guidance, respond to inquiries, and reassure them.

The establishment of this help line would benefit CUF in a number of ways, such as enhancing customer satisfaction, setting it apart from the competition, and supporting the company's objective, which is to "promote the provision of health services with the highest levels of quality and knowledge, respecting the primacy of life and the environment, through the development of organizational intellectual capital in a permanent search for the best." (CUF 2020) Furthermore, it would be an additional revenue stream because this will be paid separately.

1.5.3.2. Suggestion for improvement in the Clinical Phase

1.5.3.2.1 Creation of a personalized transport service from the client's place of residence to the CUF and vice versa

The suggested improvement is the creation of a personalized transport service, accessible to all patients scheduled for surgery, utilizing regular vehicles instead of ambulances to mitigate stress and anxiety associated with ambulance transport (Weber et al. 2009). Presently, CUF only provides ambulance transportation for clients with a specific degree of morbidity. This proposal is aligned with the importance of the existence of personalized service, that accommodates the needs and preferences of customers (Ricciardi and Boccia 2017). Although respondents didn't rate it as one of the four critical criteria, they rated its level of importance at 4.03, above the threshold of 4, according to Carolina’s findings.

This improvement aims to enhance the client experience by fostering autonomy and reducing the need for clients to rely on family or friends for transportation. This service would alleviate

the stress and logistical challenges associated with hospital entry and discharge, sparing clients from concerns about public or private transport services ill-prepared for specific needs, as evidenced in our fieldwork. The observed difficulty faced by a client, with a broken leg, using Uber highlighted the inadequacy of private transport services for customers with diverse needs. Four Seasons transportation service was used as benchmark based on its convenience and quality. Implementing this suggestion would elevate the customer experience, bolstering CUF's position as the premier health service in Portugal. It distinguishes CUF from competitors, solidifying its customer-centric approach. Furthermore, it enhances CUF's value proposition by extending beyond healthcare to offer complementary services, thereby increasing customer satisfaction and generating additional revenue.

1.5.3.2.2 Creation of a customer logistics support service

The suggestion is to create a team of health travel specialists who will coordinate every aspect of the client's trip. From booking flights that suit the clients' medical needs, to booking accommodation and transfers between the hospital and the place of stay. In addition, the team would also be available to provide information on health-related travel requirements, ensuring that clients are well informed and prepared. This suggestion is in line with the significance of having individualized services that take into account clients' requirements and preferences (Ricciardi and Boccia 2017). Carolina's findings show that although respondents did not consider it as one of the four important criteria, they did rate its level of importance at 4.03, above the threshold of 4.

Mayo Clinic serves as a benchmark within the healthcare sector, providing clients with logistical support to ensure smooth health-related trips. By offering a comprehensive travel booking service, customers can have a more organized travel experience, enabling them to focus entirely on their treatment and enhancing their overall customer journey. This

simultaneous improvement extends to the client and their family, as meticulous attention to logistical details ensures a seamless experience.

For CUF, the advantages are numerous. Firstly, it allows them to enhance competitiveness and stand out in the healthcare tourism sector—a rapidly growing industry valued at $54.4 billion in 2022 (Statista 2023) and projected to reach $209.7 billion by 2027. Secondly, it will consolidate the CUF international positioning. Additionally, it will improve the customers satisfaction rate since they will have a travel journey as smooth as possible.

1.5.3.2.3 Transforming the inpatient waiting room into a comfortable, welcoming and relaxing space (similar to a hotel lobby)

As observed during the fieldwork, CUF's facilities are top-notch, with furniture that keeps up with the latest trends. However, despite the modernity and quality of the facilities, the decoration takes customers back to the hospital where stress and anxiety are usually present.

The suggestion is to modify the decoration of the inpatient waiting room, transforming it into a comfortable, welcoming and relaxing space similar to a hotel lobby, where clients could effectively relax before surgery. The proposed transformation of the waiting room revolves around four key elements. First, there is a plan to alter the lighting by lowering the ceiling lights, replacing the current white light with a warmer yellow hue, and incorporating various spotlights and wall lights. This strategic use of lighting is intended to create distinct environments within the waiting room, enhancing its overall atmosphere. Additionally, a significant part of the proposed changes involves replacing the existing furniture with more comfortable and luxurious alternatives. This shift is aimed at evoking a heightened sense of comfort reminiscent of upscale hotel lobbies, thereby improving the experience for those occupying the waiting room. The transformation extends to the color and decoration of the walls, with a move away from clear colors like white and yellow in favor of deeper, more soothing hues. The suggestion

is to incorporate natural elements such as wood to further elevate the overall comfort of the space. Lastly, the proposal includes the integration of relaxing music and sounds of nature. This addition is based on the well-established benefits of music in anxiety reduction, as demonstrated by Bradt, Dileo, and Shim (2013). The aim is to contribute to a more welcoming ambiance in the waiting room, ultimately enhancing the overall well-being of individuals.

As the unifying medium and theme of the room's decoration, nature would be the focal point that would unite the aforementioned pillars and transform the customer's waiting experience. Pictures with images of natural elements such as artificial plants, the sound of water running in a waterfall would improve the waiting time experience and reduce the stress associated with this moment (Beukeboom et al. 2012).

This suggestion is in line with the significance of room comfort role in fostering a positive hospitalization experience (Wu, Robson and Hollis 2013). Carolina's findings show that although respondents did not consider it as one of the four important criteria, they did rate its level of importance at 4.30, above the threshold of 4. This is aligned with Carolina interview findings, where interviews emphasized the desire for hotel-like rooms in order to enhance comfort and well-being during hospitalization. Equally Wu, Robson, and Hollis (2013) underscore the need for more hospitality-like environments in hospitals, advocating features like welcoming lobbies in order to foster a positive hospitalization experience.

As a hospital benchmark several units were considered. Parkview Cancer Institute sets a precedent with a lobby incorporating natural elements to harness the benefits of nature (Fig.5, App.5). Similarly, Yankees Cancer Center features an indoor garden, offering clients an opportunity to reconnect with nature (Fig.6, App.5). Singapore General Hospital distinguishes itself by creating therapeutic gardens and outdoor waiting areas designed to provide a calming respite for clients and their families amid the hospital's activity (Fig.7, App.5). The University of Pittsburgh Medical Center stands out with healing gardens aimed at mitigating stress and

anxiety for clients, exemplifying best practices in creating soothing environments within healthcare facilities (Fig.8, App.5).

This transformation of the decor would improve the customer experience at CUF, as it would make the surgical procedure less stressful. It should be noted that this transformation would bring numerous benefits to CUF, as it would distinguish itself from its competitors, increasing its value proposition and consolidating its position as a customer-centered company.

1.5.3.2.4 Hairdresser/Esthetician/Barber Service for Hospitalized Clients

The suggestion is to have a beauty service available, allowing hospitalized clients to receive beauty care in the comfort of their room, improving their sense of well-being during their stay. This service would work in partnership and would be requested in the MyCUF app.

This suggestion is aligned with the importance of providing tailored services that consider the needs and preferences of clients (Ricciardi and Boccia 2017). According to Carolina's findings, respondents rated the importance of this factor at 4.03, above the cutoff of 4, even though they did not view it as one of the four crucial criteria. The Canberra Hospital served as a benchmark, as offer a hairdresser/barber service to clients, emphasizing a comprehensive approach to patient care. Similarly with Four Seasons, that offer a beauty service, at the client's room.

The importance of having a beauty service is confirmed by Ridder et al. (2004), that affirm self-esteem plays a fundamental role in individual well-being, as well as in the client's perception of well-being. By improving their self-esteem, the client will feel better not only psychologically but also physically, which contributes positively to the evolution of the disease.

By implementing this recommendation, CUF would be able to differentiate itself from competitors, improve customer satisfaction, strengthen its client-centered positioning, and expand its value proposition. It also represents an extra source of income.

1.5.3.2.5 Creation of the CUF Wellbeing Center

The suggestion involves the creation of a space dedicated to the physical, psychological and mental well-being of CUF customers. In this space there would be different activities, all of them related to well-being, such as meditation and mindfulness sessions, workshops on nutrition and healthy ageing and presentation sessions for Domus Vida residential condominiums (José de Mello nursing home).

This suggestion is in line with the significance of having individualized services that take into account clients' requirements and preferences (Ricciardi and Boccia 2017). Carolina's findings show that although respondents did not consider it as one of the four key criteria, they did rate its level of importance at 4.03, above the threshold of 4. Additionally, and according to Statista (2022), 72% consider mental health to be as important or more important than physical health. This suggestion is corroborated by Wu, Robson and Hollis (2013) that underscore the need of therapeutical centers in hospitals, to improve the wellbeing of customers. As benchmark, Mayo Clinic and Cleveland Clinic were used, since both health units have a range of activities to improve the inpatient customer experience. This suggestion would allow CUF to accompany customers overtime and not just at times when they visit the health units, which translates into an increase in sales. Moreover, it opens up opportunities for cross-selling with other entities within the group, such as Domus Vida residential condominiums. Concurrently, this strategy would set CUF apart from competitors, enhance the overall customer experience, elevate satisfaction rates, and solidify a customer-centric positioning in the market.

1.5.3.3 Suggestions for improvements in the Post-Surgical Contact Phase

1.5.3.3.1 Creation of an online post-discharge follow-up platform

The suggestion is to create an online platform where customers can record their post-operative progress. The platform is supported by artificial intelligence, which monitors the evolution of

patient's symptoms. In the event of an alert, it sends a warning so that the medical team can contact the client. The suggestion would be to use wearables in the near future as a way of effectively monitoring client's post-operative progress. This suggested improvement aligns with the quality of post-treatment, one of the 4 key factors identified as crucial by respondents, as evidenced by Carolina's research, where the quality of post-treatment scored a significance level of 4.56. Additionally, this suggestion is in line with the ease of scheduling follow-up appointments. Carolina's results indicate that while respondents did not regard it as one of the four primary criteria, they rated an importance level of 4.27 importance rating, which is higher than the 4 thresholds. Moreover, this suggestion is aligned with the importance of providing personalized services that consider the needs and preferences of clients (Ricciardi and Boccia 2017). Carolina's results indicate that while respondents did not regard it as one of the four.

It is important to highlight that 47% of respondents (Statista 2023) use health and medical apps. In addition, in 2030 the global market for artificial intelligence in healthcare will be worth 187.95B$. Sword Health, a health app that treats muscle discomfort using wearable powered was utilized as a benchmark. This suggestion would make it possible to improve the customer experience, strengthen customer-centric positioning and differentiate from competitors.

1.5.4 Key Factors in the In-Patient Experience without Suggested Improvements

During the fieldwork, it became evident that the hospital staff exhibited a high level of care, sympathy, and understanding towards customers. Consequently, no suggested improvements were made to enhance the friendliness and responsiveness of the hospital staff. Similarly, communication with customers was observed to be clear and objective, minimizing the likelihood of misunderstandings. As a result, no improvements in this area were recommended. In terms of family accommodation, since CUF provides the option for hospitalized customers to have an accompanying family member, no further improvements were suggested. While the

timeliness of meals was occasionally not adhered, no specific improvements were suggested since a solution with different kitchen shifts has already started to be tested.

The quality of meals, although generally good, face feedback from some clients citing repetitiveness. However, a solution was already in progress, with a new à la carte menu being developed. This menu will offer customers a selection of 8 dishes tailored to their individual needs and preferences. Factors with lower importance ratings were not addressed, given their perceived low significance in the overall evaluation.

1.6. Home Hospitalization

1.6.1. Suggestions for improvement – Home Hospitalization

Home admission in private hospitals such as CUF is a relatively new but promising practice, which aims to offer clients the possibility of receiving hospital care in the comfort of their homes. Using the customer journey stated in Mariana's individual part it was possible to analyze some improvements that can be made in the specific case of CUF.

1.6.1.1. Information about Home Hospitalization

During the client's journey, when the client is still hospitalized and can be transferred to Home Hospitalization, a team of healthcare professionals goes to the client's room, as was seen during the field work. It explains how the hospitalization at home process works. Some people may be unaware of this service because there is not much information on this subject available.

A way to present the information more clearly would be through a video showing how the process works from the transference from Hospital to Home until discharge. Videos provide a visual presentation of content, which can be more engaging and attractive to many people (Felizardo 2021). For those who prefer to read this type of information, a brochure could also exist so that the customer can choose which option is better. Reading allows people to adjust

their pace according to their preferences and ability to absorb information.

This way the client could better understand how the process works and even learn about the existence of hospitalization at home.

With the aim to show how HH function Cleveland Clinic made a video to introduce their clients to the home hospitalization service with real client testimonials (https://youtu.be/bsGJq8Ce8j0?si=36_ZIAqzndPKzRmj).

1.6.1.2. Cleaning service

In the customer journey when the client is already hospitalized at home, the creation of a cleaning service for customers hospitalized at home could be an added value. Despite the obligation to have a caregiver, this person may not have the best skills to provide a good cleaning service, so that the client's recovery is faster. When the client is in traditional hospitalization it is included in the cleaning service but when the client passes to HH the cleaning service is no longer included.

Clients and caregivers often have their hands full with medical responsibilities and caregiving tasks as was confirmed in the fieldwork. Having someone else handle cleaning duties can be a significant convenience. Having cleaning responsibilities handed over to professionals can help reduce stress and anxiety for both the caregiver and client during an already challenging time, meaning clients and caregivers can save time and energy that would otherwise be spent on chores. cleaning, allowing them to focus on more important matters, such as client recovery.

Having professionals deal with this matter can give the client more security as a specialist is in charge of this task, as maintaining a clean and hygienic environment is crucial for the client's recovery. A clean and organized home contributes to a better quality of life for both clients and caregivers (Deering 2023).

Clients can therefore focus on their recovery without worrying about household chores, which

can positively impact their recovery process. Cleaning services can be adapted to the client's specific needs and preferences, ensuring a personalized approach that emphasizes care for the client's preferences.

An example of this service being implemented can be in Hospital to Home that created a cleaning service that helps the client return to their home knowing that it has been deeply cleaned, to ensure that the client's recovery is facilitated without the extra worry of cleaning.

1.6.1.3. Personal hygiene service

The service of having a caregiver who helps the client with their personal hygiene brings added value to the client's recovery during the period they are hospitalized at home. During the fieldwork, it was possible to observe that there were clients who needed a professional to carry out their personal hygiene, as the caregiver could not do so. A client hospitalized at home may be bedridden, which leads to the need for greater care and knowledge when performing personal hygiene so as not to harm the client.

The disease can often affect a person's ability to perform basic hygiene tasks independently. Proper hygiene is crucial to preventing infections and complications, especially for individuals with weakened immune systems (Lyons 2018). Having a professional assisting with hygiene routines ensures that these tasks are carried out completely and effectively, ensuring that the client maintains their dignity.

Some clients may have mobility issues that increase the risk of slips, falls, or other accidents when trying to perform hygiene tasks. External assistance minimizes this risk. External professionals can tailor their assistance to the individual's specific needs and preferences, ensuring that hygiene routines are carried out in line with the person's comfort level (Goldenhart and Nagy 2022).

Interacting with a caregiver or professional during hygiene tasks can provide social interaction

and companionship, especially for clients who may be homebound due to illness. Professionals are trained to provide assistance with personal hygiene tasks, ensuring that tasks are carried out safely and effectively. A clean, well-cared-for body can contribute to a positive healing environment.

Home Instead Senior Care is a well-known provider of non-medical home care services for seniors. This service provider offers personalized care services and assistance with daily activities, including personal hygiene.

1.6.1.4. Contact the healthcare professional

During HH, doubts may arise that the client would like to discuss with their doctor. Although there is an open line for emergencies that customers can call 24 hours a day, many customers do not use the line and wait for the next visit with medical professionals to ask the question. The existence of a chatbot allows contact when there is a non-urgent question via the MyCUF app, with the answer automatically given by the chatbot system in real-time. If the chatbot does not have the knowledge to answer customer queries, the message will be sent to a healthcare professional. Although it is a non-urgent issue, this can leave the customer feeling anxious.

Creating a chatbot can help make responses faster. Chatbots are software trained to hold conversations about certain topics autonomously. They use artificial intelligence to interact with customers and answer their questions about, for example, basic disease symptoms.

The increased use of intelligent technologies based on algorithms, text, and voice has started to reach the medical field with the aim of easing the workload of primary care services (Bohr and Memarzadeh 2020, 25–60). There are countless examples of chatbots that can provide a basic care service to doctors, nurses, customers, or even their families: from medication management and taking to remote assistance in first aid situations or even emergencies in the primary phase. For example, Symptomate is a platform that uses artificial intelligence to assess the client's

health status, check their symptoms, and establish a possible diagnosis, which can help in situations of hospitalization at home to control the client more and at the same time answer questions. that may arise during treatment (you can see how this platform works in this short video: https://www.youtube.com/watch?v=p8YcZnbiB2U)

The use of a chatbot would be suitable for non-urgent matters, allowing more flexibility in response. Text messages provide a written record of the conversation, which can be useful as the customer can read the response whenever they need to.

Clinics like Geisinger Health System created an app called MyGeisinger that allows their customers to communicate with their healthcare professionals from the MyGeisinger application. Intermountain Healthcare called their app My Health+ that permits customers to contact their doctor or nurse.

1.6.1.5. Notice of the arrival of the team of healthcare professionals

When the client is in HH, there is no fixed time for the arrival of the team of healthcare professionals. This can leave the client with some anxiety as was observed during the fieldwork, as they do not know when the appointment will take place. The client may be apprehensive and not want to carry out other activities, thus simply waiting for the team of professionals.

In the fieldwork, it was possible to observe that the medical team calls the client when they are parking the car. One way to prepare the client for the arrival of the medical team could be through a warning via the MyCUF app, which would be sent automatically, of how many minutes or km the team of healthcare professionals would be from the client's home. It would be possible to know where the team is from leaving a CUF hospital until arriving at the client's home. This way the client would have more time to prepare for the team's arrival and at the same time it would take away a role from the team of professionals who already have a lot of responsibilities.

For example, Amazon Logistic Team Service has a service that when the client is waiting for an order to be delivered using Amazon's own delivery network, it is possible to have access to more detailed and up-to-date information, such as an estimated delivery window so that the person can be prepared for the arrival of your order.

Uber has also a service for alerting the client. From the moment a driver accepts the customer's trip, it is possible to know where the customer is and how many minutes it takes to reach the pickup point from the Uber app.

Chapter 2 – Enhancing Customer Experience: Essential Factors in Hospitalization

2.1 Introduction

In the realm of healthcare, the traditional dichotomy between hospitals and hospitality is succinctly stated by Pizam (2007, 500): “The difference between hospitals and hospitality is ‘ity’ but that ‘ity’ can make a significant difference in the recovery of hospital patients.” The words “hospitality” and “hospital” share an etymological origin, both deriving from the Latin word hospes, meaning guest, host, or stranger (Etymonline 2017). This linguistic connection underscores the fundamental link between the two concepts. However, despite their common ancestry, contemporary understandings have resulted in hospitals being associated with clinical care (WHO 2022), while hospitality has become synonymous with service industries such as hotels and airlines (Brotherton 1999).

Nonetheless, a new era is beginning (Gondi and Song 2019). According to Wu, Robson, and Hollis (2013), this era is defined by the infusion of hospitality principles into the hospital setting, echoing the language of customer-centric industries (Al, Zakiudin, and Abdullah 2018). In essence, the “ity” in hospitality has become a bridge, connecting the technical expertise of healthcare with the empathetic aspects of guest-oriented service (Severt et al. 2008).

Accordingly, this thesis addresses a notable gap in the literature by exploring essential components that elevate the customer experience for hospitalized patients in Portugal. The study addresses critical factors while examining how healthcare quality perceptions, in Portugal, are influenced by age, gender, and income levels. The thesis also investigates the impact of these factors on the perceived importance of key elements for a positive hospitalization experience, in Portugal. These insights are used to answer RQ1 (Enhancing Customer Experience: Key critical factors in hospitalization).

2.2 Literature Review

Despite Pizam's (2007) assertion that “ity” is the difference between hospital and hospitality and the limited cross-fertilization between hotels and hospitals noted by Zygourakis et al. (2014), Brotherton (1999) emphasizes the importance of integrating hospitality into healthcare. In alignment with this perspective, Wu, Robson, and Hollis (2013) underscore the need for more hospitality-like environments in hospitals, advocating features such as hotel-like rooms, welcoming lobbies, and enhanced service offerings to improve the healthcare experience. Equally, Severt et al. (2008) identify the positive correlation between hospitality initiatives and improved patient satisfaction, while Chen et al. (2016) affirms the environment and staff attitudes influence customer satisfaction.

Demographic factors also play a crucial role in shaping perceptions of care quality, acknowledging the unique and varied perceptions of each individual. DeVoe, Wallace, and Fryer (2009) note that patients aged 18–64 years are less likely to report that their provider consistently listens and shows them respect compared to those aged 65 or older. Teunissen, Rotink, and Lagro-Janssen (2016) highlight how women’s assessments of hospital care tend to be lower than men’s. Additionally, Okunrintemi et al. (2019) assert that lower-income patients experience poorer healthcare access, perception, and effective quality of care.

Recently, as a result of private equity investments in healthcare delivery, a multi-dimensional change has occurred in the healthcare environment (Gondi and Song 2019). The realization that the environment in which medical care is delivered plays a pivotal role in patient outcomes (Kelly, Losekoot, and Wright-Sinclair 2016) has led healthcare providers to embrace principles traditionally associated with the hospitality industry (Wu, Robson, and Hollis 2013). According to Al, Zakiuddin, and Abdullah (2018, 8), a crucial aspect of the paradigm shift in healthcare is the adoption of a "patient-centered approach," which is deemed essential to address the changing needs and expectations of modern patients. Islam (2018) further emphasizes the necessity of adopting a holistic approach to healthcare, asserting that a patient-centric focus, extending beyond the disease, enhances the effectiveness of healthcare delivery. Correspondingly, Kurtuluş and Cengiz (2022) underscore the importance of healthcare providers prioritizing and optimizing the overall customer experience.

Al, Zakiudin, and Abdullah (2018) assert the importance of positive interactions between healthcare providers and patients, thus highlighting the importance of human connections in shaping overall experiences. Hence, in this digital era of fast-changing technology (Coccoli et al. 2014), where eMedicine is growing exponentially, a balanced approach is critical, "wherein the benefits of cutting-edge eMedicine are harmoniously integrated with the human-centric ethos of high-touch healthcare" (Ramaprasad and Johnson 2002, 5). Consistent with this perspective, Meyer et al. (2018, 4) affirm that "Healthcare should attain the perfect combination of high tech with high touch." This balanced integration becomes particularly pertinent when considering the customer journey of a hospitalized client. This journey is divided into three parts (CUF 2023): the Pre-Clinical, the Clinical, and the Post-Clinical (Fig.1, App.4).

The Pre-Clinical Act (Fig.2, App.4) commencing with the client becoming aware of the need for surgery, followed by the surgical estimate phase, pre-surgical contact, and pre-surgical consultations phase. The Clinical Act (Fig.3, App.4) begins with admission to the hospital,

encompassing admission, waiting, surgery, recovery, and in-patient phases, concluding with discharge. The journey extends into the Post-Clinical Act (Fig.4, App.4) involving for health assessment post-discharge. The journey varies based on medical interventions and individual health needs (CUF 2023).

2.3 Methodology

To bridge the identified gap in the literature and fulfill the objectives of this thesis, a two-phase research methodology was implemented. In the first phase, occurred in October 2023, an online exploratory survey was developed to gather insights into key aspects of a positive hospitalization experience and healthcare quality perceptions. The second phase, occurred in November 2023, involved in-depth face-to-face interviews with distinct persona groups to analyze the five elements crucial for enhancing the in-patient experience. The research initially aimed to uncover five key factors for enhancing customer experience of hospitalized clients. However, a strategic decision was made to streamline the focus by reducing the number of key points to four. The research orientation centered around integrating the customer journey of hospitalized clients by examining, experiences, touchpoints, and interactions, thus, providing a holistic understanding of the patient's overall experience.

2.3.1 First Phase – Exploratory Survey

A structured exploratory survey was created to gather preliminary insights on the five key factors that customers consider essential for a good hospitalization experience. The questionnaire development started with a literature review to find existing surveys, and most questions were adapted from them. New questions were created for the factors influencing in-patient satisfaction section, based on key factors identified by Chen et al. (2016).

The survey was assembled via Microsoft Forms and accessible for 30 days. The survey was

shared online. The responses were collected anonymously. A diverse sample of 158 respondents participated. Segmentation relied on age (DeVoe, Wallace, and Fryer 2009), gender (Teunissen, Rotink, and Lagro-Janssen 2016), and income (Okunrintemi et al. 2019) since prior research has indicated the impact of these demographic factors on consumer behavior. The survey (Tbl.5 and Tbl.6, App.6) started with demographic inquiries to define personas based on age groups (18–24, 25–34, 35–44, 45–54, 55–64, +65 years) and gender (female, male, non-binary, prefer not to answer). Socioeconomic factors such as annual income were also explored (€0–9,999; €10,000–24,999; €25,000–49,999; €50,000–74,999; €75,000–99,000; €100,000+) as well as affiliations with any insurance or health subsystem. Additionally, participants were queried about their past hospitalization experiences, specifically whether they or a family member had been hospitalized in the last three years. If not, respondents did not proceed to the survey questions to ensure the timeliness and accuracy of the gathered data. Additionally, participants were asked about the criteria they considered when choosing a hospital for their hospitalization. Respondents were also questioned about unconventional aspects that have contributed to their comfort in previous hospitalizations and to identify unexpected challenges during their hospital stays. Furthermore, respondents were asked to rate the relevance of "the factors influencing in-patient's satisfaction with hospitalization service," according to Chen et al. (2016), on a scale of 1 (Not important) to 5 (Very important). These factors were room comfort; effective communication with hospital staff; clarity of treatment information; personalized services; friendliness and responsiveness of hospital staff; quality of meals; response to any special requests or preferences previously referenced; available recreation and entertainment options; cultural sensitivity in addressing your needs and preferences; timeliness of services; accommodation of your family in the caregiving process; ease of scheduling follow-up appointments after your discharge; and quality of post-treatment. Finally, survey participants were questioned about their perspectives on the current quality of healthcare on a scale of 1

(Very bad quality) to 5 (Very good quality).

2.3.2 Second Phase – Interviews

The interviews, conducted with distinct persona groups identified through the survey (Tbl.7, App.7), aimed to explore critical elements, validate the survey findings, provide contextual knowledge, and identify unexplored customer considerations. Using face-to-face method, each interview lasted 30–40 minutes, using a semi-formal script for consistency and flexibility (Tbl.8 and Tbl.9, App.8). The interview script covered demographics and explored the importance of clarity of treatment information, effective communication with hospital staff, friendliness and responsiveness of staff, room comfort, and post-treatment quality for a positive hospitalization experience. The final section allowed interviewees to discuss additional topics.

2.4 Data Analysis

A total of 158 answers were collected (Fig.10, App.9). Since the report aims to study only respondents or family members who have been hospitalized in the last three years, 57 (36.1%) demographic answers were not further analyzed (Graph.11, App.10). The adjusted analysis evaluated 101 answers, which corresponded to 63.9% of the total demographic answers collected. All the results have been adjusted to the total of 101 answers (n = 101). In previous studies, age (DeVoe, Wallace, and Fryer 2009), gender (Teunissen, Rotink, and Lagro-Janssen 2016), and income (Okunrintemi et al. 2019) were found to impact perceptions of healthcare quality. Therefore, it was important to characterize the sample regarding these three demographics. The statistics were acquired through SPSS 28.

2.4.1 Sample Characteristics – Age

For the sample, age was measured by age groups. When analyzing the frequencies displayed in

Table 12 Appendix 9, it appears that the sample distribution is left-skewed (Graph.13, App.10). This asymmetry is explained by 62.4% of the respondents being at least 45 years old, while the remaining 37.6% are less than 45. The most recurrent age group (55–64) accounted for 29.7% of the total, while the second (25–34) and third (35–44) age groups each accounted for only 7.9% of the responses. In conclusion, and as observed in Figure 13, Appendix 10, there is an excess of answers from respondents above 45 years old and a lack of responses from respondents aged between 25–44 years. This discrepancy can be explained by Fimognari et al. (2022), who concluded that the probability of hospitalization increases with age. In addition, the age classes with highest frequency in the Portuguese age pyramid in 2022 were those between 45–64 years (Population Pyramids 2022).

2.4.2 Sample Characteristics – Gender

Although the gender question provided four options, it is noteworthy that only female and male options were selected (Tbl.14, App.11). Therefore, the statistics' outputs only consider two gender options. In Graphic 15 Appendix 11, the sample exhibits a roughly balanced distribution between genders, of which 53 respondents were female (52%) and 48 were male (48%). This difference is explained by the fact that women had a significantly higher mean number of visits to their primary care clinic than men (Bertakis 2009). Additionally, in 2022, the annual mean percentage for the female sex was approximately 52.3% of the total resident Portuguese population, according to Pordata (2023).

2.4.3 Sample Characteristics – Income

Income was measured by income classes. When analyzing the frequencies in Table 16 Appendix 8, the sample distribution is right skewed (Graph.17, App.12). The first three income levels account for approximately 90% of total respondents. The second income group (€10,000–

24,999) is the largest group and accounts for 37% of the total, followed by the first and third groups (accounting for 29% and 25%, respectively). The remaining groups (€50,000–74,999, €75,000–99,999 and €100,000+) account for 6.9%, 1%, and 2% of the answers, respectively. Given the low incidences in the upper levels, the three classes with incomes equal and greater than €50,000 were joined into a single class for statistical purposes. In conclusion, and as observed in Graphic 18 Appendix 12, there is an excess of responses from the income classes below €50,000 (90.1%) and a lack of responses above €50,000 (9.9%). This discrepancy can be explained by the fact that the average annual Portuguese salary is €20,323 (Statista 2023).

2.4.4 - Impacts of Age, Gender, and Income on Healthcare Quality Perceptions

An ANOVA test was conducted to assess the influence of age on healthcare quality perceptions, revealing statistically significant differences ($p < 0.01$) among at least two age groups and leading to the rejection of the null hypothesis (Tbl.19, App.13). Consequently, a multiple comparisons test (Tukey) was run to identify the groups in which these differences existed. This test ($p < 0.01$) revealed that the youngest group (18–24) had lower healthcare quality perceptions compared to the two older groups (55–64 and +65). Specifically, the youngest group had healthcare quality perceptions, on average, 2.017 points below the average of the group aged above 65 years (Tbl.20, App.13).

To understand whether gender influences healthcare quality perceptions, a T-test for independent samples was performed. The results indicated a statistically significant difference, with men having significant higher quality perceptions than women ($p < 0.05$) (Tbl.21, App.14). Additionally, to examine potential disparities in healthcare quality perceptions across income levels, an ANOVA test was run. This led to the rejection of the null hypothesis meaning that there are statistically significant differences in perceptions ($p < 0.05$) among at least two income groups (Tbl.22, Appe.15). Therefore, a multiple comparisons test (Tukey) was performed. The

analysis showed that the respondents who earned less than €10,000 had lower healthcare quality perceptions than those within the income bracket of €10,000–24,999 ($p < 0.05$). Specifically, respondents who earned less than €10,000, on average, had healthcare quality perceptions 1.112 points below those who earned €10,000–24,999. (Tbl.23, App.15)

2.4.5. Factors Influencing In-Patient Hospitalization Satisfaction

A comparative analysis was conducted among 13 survey factors to assess respondent priorities for a positive hospitalization experience (Tbl. 24, App.16). Respondents considered the most important factors were clarity of treatment information (4.60), quality of post-treatment (4.56), effective communication with hospital staff (4.5), and friendliness and responsiveness of staff (4.48) (Graph.25, App.16). A cross-tabulation analysis was conducted to identify the impact of age, gender, and income on these factors.

Age was positively correlated with key factors, as increasing age leads to a rise in the importance of such factors. Of respondents over 65 years, 100% indicated that clarity of treatment information is very important in contrast to 38.1% of respondents in the 18–24 age group (Tbl.26, App.17). Of respondents aged above 65, 92.3% affirmed that post-treatment quality is very important, compared to 27.3% of respondents aged 18–24 years (Tbl.27, App.17). Similarly, in the age group above 65, 83.3% of respondents consider effective communication with staff to be very important, contrasting with 33.3% of respondents in the 18–24 age group (Tbl.28, App.17). Equally, 92.3% of respondents above 65 state the friendliness and responsiveness of the hospital staff is very important, as opposed to 27.3% of respondents aged 18–24 years (Tbl.29, App.17).

Concerning gender, male respondents rated the key factors as more important than females did (Tbl.30, App.18) Of the males, 72.3% affirmed clarity of treatment information is very important, contrasting with 53.8% of females. For post-treatment quality, 78.7% of male

respondents affirmed it is very important, compared to 41.5% of females (Tbl.31, App.18). Males also placed greater importance on communication with hospital staff, with 61.7% deeming it very important, compared to 53.8% of females (Tbl.32, App.18). Similarly, in evaluating the importance of the friendliness of hospital staff, all male respondents (100%) affirmed it was important or very important versus 90.6% of females (Tbl.33, App.18).

Income had no linear influence on the key factors. Of the respondents, 46.4% who earn €0–9,999 affirmed clarity of treatment information is very important versus 30% of respondents who earn more than €50,000 (Tbl.34, App.19). Of the respondents, 17.9% who earn €0–9,999 affirmed the importance of effective communication with staff was moderately important (Tbl.35, App.19). Conversely, 100% of respondents who earn €10,000–24,999 and €50,000+ stated communication was important or very important (Tbl.35, App.19). Regarding the quality of post-treatment (Tbl.36, App.19) and the importance of friendliness and responsive hospital staff (Tbl.37, App.19), the results were very balanced through the income groups, which shows the influence of income is practically null.

It is important to note that a regression analysis to test the predictability of the key factors model was not run since some key factors were very highly correlated to others (for example, effective communication with hospital staff and clarity of treatment information, with a correlation coefficient of 0.769) (Tbl.38, App.20). Therefore, neglecting the absence of the multicollinearity assumption may result in misinterpretation of the outcomes.

2.4.6 Findings from the Interviews

Five interviews were conducted to gain deeper insights into the key factors with higher importance ratings (Tbl.39 and Tbl.40, App 21). Interviewees emphasized the importance of the clarity of treatment information for providing a sense of security and control in challenging situations. In terms of communication with hospital staff, respondents underscored its crucial

role in hospitalization experiences, emphasizing positive interactions when staff showed empathy and understanding of their needs and fears. Regarding the quality of post-treatment, interviewees stated that it plays a decisive role in shaping the overall experience, serving as the closing point. Concerning staff friendliness, they emphasized its critical role in creating a positive hospitalization experience by fostering a sense of comfort. When discussing room comfort, interviewees appreciated environments that resembled hotels rather than hospitals, citing specific elements such as pictures of nature that evoked feelings of comfort and nostalgia. None of the interviewees mentioned any additional topics that were not covered.

2.5 Discussion

Following the data analysis, RQ1 (Enhancing Customer Experience: Key critical factors in hospitalization) can be answered. The study's outcomes resonate with the conclusions of Chen et al. (2016, 469), emphasizing the substantial influence of the environment and service attitudes of medical professionals on customer satisfaction. The study identifies the clarity of treatment information as the most important factor for enhancing customer experiences in hospitalization, aligning with the universal human need for predictability (Aubert 1961). This also aligns with Collins's (2006) perspective that customers seek information about complications, recovery timelines, and financial costs. The interviews revealed that the clarity of treatment information is crucial, as a well-defined plan offers reassurance during uncertain times. The importance attributed to treatment clarity increases with age, reflecting the increasing desire for predictability and control (Ross, Owensby, and Kolak 2022). The differing results between genders align with Soble's observations, with males placing greater emphasis on treatment clarity, consistent with a tendency toward objectivity (Soble 1994). In terms of income levels, our study indicates that individuals with lower incomes place greater importance on treatment clarity, consistent with findings by Zhang and Sussman (2023), who argue that

lower-income prioritize budgeting due to a narrower margin for unexpected expenditures.

The second highlighted factor is post-treatment quality (rated 4.56/5). Aligning with Delion, Mauguin, and Corsin (2004), this study emphasizes its pivotal role in shaping a positive hospitalization experience. Interview participants underscored post-treatment quality as the "big finale" influencing overall perceptions and emphasizing the importance of medical team support and easy post-consultation scheduling. Respondents expressed a desire for more accessible support through online platforms, especially with the growing prominence of eMedicine (Ramaprasad and Johnson 2002). Age correlated positively with the importance of post-treatment quality, which is attributable to a greater likelihood of complications among the elderly (Latkauskas et al. 2005). Males prioritized treatment quality more than females for indistinct reasons, while income levels showed no clear influence, as approximately 50% of respondents across income classes rated treatment quality as highly important.

The third key point underscores the importance of communication with hospital staff, resonating with insights from Kurtuluş and Cengiz (2022) and Al, Zakiuddin, and Abdullah (2018). Interviewees highlighted effective communication as pivotal for a positive hospitalization experience, aligning with DeVoe, Wallace, and Fryer (2009). Positive communication practices, such as empathy and clarity, were emphasized as fostering security and comfort. Age correlates positively with the importance assigned to communication, as seen in findings by DeVoe, Wallace, and Fryer (2009). Males also placed a greater emphasis on the significance of communication with hospital staff compared to females, due to unclear reasons. Regarding income levels, a nuanced trend emerged. While 17.9% of respondents earning €0–9,999 considered communication moderately important, 100% of those earning €10,000–24,999 and with incomes exceeding €50,000 affirmed its importance or deemed it very important. This result aligns with Okunrintemi et al.'s (2019) findings, indicating that lower-income individuals prioritize essential treatment, while the higher-income group, assured of the

disease treatment, value factors contributing to an enhanced healthcare experience.

The fourth key factor emphasized by respondents pertained to the friendliness and responsiveness of hospital staff. This concurs with the insights from Islam's study (2018), underscoring the significance of a patient-centric approach that considers the individual beyond their disease. This approach leads to a more effective and overall superior hospitalization experience, emphasizing the importance of empathetic professionals (Moudatsou et al. 2020). Furthermore, our study findings align with Severt et al. (2008), who assert a positive correlation between hospitality initiatives, such as the empathy of staff, and higher patient satisfaction. This correlation aligns with the sentiments expressed in interviews in which respondents highlighted the pivotal role of staff sympathy in fostering a sense of safety and comfort during hospitalization. Age significantly influenced this aspect, with 92.3% of respondents above 65 years affirming its very high importance, contrasting with 27.3% of those aged 18–24. Similarly, males prioritized staff friendliness more highly than females, though the exact reasons were unclear. Income levels have a minimal impact, with around 40% from each income class stating staff friendliness is very important.

In a brief overview, it was also decided to highlight additional factors with importance ratings above four: room comfort (4.3/5), ease of scheduling follow-up appointments (4.27/5), and personalized services (4.03/5) (Graph.25, App.16). Room comfort demonstrated high importance, consistent with previous research emphasizing its crucial role in fostering a positive hospitalization experience (Wu, Robson, and Hollis 2013). Although not one of the primary four elements, room comfort was near at merely 0.18 points below staff friendliness. As mentioned earlier, room comfort was considered in interviews, providing deeper insights into this aspect. The interview findings align with Wu, Robson, and Hollis (2013), who emphasized the desire for hotel-like rooms, with interviewees highlighting the importance of decoration in enhancing comfort and well-being during hospitalization. The importance of easy follow-up

appointment scheduling was highly correlated with the key factor of post-treatment quality, which was evaluated as one of the top four factors for a good hospitalization experience. The personalized services importance level reflected the contemporary desire for customized experiences aligned with individual tastes (Ricciardi and Boccia 2017).

Regarding healthcare quality perceptions study's findings align with the literature review, confirming patterns observed in previous research. DeVoe, Wallace, and Fryer (2009) noted age-related differences in healthcare quality perceptions, which are echoed in this study's results, with lower quality perceptions among the youngest age group (18–24) compared to older groups (55–64 and +65). Similarly, Teunissen, Rotink, and Lagro-Janssen (2016) highlighted gender differences, which are consistent with this study's results indicating significantly higher quality perceptions among males than females ($p < 0.05$). Regarding income levels, the analysis concurs with Okunrintemi et al. (2019), affirming that lower-income individuals have poorer healthcare experiences, evident in the lower quality perceptions among those earning less than €10,000 compared to the €10,000–24,999 bracket.

2.6 Conclusion and Limitations

In recent years, there has been a shift in the healthcare paradigm. Customers are becoming increasingly demanding, prompting the healthcare industry to adopt hospitality principles and a patient-centered approach to enhance the overall customer experience.

This study was conducted to understand current perceptions of healthcare quality and identify key areas for enhancing the customer journey of hospitalized clients. The results indicate that Portuguese consumers currently perceive healthcare quality as average (3.19). (Tbl.41, App.22). Clarity of treatment information, communication with hospital staff, quality of post-treatment, and friendliness and responsiveness of staff emerged as the most crucial elements for a positive hospitalization experience. Consequently, these four points were identified as the

key areas for improvement to ensure hospitalized customers have a positive experience.

However, the study has some limitations. Firstly, the study did not analyze the influence of insurance or health subsystems, since only 10 respondents did not have such coverage, representing a non-statistically significant sample. Another limitation is that the study did not evaluate differences between regions and assumed Portugal was a unified region.

The healthcare paradigm is in a constant state of change, adapting to the evolving needs and preferences of consumers. Consequently, this dissertation serves as a foundation for future studies on the key elements to improve the customer experience of hospitalized patients

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2.8 - Appendix

Appendix 1 – Acronym

Figure-Fig

App-Appendix

Home Hospitalization – HH

Appendix 2 – Interviews – Customer Experience at CUF

We are a group of three students from the Nova School of Business and Economics, currently conducting research as part of our Master's Thesis in Management, with the aim of improving the customer experience in CUF hospitals. In the context of this questionnaire, we would like to inform you that your email address will not be collected by the platform and, therefore, will not be associated with specific responses. Responding to this questionnaire should not take more than 5 minutes, and the results will always be analyzed in aggregate, potentially shared internally and with external entities (always in aggregated form), without collecting data that identifies each participant individually. Thus, anonymity and confidentiality are ensured.

1. **What is your age?**

□ 18 – 29

□ 30 – 49

□ 50 – 65

□ +65

2. **What is your gender?**

□ Feminine

□ Masculine

□ Other _____

3. Do you have any health insurance or health subsystem/agreement (ADSE, SAMS, ADM, etc.)?

□ Yes Which one? _____

□ No

4. How did you become aware of CUF?

□ Family

□ Friends

□ Social Media

□ CUF website

□ Other _____

5. What reason led you to choose to be attended here?

6. How many times have you already used CUF services?

□ It is my 1st time

□ 1

□ 2

□ 3

□ 4

□ I am a regular client

7. What are your future expectations regarding your journey with CUF?

8. **On a scale from 0 to 10, how do you feel about your experience with scheduling appointments or procedures? (Please select a value between 1 and 10: "0 = Not applicable", "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied")**

9. **Was the process quick? Did you encounter any issues or difficulties?**

10. **Have you had any interaction or experience with the hospital's communication channels (such as online chats, dedicated phone lines, etc.)?**

- ☐ Yes
- ☐ No

11. **On a scale from 1 to 10, how effective do you consider the communication channels provided for customers to contact CUF? (Please select a value between 1 and 10: "1 = Ineffective" and "10 = Very effective".)**

12. **On a scale from 1 to 10, how do you rate the waiting time? (Please select a value between 1 and 10: "1 = Very slow", "5 = Neutral", and "10 = Very fast").**

13. **Were there clear information about the estimated waiting time? What did you think of the facilities and entertainment while waiting or during your stay?**

14. **On a scale from 1 to 10, how do you feel about the quality of the service received during your visit to the hospital? (Please select a value between 1 and 10: "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied").**

15. **Was there any positive or negative highlight? Did you feel heard and understood?**

16. **On a scale from 0 to 10, how do you feel about the post-treatment experience? (Please select a value between 0 and 10: "0 = Not applicable", "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied").**

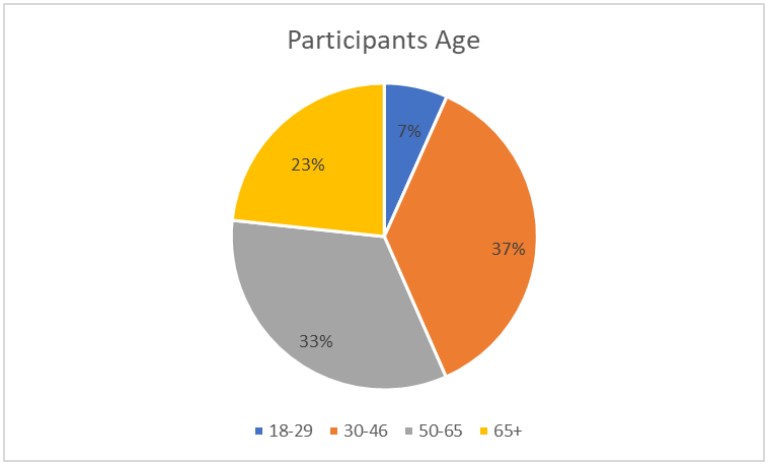
17. **On a scale from 1 to 10, how do you feel about CUF hospitality? (Please select a value between 1 and 10: "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied").**

18. **On a scale from 1 to 10, how likely are you to recommend CUF services to others? (Please select a value between 1 and 10: "1 = Would not recommend" and "10 = Definitely would recommend").**

19. **Are there any suggestions or recommendations you would like to share to improve your experience at CUF?**

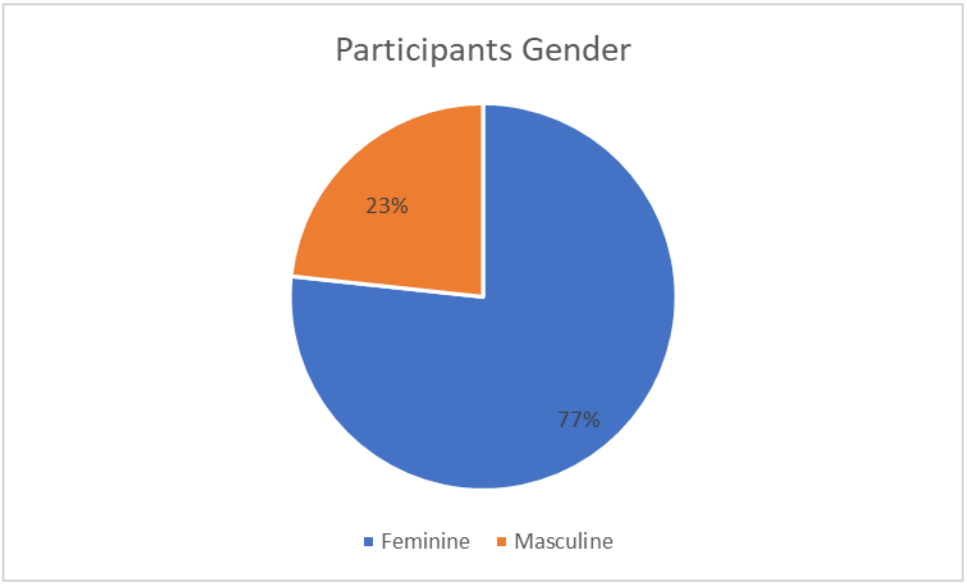
Appendix 3 – Interview answers – Customer Experience at CUF

Q1. What is your age?



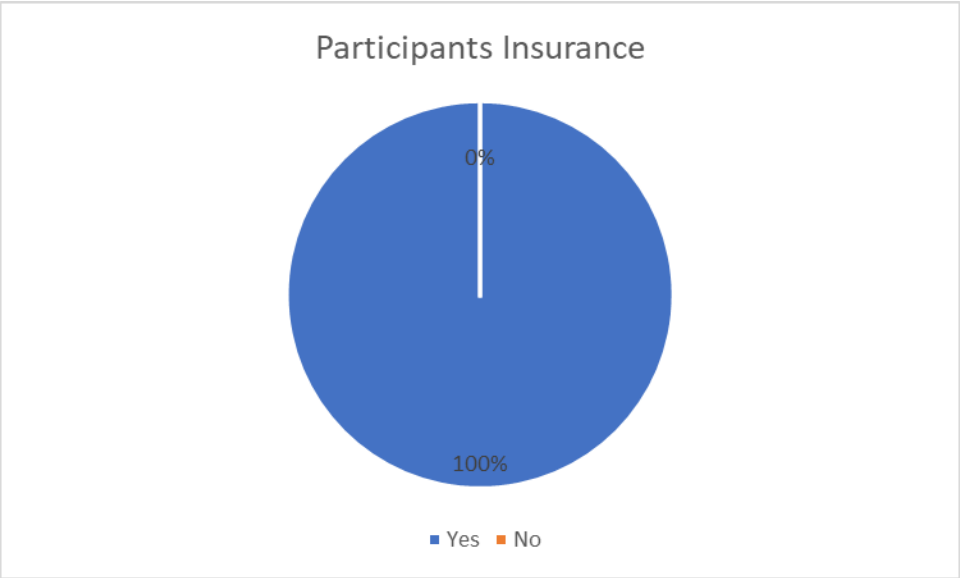
Graphic 1 – Participants age

Q2. What is your gender?

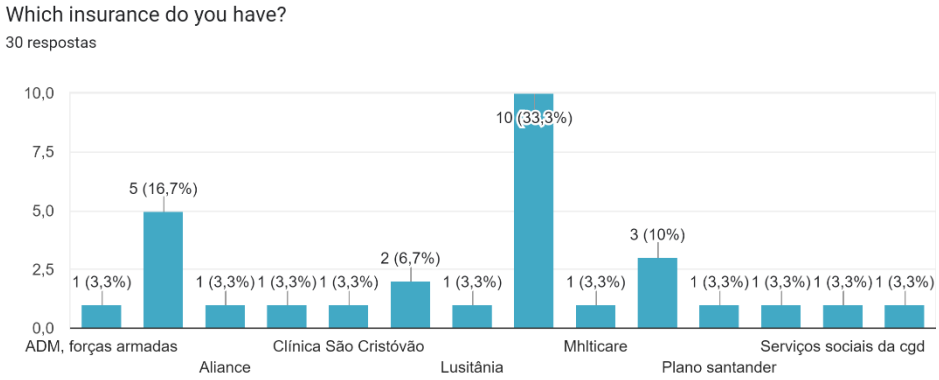


Graphic 2 – Participants Gender

Q3. Do you have any health insurance or health subsystem/agreement (ADSE, SAMS, ADM, etc.)?

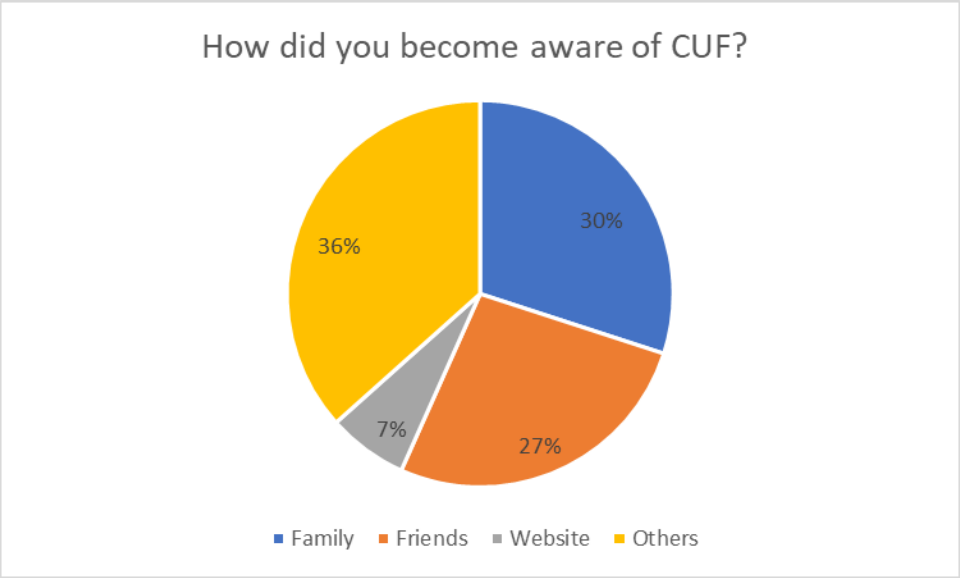


Graphic 3 – Participants insurance



Graphic 4 – Insurance provider companies

Q4. How did you become aware of CUF?



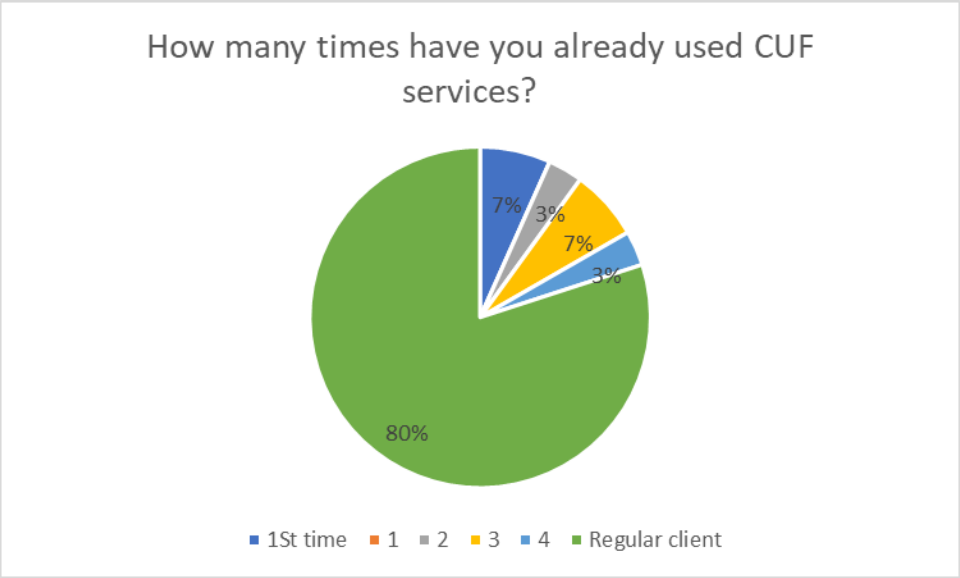
Graphic 5 – How the clients become aware of CUF

Q5. What reason led you to choose to be attended here?

- Quality of medical care
- Speed of service and waiting time
- Family members frequently attend
- I work here, know the doctors
- Already had surgery at CUF, and the same doctor was there
- In case of urgent cardiology, it went well
- Friends
- Several reasons: faster, better services, and insurance
- Because of the quality
- Decided to try it and liked it, switched from public healthcare
- Service quality and infrastructure
- It works well, quality, speed, hygiene
- Because CUF has a good reputation
- Health insurance

- Medical advice
- Brought here due to urgency
- Personal preference
- Urgency
- It's quick when making an appointment, no need to wait for a month, it's new, like the facilities, and it's modern
- Recommendation from a friend treated by a doctor here
- Close to my home
- Quality of service
- Husband works at Santander, which offers free services here
- Through work, with the friendliness of people and the services, we continue. CUF is everything
- Ease of access and speed
- Recommended by friends, based on the service
- Always been treated at Infante Santo, followed my doctors
- Agreement with ADSE, we like the care, know other people who are treated here
- Already knew the doctor and chose to come here, very competent
- Found it cheaper, and the service is good; the doctors are very kind

Q6. How many times have you already used CUF services?

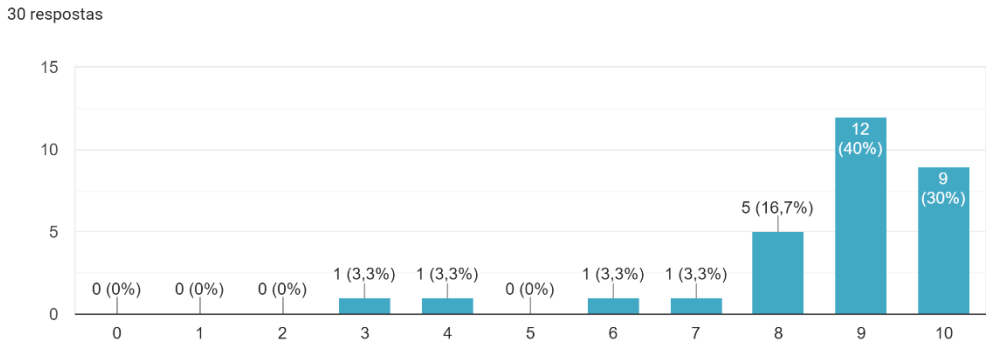


Graphic 6 – How many times did the client used CUF services

Q7. What are your future expectations regarding your journey with CUF?

- Good service
- Trustworthy

Q8. On a scale from 0 to 10, how do you feel about your experience with scheduling appointments or procedures? (Please select a value between 1 and 10: "0 = Not applicable", "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied")

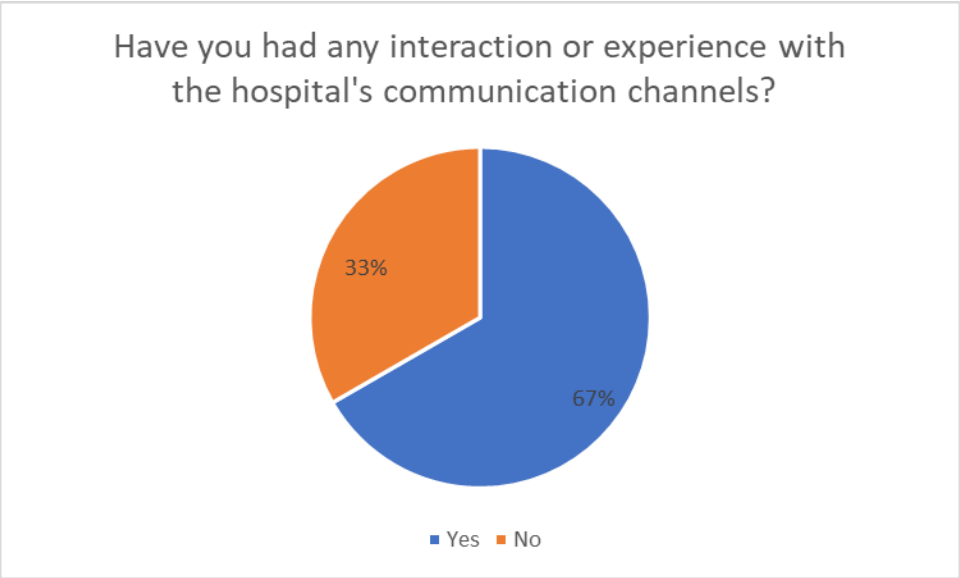


Graphic 7 – Participants experience with scheduling appointments

Q9. Was the process quick? Did you encounter any issues or difficulties?

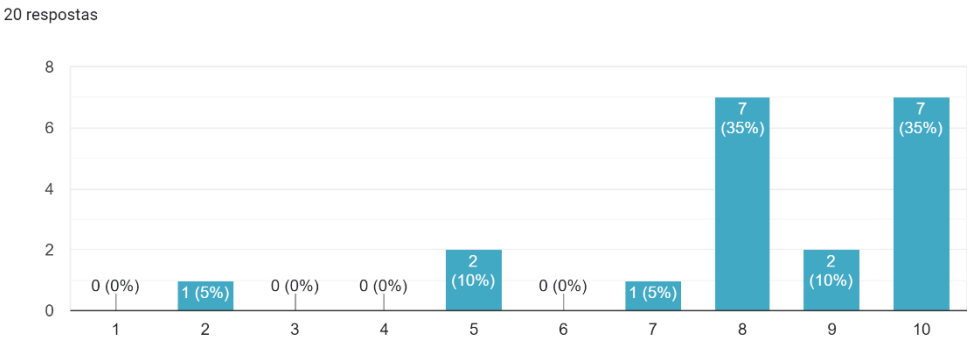
- Yes
- Fast
- Yes
- There is difficulty in scheduling appointments through the ADSE subsystem
- No problem
- Fast, everything on MyCUF
- Fast
- Fast and without problems
- Difficulty with scheduling
- Yes
- Appointment canceled at the last minute and with a month's notice
- Very fast
- Very fast
- Yes. But with ADSE, appointments are later. My mother has it, and it's always confusing.
- Yes, it was very fast

Q10. Have you had any interaction or experience with the hospital's communication channels (such as online chats, dedicated phone lines, etc.)?



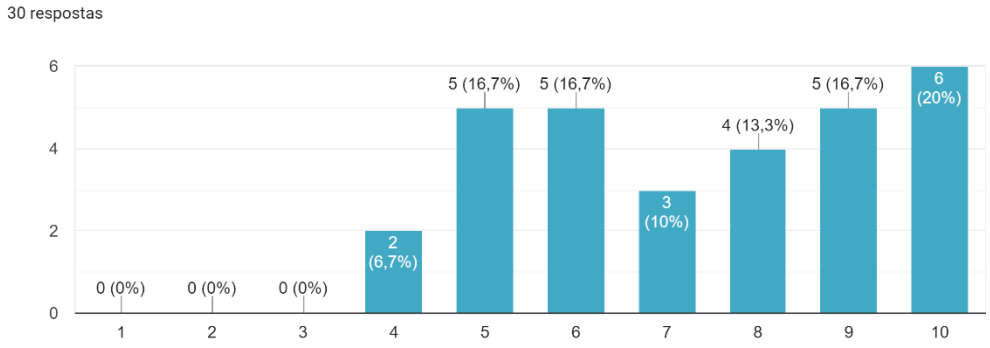
Graphic 8 – Participants interaction or experience with the CUF hospital's communication channel

Q11. On a scale from 1 to 10, how effective do you consider the communication channels provided for customers to contact CUF? (Please select a value between 1 and 10: "1 = Ineffective" and "10 = Very effective".)



Graphic 9 – Effectiveness of the Communication Channels

Q12. On a scale from 1 to 10, how do you rate the waiting time? (Please select a value between 1 and 10: "1 = Very slow", "5 = Neutral", and "10 = Very fast").



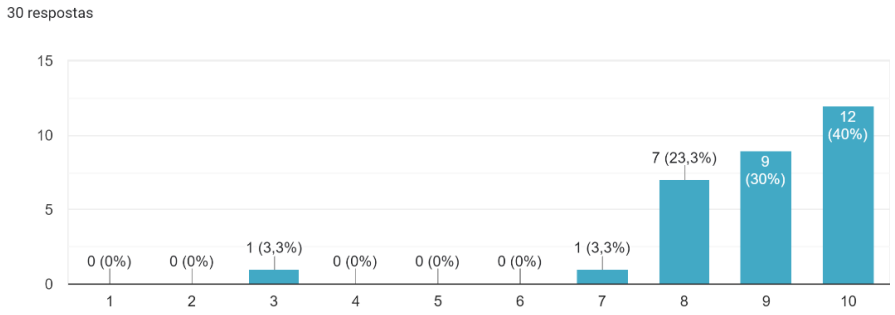
Graphic 10 – Rate of the waiting time

Q13. Was there clear information about the estimated waiting time? What did you think of the facilities and entertainment while waiting or during your stay?

- No
- There were no clear information about the waiting time, and there was no entertainment
- Good
- Used to Infante Santo, but yes
- Yes, they are good
- 10 minutes fast, at CUF Tejo more time compared to Cascais
- I didn't have any, 3 hours wait, the facilities are excellent
- Yes. Today is taking longer
- Very fast compared to public
- It's taking too long today
- Yes, they inform, the facilities are good, except the parking
- Slightly confusing information
- I like the facilities I just arrived, don't know if it's fast

- I had none, facilities are rated 3, the best like a hotel
- No
- No
- No, don't know how long, it would be good to know how many people are ahead of us
- No, the facilities are classy
- Wasn't always consistent. Facilities are good
- Yes, there were. The facilities are excellent
- They don't say. Facilities are excellent
- I enter appointments before the scheduled time.
- No information. Facilities are excellent
- Yes. Nothing to complain about
- Yes. Compared to previous ones, they are excellent
- No. Modern facilities
- They don't provide. Similar to others
- Yes. Excellent facilities

Q14. On a scale from 1 to 10, how do you feel about the quality of the service received during your visit to the hospital? (Please select a value between 1 and 10: "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied").

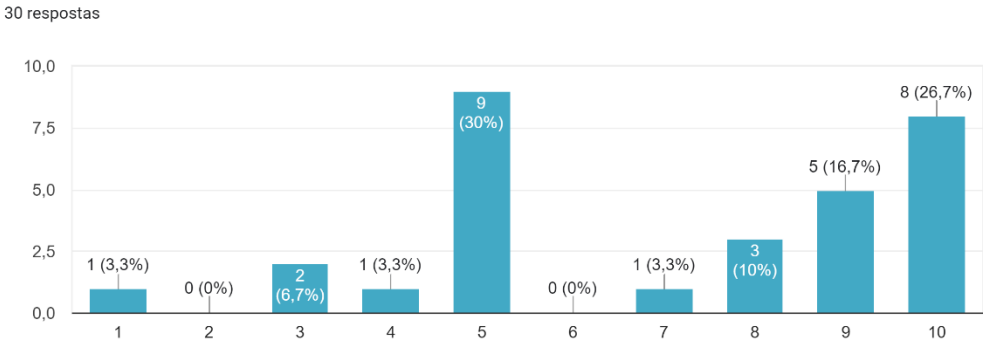


Graphic 11 – Quality of the service received during the visit to the hospital

Q15. Was there any positive or negative highlight? Did you feel heard and understood?

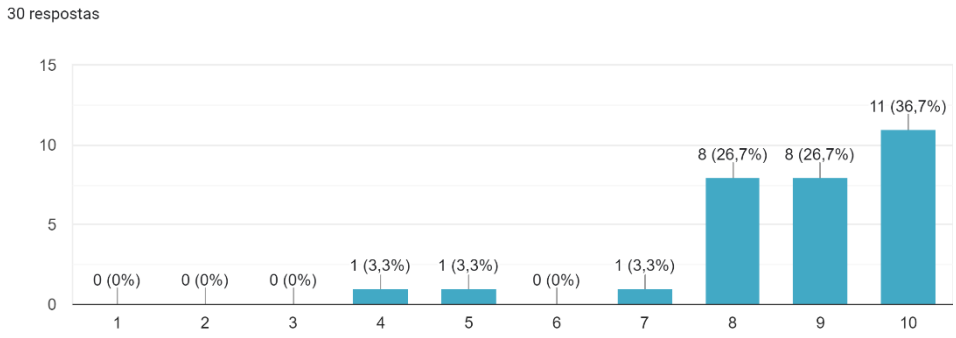
- Positive highlight is the quality of the facilities
- Felt good, yes
- Yes, no complaints
- Positive
- Positive
- Excellent
- Very good education
- Everything is fine
- Yes
- No
- Very positive, quality of the doctors
- The app is very good, the cafeteria too
- Floor 0 and imaging, the service is quite negative
- Imaging in general, both the reception desk and the CT service
- On a medical level, yes, not always from others

Q16. On a scale from 0 to 10, how do you feel about the post-treatment experience? (Please select a value between 0 and 10: "0 = Not applicable", "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied").



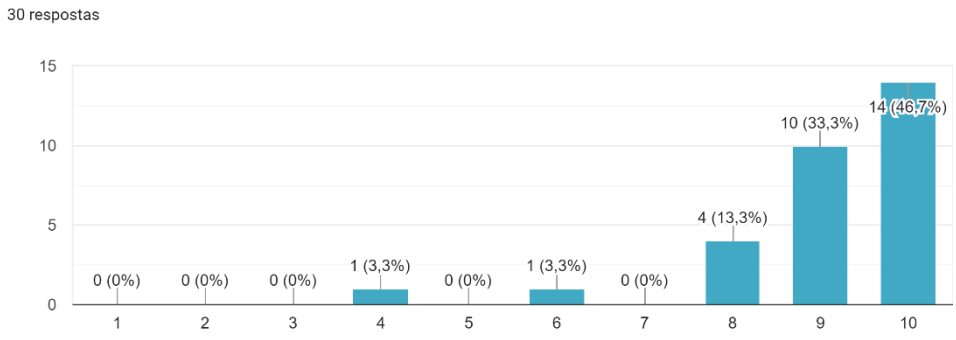
Graphic 12 – Participants post-treatment experience

Q17. On a scale from 1 to 10, how do you feel about CUF hospitality? (Please select a value between 1 and 10: "1 = Very dissatisfied", "5 = Neutral", and "10 = Very satisfied").



Graphic 13 - How participants feel about CUF hospitality

Q18. In a scale from 1 to 10, how likely are you to recommend CUF services to others? (Please select a value between 1 and 10: "1 = Would not recommend" and "10 = Definitely would recommend").



Graphic 14 - How participants are likely to recommend CUF services to others

Q19. Are there any suggestions or recommendations you would like to share to improve your experience at CUF?

- No
- Improve the management of waiting times
- More accessible and democratic fees
- I already feel at home like in Infante; at first, it was confusing, but they are on the right track
- It's new, very good
- They should call in the order of the appointments; the parking is very expensive, sometimes even more expensive than the consultation
- It's hard to improve what is already good; every council has a CUF, not much to criticize
- Waiting times, consultation with a 50-minute delay
- Parking could be cheaper
- Waiting times at the hospital could be better Tejo is better than Descobertas; when we call, sometimes it takes time; on MyCUF, you can't schedule an urgent appointment in

2/3 days; more comfortable chairs

- Pay more attention to the patient and provide satisfaction regarding the waiting time
- Improve the app system It needs to take into account the human component more, and professionalism should be reconsidered
- No
- Improve the waiting time, and something to check the waiting time
- Would like to know how long the waiting time would be
- No. Liked everything
- Put the screens in English; everything is in Portuguese, and I don't understand; they find people to speak English with me
- Nothing to add Just would like to have the benefits of my husband, as I am happy with mine
- Everything is good
- The parking should be free
- Invest in raising awareness of public service in some areas. Which is also slow.
- Floor 0 has to be cherished; they are rude and ill-mannered Management of imaging; there are more people there than at the central counter, and still, the service is terrible
- Parking could be cheaper
- Very bureaucratic, I can't wait, I leave and then pay I don't have any.

Appendix 4

Figure 1 - Representation of the customer journey of a hospitalized customer (CUF 2023)

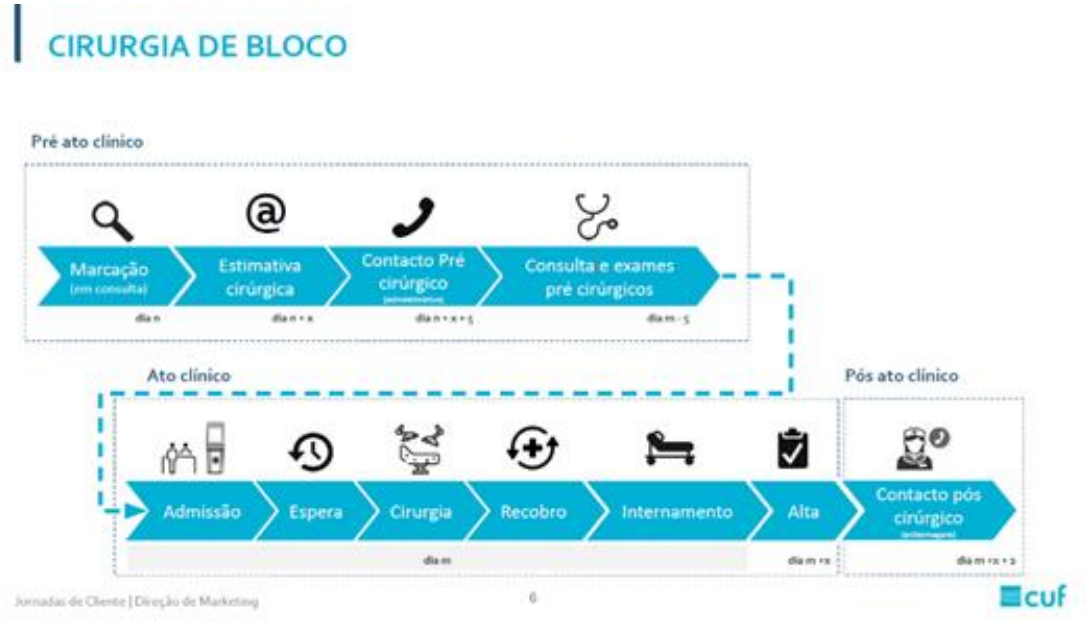


Figure 2 - Representation of the first phase of a hospitalized client customer journey (CUF 2023)

Figure 3 - Representation of the second phase of a hospitalized client customer journey (CUF 2023)

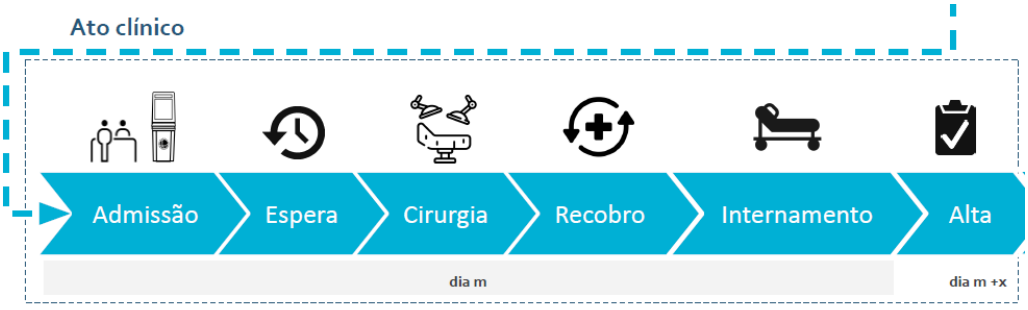
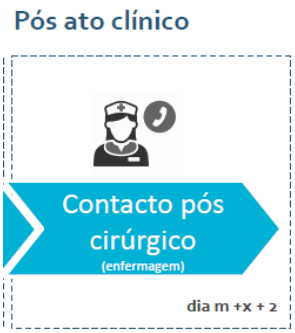


Figure 4 - Representation of the third phase of a hospitalized client customer journey (CUF 2023)



Appendix 5-Hospitals Benchmark

Figure 5-Parkview Cancer Institute lobby

Figure 6-Yankees Cancer Center interior garden

Figure 7-Singapore General Hospital

Figure 8- University of Pittsburgh Hillman Cancer Center healing

Appendix 6–Script Survey about Improving Customer Experience in Hospitals

Table 5 – Script of the survey about key factors to have a good hospitalization experience (Part 1)

Theme	Question	Answer	Question objective	Important Notes
Demographics	1.What's your age?	(18-24; 25-34; 35-44; 45-54; 55-64; +65)	Characterize the personas	
	2.To which gender identy do you most identify?	(Female; Male; Non-binary; Prefer not to say	Characterize the personas	
	3. What is your country of origin?	(Portugal; Spain; France; Germany; Italy; Other)	Characterize the personas	
Socioeconomics	4. What is your occupation?	(Student; Employed; Unemployed; Self-employed)	Characterize the personas	
	5.Which of the following best describes you	(0-9,999€; 10,000€-24,999€; 25,000€-49,999€; 50,000€-74,999€; 75,000€-99,999€; +100,000€)	Characterize the personas	
	6.Do you have any insurance (Médis, Multicare, etc) or health subsystem (ADSE, etc) ?	(Yes, No)	Characterize the personas	
Past experiences	7.Do you or any familiar have been hospitalized in the last 3 years?	(Yes, No)	Ensure the recentness and accuracy of the gathered data	If the respondent provided a negative response, the survey concluded at this point
	8.When selecting a hospital for hospitalization, what criteria do you typically consider?	(Past experiences; Insurance Coverage; Facilities; Specialized Services; Recommendations	Get specific data based on individual past experiences	
	9.Beyond traditional aspects, were there any unexpected elements that contributed to your comfort during your hospital stay?	(Specific Amenities; Activities; Interactions; Other)	Dig into unexpected answers that can bring insightful data.	
	10.Were there any challenges or difficulties during your hospitalization that caught you by surprise?	(Yes, No)	Dig into unexpected answers that can bring insightful data.	
	11.Please share the challenge that you overcome	(Communication barriers; Limited Visitor Acess; Lack of information; other)	Dig into unexpected answers that can bring insightful data.	This question were presented exclusively to respondents who affirmatively responded to Question 10

Table 6 – Script of the survey about key factors to have a good hospitalization experience (Part 2)

Factors influencing inpatient satisfaction with hospitalization service patients (Chen et al. 2016)	12.Please rate the relevance of the following elements during your inpatient experience	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)	Delve into the core of the user's true preferences without biasing the respondents	A Likert scale was adopted for added precision to compel respondents to express an opinion in the absence of a neutral option (Nemoto and Beglar 2014).
	A. Room Comfort	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		Room comfort refers to the comfort of shared spaces, specifically the waiting room.
	B. Effective Communication with hospital staff	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	C.Clarity of treatment information	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		Clarity is achieved by giving people information that they will find useful to their decision-making process and empowering them to act on
	D. Personalized Services	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	E. Friendliness and responsiveness of staff	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5=		
	F. Quality of meals	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	G.Response to any special requests or preferences previously refered	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	H. Available recreation and entertainment options	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5=		
	I. Cultural sensitivity in adressing your needs and preferences	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	J. Timeliness of services	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	K. Accommodate your family in the caregiving process	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5=		
	L. Ease of schedule follow-up appointments after your discharge	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
	M. Quality of post treatment	(1=Not important; 2=Slightly important;3=Moderately important; 4=Important; 5= Very important)		
Perspective	What is your prespective about the healthcare quality?	(1=Very bad quality; 2=Bad quality; 3=Average quality;4= Good quality; 5= Very good quality)	Have na overview of the healthcare quality perception	A Likert scale was adopted for added precision to compel respondents to express an opinion in the absence of a neutral option (Nemoto and Beglar 2014).

Appendix 7–Characterization of personas

Table 7 – Demographic characterization of the respondents intervieweed (each one representing a different persona group)

Personas	1	2	3	4	5
Age	21	32	48	59	68
Gender	Female	Male	Female	Male	Female
Income	0-9.999€	10.000€-24.999€	24.999€-49.999€	50.000€-74.999€	24.999€-49.999€
Nacionality	Portuguese	Portuguese	Portuguese	Portuguese	Portuguese
Occupation	Student	Employed	Employed	Self-Employed	Employed
Do you have Insurance/Health subsystem ?	yes	yes	yes	yes	yes
Do you or a family member have been hospitalized in the last three years?	yes	yes	yes	yes	yes

Appendix 4–Interview Script

Table 8 – Interview script about the key factors for a good hospitalization experience (Part 1)

Section	Question
Demographics	1.What's your age?
	2.To which gender identy do you most identify?
	3. What is your country of origin?
	4. What is your occupation?
	5.Which of the following best describes your income
	6. Do you have any insurance (Médis, Multicare, etc) or health subsystem (ADSE, etc) ?
	7. Do you or any familiar have been hospitalized in the last 3 years?
B-Clarity of treatment	8. Based on your perspective, how important is clarity of treatment information, including details about procedures and associated costs?
	9. Can you share specific moments where the clarity of treatment information had a significant impact on your experience?
	10. How did the information provided about treatment cost influence your overall hospitalization experience?
C-Effective communication with staff	11. In your opinion, how does effective communication contribute to a positive hospital experience?
	12. Can you provide specific examples of positive and not positive communication experiences with staff?
	13. In your point of view, what communication practices contributed most to a positive interaction with staff?
D-Staff friendliness and responsiveness	14. Can you provide positive examples related with staff friendliness.
	15. Can you provide negative examples related with staff unfriendliness.
	16. How the staff friendliness affect your overall experience?

Table 9 – Interview script about key factors for a good hospitalization experience (Part 2)

E-Room Comfort	17. How important is the comfort of your room during your hospital stay, including factors like ambiance, cleanliness, and amenities?
	18. Can you recall specific room features, in any hospitalization moment, that significantly influenced your hospitalization experience? (colour of the walls, a specific frame, a plant..)
	19. Were there any aspects of your room's that affect negatively your experience? (room to impersonal, a specific wall colour…)
F-Quality of post treatment	20. How did the information provided about post treatment care influence your overall satisfaction with the entire healthcare experience?
	21. Were there any challenges in following your posttreatment care plan that you wished were explained more comprehensively?
Closing question	22. Is there anything else you would like to share about your hospital experience that we haven't discussed?

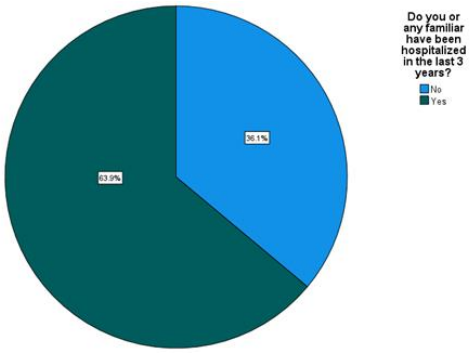
Appendix 8-Demographic Data collected, through the survey, about the time of last hospitalization

Table 10-Frequency table about the time of last hospitalization (n=158)

Do you or any familiar have been hospitalized in the last 3 years?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	57	36.1	36.1	36.1
	Yes	101	63.9	63.9	100.0
	Total	158	100.0	100.0	

Graphic 11-Pie chart with the distribution of the analyzed (63.9%) vs not analyzed answers (36.1%) (n=158)



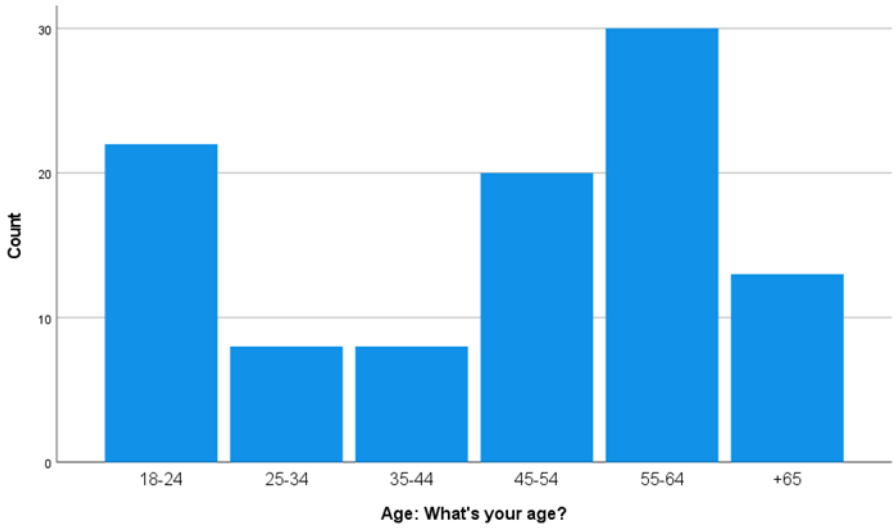
Appendix 9 - Demographic age data collect in the survey

Table 12-Frequency table of ages by classes

Age: What's your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	22	21.8	21.8	21.8
	25-34	8	7.9	7.9	29.7
	35-44	8	7.9	7.9	37.6
	45-54	20	19.8	19.8	57.4
	55-64	30	29.7	29.7	87.1
	+65	13	12.9	12.9	100.0
	Total	101	100.0	100.0	

Graphic 13-Age Bar Chart by Classes



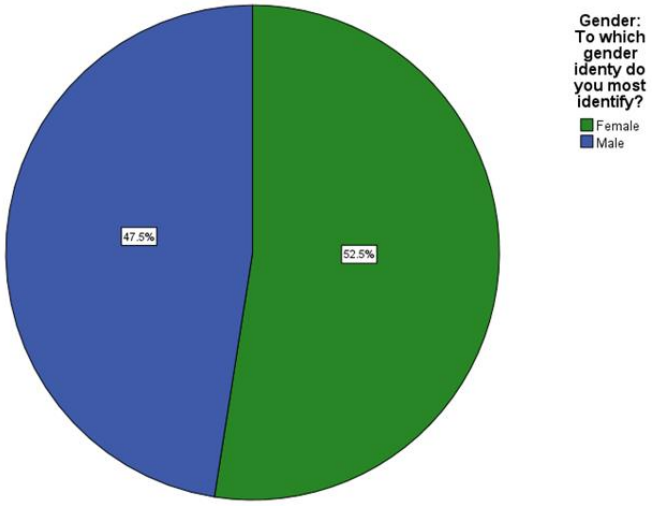
Appendix 10-Demographic gender data collected in the survey

Table 14-Gender Frequency table

Gender: To which gender identy do you most identify?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	53	52.5	52.5	52.5
	Male	48	47.5	47.5	100.0
	Total	101	100.0	100.0	

Graphic 15-Gender Pie Chart



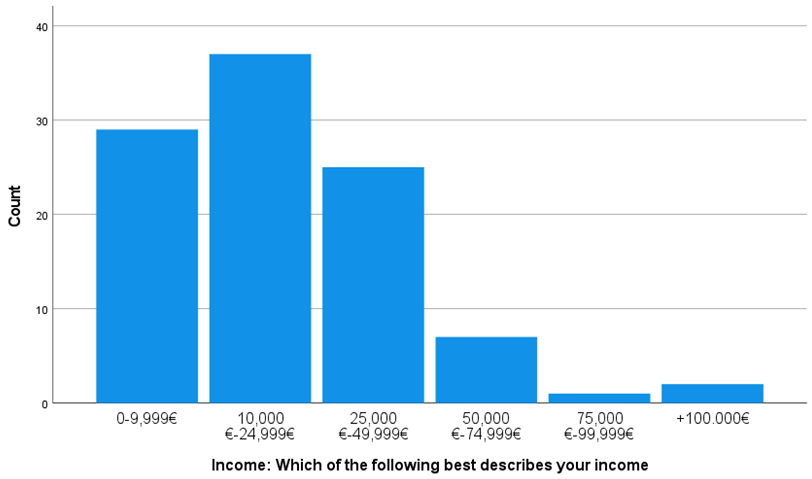
Appendix 11-Sociodemographic income data collected in the survey

Table 16-Frequency table of income by classes

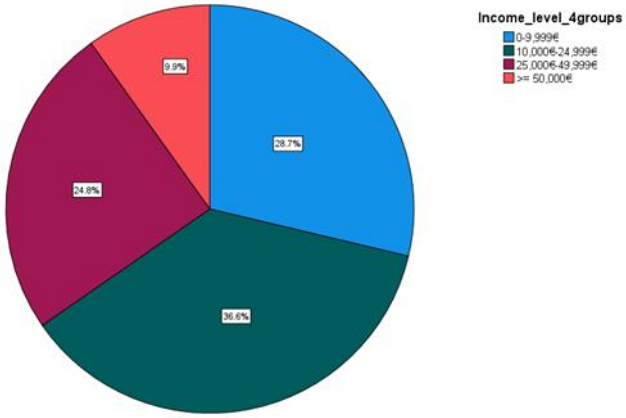
Income: Which of the following best describes your income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-9,999€	29	28.7	28.7	28.7
	10,000€-24,999€	37	36.6	36.6	65.3
	25,000€-49,999€	25	24.8	24.8	90.1
	50,000€-74,999€	7	6.9	6.9	97.0
	75,000€-99,999€	1	1.0	1.0	98.0
	+100.000€	2	2.0	2.0	100.0
	Total	101	100.0	100.0	

Graph 17-Age Bar Chart by Classes



Graph 18-Income distribution pie chart (combined upper classes)



Appendix 12-Impact of age on healthcare quality perceptions

Table 19- ANOVA test results about the impact of age on healthcare quality perceptions

ANOVA

What is your perception about the quality of healthcare? (Very bad;"Bad";"Neutral";"Good per

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	46.176	5	9.235	5.309	<.001
Within Groups	165.250	95	1.739		
Total	211.426	100			

Table 20- Multiple comparisons test results about the impact of age on healthcare quality perceptions

Multiple Comparisons

Dependent Variable: What is your perception about the quality of healthcare? (Very bad;"Bad";"Neutral";"Good perception";"Very go
Tukey HSD

(I) Age: What's your age?	(J) Age: What's your age?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
18-24	25-34	-.489	.545	.946	-2.07	1.10
	35-44	-1.239	.545	.215	-2.82	.35
	45-54	-1.014	.407	.138	-2.20	.17
	55-64	-1.530*	.370	.001	-2.61	-.45
	+65	-2.017*	.461	<.001	-3.36	-.68
25-34	18-24	.489	.545	.946	-1.10	2.07
	35-44	-.750	.659	.865	-2.67	1.17
	45-54	-.525	.552	.932	-2.13	1.08
	55-64	-1.042	.525	.359	-2.57	.48
	+65	-1.529	.593	.112	-3.25	.20
35-44	18-24	1.239	.545	.215	-.35	2.82
	25-34	.750	.659	.865	-1.17	2.67
	45-54	.225	.552	.999	-1.38	1.83
	55-64	-.292	.525	.994	-1.82	1.23
	+65	-.779	.593	.777	-2.50	.95
45-54	18-24	1.014	.407	.138	-.17	2.20
	25-34	.525	.552	.932	-1.08	2.13
	35-44	-.225	.552	.999	-1.83	1.38
	55-64	-.517	.381	.752	-1.62	.59
	+65	-1.004	.470	.278	-2.37	.36
55-64	18-24	1.530*	.370	.001	.45	2.61
	25-34	1.042	.525	.359	-.48	2.57
	35-44	.292	.525	.994	-1.23	1.82
	45-54	.517	.381	.752	-.59	1.62
	+65	-.487	.438	.875	-1.76	.79
+65	18-24	2.017*	.461	<.001	.68	3.36
	25-34	1.529	.593	.112	-.20	3.25
	35-44	.779	.593	.777	-.95	2.50
	45-54	1.004	.470	.278	-.36	2.37
	55-64	.487	.438	.875	-.79	1.76

*. The mean difference is significant at the 0.05 level.

Appendix 13-Impact of gender on healthcare quality perceptions

Table 21-T-test results about the impact of gender on healthcare quality perceptions

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p			Lower	Upper
What is your perception about the quality of healthcare? (Very bad;"Bad";"Neutral";"Good perception";"Very good perception)	Equal variances assumed	1.184	.279	-2.232	99	.014	.028	-.634	.284	-1.198	-.070
	Equal variances not assumed			-2.218	94.345	.014	.029	-.634	.286	-1.202	-.066

Appendix 14-Impact of income on healthcare quality perceptions

Table 22-ANOVA test results about the impact of income on healthcare quality perceptions

ANOVA

What is your perception about the quality of healthcare? (Very bad;"Bad";"Neutral";"Good per

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.305	3	8.102	4.200	.008
Within Groups	187.120	97	1.929		
Total	211.426	100			

Table 23-Multiple comparisons test results about the impact of income on healthcare quality perceptions

Multiple Comparisons

Dependent Variable: What is your perception about the quality of healthcare? (Very bad;"Bad";"Neutral";"Good perception";"Very gooc
Tukey HSD

(I) Income_level_4groups	(J) Income_level_4groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
0-9,999€	10,000€-24,999€	-1.112*	.344	.009	-2.01	-.21
	25,000€-49,999€	-.677	.379	.286	-1.67	.31
	>= 50,000€	-1.317	.509	.054	-2.65	.01
10,000€-24,999€	0-9,999€	1.112*	.344	.009	.21	2.01
	25,000€-49,999€	.435	.360	.623	-.51	1.37
	>= 50,000€	-.205	.495	.976	-1.50	1.09
25,000€-49,999€	0-9,999€	.677	.379	.286	-.31	1.67
	10,000€-24,999€	-.435	.360	.623	-1.37	.51
	>= 50,000€	-.640	.520	.608	-2.00	.72
>= 50,000€	0-9,999€	1.317	.509	.054	-.01	2.65
	10,000€-24,999€	.205	.495	.976	-1.09	1.50
	25,000€-49,999€	.640	.520	.608	-.72	2.00

*. The mean difference is significant at the 0.05 level.

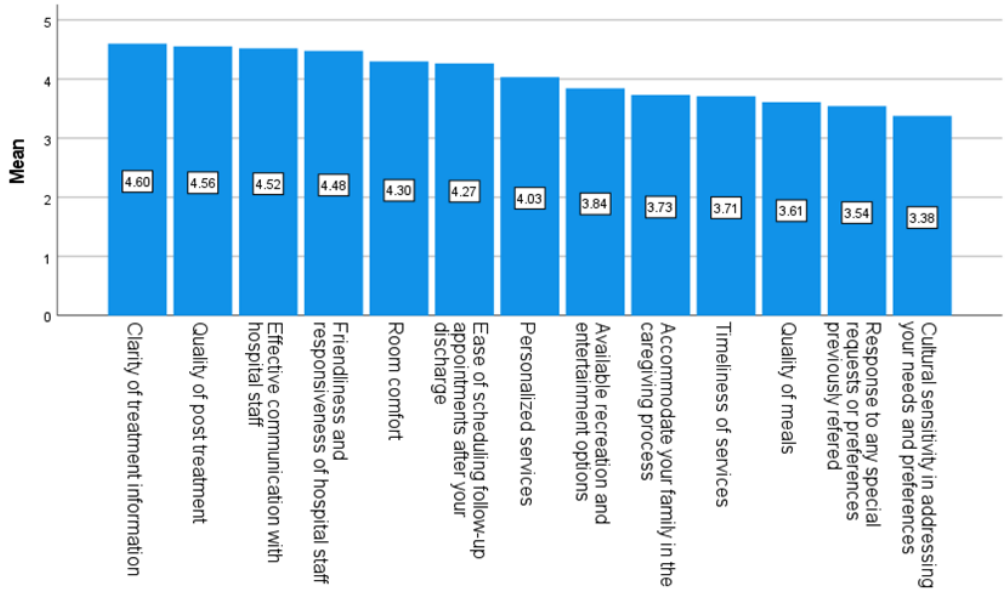
Appendix 15-Impact of income on healthcare quality perceptions

Table 24-Factor influencing in-patient experience frequency table

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Clarity of treatment information	99	3	5	4.57	.609
Quality of post treatment	100	3	5	4.52	.627
Effective communication with hospital staff	99	3	5	4.52	.612
Friendliness and responsiveness of hospital staff	101	3	5	4.48	.593
Room comfort	100	2	5	4.33	.739
Ease of scheduling follow-up appointments after your discharge	100	2	5	4.26	.799
Personalized services	101	2	5	4.01	.728
Available recreation and entertainment options	99	2	5	3.87	.900
Accommodate your family in the caregiving process	101	2	5	3.73	.747
Timeliness of services	100	2	5	3.68	.737
Quality of meals	99	2	5	3.60	.727
Response to any special requests or preferences previously refered	101	2	5	3.53	.701
Cultural sensitivity in addressing your needs and preferences	99	2	5	3.36	.706
Valid N (listwise)	90				

Graphic 25-Factor influencing in-patient experience frequency table



Appendix 16-Impact of age on factors influencing the in-patient experience

Table 26-Crosstabulation table about the impact of age on the importance of the clarity of treatment information

Age: What's your age? * Clarity of treatment information Crosstabulation

			Clarity of treatment information			
			Moderately Important	Important	Very Important	Total
Age: What's your age?	18-24	Count	2	11	8	21
		% within Age: What's your age?	9.5%	52.4%	38.1%	100.0%
	25-34	Count	0	4	4	8
		% within Age: What's your age?	0.0%	50.0%	50.0%	100.0%
	35-44	Count	0	4	4	8
		% within Age: What's your age?	0.0%	50.0%	50.0%	100.0%
	45-54	Count	1	5	14	20
		% within Age: What's your age?	5.0%	25.0%	70.0%	100.0%
	55-64	Count	3	7	20	30
		% within Age: What's your age?	10.0%	23.3%	66.7%	100.0%
	+65	Count	0	0	12	12
		% within Age: What's your age?	0.0%	0.0%	100.0%	100.0%
Total		Count	6	31	62	99
		% within Age: What's your age?	6.1%	31.3%	62.6%	100.0%

Table 27-Crosstabulation table about the impact of age on the post treatment quality importance

Age: What's your age? * Quality of post treatment Crosstabulation

			Quality of post treatment			
			Moderately Important	Important	Very Important	Total
Age: What's your age?	18-24	Count	4	12	6	22
		% within Age: What's your age?	18.2%	54.5%	27.3%	100.0%
	25-34	Count	0	5	3	8
		% within Age: What's your age?	0.0%	62.5%	37.5%	100.0%
	35-44	Count	0	6	2	8
		% within Age: What's your age?	0.0%	75.0%	25.0%	100.0%
	45-54	Count	2	4	14	20
		% within Age: What's your age?	10.0%	20.0%	70.0%	100.0%
	55-64	Count	1	6	22	29
		% within Age: What's your age?	3.4%	20.7%	75.9%	100.0%
	+65	Count	0	1	12	13
		% within Age: What's your age?	0.0%	7.7%	92.3%	100.0%
Total		Count	7	34	59	100
		% within Age: What's your age?	7.0%	34.0%	59.0%	100.0%

Table 28-Crosstabulation table about the impact of age on the effective communication with hospital staff importance

Age: What's your age? * Effective communication with hospital staff Crosstabulation

			Effective communication with hospital staff			
			Moderately Important	Important	Very Important	Total
Age: What's your age?	18-24	Count	3	11	7	21
		% within Age: What's your age?	14.3%	52.4%	33.3%	100.0%
	25-34	Count	0	4	4	8
		% within Age: What's your age?	0.0%	50.0%	50.0%	100.0%
	35-44	Count	0	5	3	8
		% within Age: What's your age?	0.0%	62.5%	37.5%	100.0%
	45-54	Count	1	6	13	20
		% within Age: What's your age?	5.0%	30.0%	65.0%	100.0%
	55-64	Count	2	8	20	30
		% within Age: What's your age?	6.7%	26.7%	66.7%	100.0%
	+65	Count	0	2	10	12
		% within Age: What's your age?	0.0%	16.7%	83.3%	100.0%
Total		Count	6	36	57	99
		% within Age: What's your age?	6.1%	36.4%	57.6%	100.0%

Table 29-Crosstabulation table about the impact of age on the staff friendliness and responsiveness

importance

Age: What's your age? * Friendliness and responsiveness of hospital staff Crosstabulation

			Friendliness and responsiveness of hospital staff			
			Moderately Important	Important	Very Important	Total
Age: What's your age?	18-24	Count	1	15	6	22
		% within Age: What's your age?	4.5%	68.2%	27.3%	100.0%
	25-34	Count	0	6	2	8
		% within Age: What's your age?	0.0%	75.0%	25.0%	100.0%
	35-44	Count	0	6	2	8
		% within Age: What's your age?	0.0%	75.0%	25.0%	100.0%
	45-54	Count	3	5	12	20
		% within Age: What's your age?	15.0%	25.0%	60.0%	100.0%
	55-64	Count	1	10	19	30
		% within Age: What's your age?	3.3%	33.3%	63.3%	100.0%
	+65	Count	0	1	12	13
		% within Age: What's your age?	0.0%	7.7%	92.3%	100.0%
Total		Count	5	43	53	101
		% within Age: What's your age?	5.0%	42.6%	52.5%	100.0%

Appendix 17-Impact of gender on factors influencing the in-patient experience

Table 30-Crosstabulation table about the impact of gender on the importance of the clarity of treatment information

Gender: To which gender identy do you most identify? * Clarity of treatment information Crosstabulation

			Clarity of treatment information			
			Moderately Important	Important	Very Important	Total
Gender: To which gender identy do you most identify?	Female	Count	4	20	28	52
		% within Gender: To which gender identy do you most identify?	7.7%	38.5%	53.8%	100.0%
	Male	Count	2	11	34	47
		% within Gender: To which gender identy do you most identify?	4.3%	23.4%	72.3%	100.0%
Total		Count	6	31	62	99
		% within Gender: To which gender identy do you most identify?	6.1%	31.3%	62.6%	100.0%

Table 31-Crosstabulation table about the impact of gender on the post treatment quality

importance

Gender: To which gender identy do you most identify? * Quality of post treatment Crosstabulation

			Quality of post treatment			
			Moderately Important	Important	Very Important	Total
Gender: To which gender identy do you most identify?	Female	Count	4	27	22	53
		% within Gender: To which gender identy do you most identify?	7.5%	50.9%	41.5%	100.0%
	Male	Count	3	7	37	47
		% within Gender: To which gender identy do you most identify?	6.4%	14.9%	78.7%	100.0%
Total		Count	7	34	59	100
		% within Gender: To which gender identy do you most identify?	7.0%	34.0%	59.0%	100.0%

Table 32-Crosstabulation table about the impact of gender on the effective communication with hospital staff importance

Gender: To which gender identy do you most identify? * Effective communication with hospital staff Crosstabulation

			Effective communication with hospital staff			
			Moderately Important	Important	Very Important	Total
Gender: To which gender identy do you most identify?	Female	Count	4	20	28	52
		% within Gender: To which gender identy do you most identify?	7.7%	38.5%	53.8%	100.0%
	Male	Count	2	16	29	47
		% within Gender: To which gender identy do you most identify?	4.3%	34.0%	61.7%	100.0%
Total		Count	6	36	57	99
		% within Gender: To which gender identy do you most identify?	6.1%	36.4%	57.6%	100.0%

Table 33-Crosstabulation table about the impact of gender on the staff friendliness and responsiveness importance

Gender: To which gender identy do you most identify? * Friendliness and responsiveness of hospital staff Crosstabulation

			Friendliness and responsiveness of hospital staff			
			Moderately Important	Important	Very Important	Total
Gender: To which gender identy do you most identify?	Female	Count	5	27	21	53
		% within Gender: To which gender identy do you most identify?	9.4%	50.9%	39.6%	100.0%
	Male	Count	0	16	32	48
		% within Gender: To which gender identy do you most identify?	0.0%	33.3%	66.7%	100.0%
Total		Count	5	43	53	101
		% within Gender: To which gender identy do you most identify?	5.0%	42.6%	52.5%	100.0%

Appendix 18-Impact of income level on factors influencing the in-patient experience

Table 34-Crosstabulation table about the impact of income level on the importance of the clarity of treatment information

Income_level_4groups * Clarity of treatment information Crosstabulation

			Clarity of treatment information			
			Moderately Important	Important	Very Important	Total
Income_level_4groups	0-9,999€	Count	4	11	13	28
		% within Income_level_4groups	14.3%	39.3%	46.4%	100.0%
	10,000€-24,999€	Count	0	6	31	37
		% within Income_level_4groups	0.0%	16.2%	83.8%	100.0%
	25,000€-49,999€	Count	1	8	15	24
		% within Income_level_4groups	4.2%	33.3%	62.5%	100.0%
	>= 50,000€	Count	1	6	3	10
		% within Income_level_4groups	10.0%	60.0%	30.0%	100.0%
Total		Count	6	31	62	99
		% within Income_level_4groups	6.1%	31.3%	62.6%	100.0%

Table 35-Crosstabulation table about the impact of income level on the effective communication with hospital staff importance

Income_level_4groups * Effective communication with hospital staff Crosstabulation

			Effective communication with hospital staff			
			Moderately Important	Important	Very Important	Total
Income_level_4groups	0-9,999€	Count	5	11	12	28
		% within Income_level_4groups	17.9%	39.3%	42.9%	100.0%
	10,000€-24,999€	Count	0	8	29	37
		% within Income_level_4groups	0.0%	21.6%	78.4%	100.0%
	25,000€-49,999€	Count	1	10	14	25
		% within Income_level_4groups	4.0%	40.0%	56.0%	100.0%
	>= 50,000€	Count	0	7	2	9
		% within Income_level_4groups	0.0%	77.8%	22.2%	100.0%
Total		Count	6	36	57	99
		% within Income_level_4groups	6.1%	36.4%	57.6%	100.0%

Table 36-Crosstabulation table about the impact of income level on the post treatment quality importance

Income_level_4groups * Quality of post treatment Crosstabulation

			Quality of post treatment			
			Moderately Important	Important	Very Important	Total
Income_level_4groups	0-9,999€	Count	5	10	14	29
		% within Income_level_4groups	17.2%	34.5%	48.3%	100.0%
	10,000€-24,999€	Count	1	11	24	36
		% within Income_level_4groups	2.8%	30.6%	66.7%	100.0%
	25,000€-49,999€	Count	1	8	16	25
		% within Income_level_4groups	4.0%	32.0%	64.0%	100.0%
	>= 50,000€	Count	0	5	5	10
		% within Income_level_4groups	0.0%	50.0%	50.0%	100.0%
Total		Count	7	34	59	100
		% within Income_level_4groups	7.0%	34.0%	59.0%	100.0%

Table 37-Crosstabulation table about the impact of income level on the staff friendliness and responsiveness importance

Income_level_4groups * Friendliness and responsiveness of hospital staff Crosstabulation

			Friendliness and responsiveness of hospital staff			
			Moderately Important	Important	Very Important	Total
Income_level_4groups	0-9,999€	Count	3	13	13	29
		% within Income_level_4groups	10.3%	44.8%	44.8%	100.0%
	10,000€-24,999€	Count	0	17	20	37
		% within Income_level_4groups	0.0%	45.9%	54.1%	100.0%
	25,000€-49,999€	Count	1	8	16	25
		% within Income_level_4groups	4.0%	32.0%	64.0%	100.0%
	>= 50,000€	Count	1	5	4	10
		% within Income_level_4groups	10.0%	50.0%	40.0%	100.0%
Total		Count	5	43	53	101
		% within Income_level_4groups	5.0%	42.6%	52.5%	100.0%

Appendix 19-Correlations between the factors influencing the in-patient experience

Table 38-Correlations table between the factors influencing the in-patient experience

Correlations

		Room comfort	Effective communication with hospital staff	Clarity of treatment information	Personalized services	Friendliness and responsiveness of hospital staff	Quality of meals	Response to any special requests or preferences previously refered	Available recreation and entertainment options	Cultural sensitivity in addressing your needs and preferences	Timeliness of services	Accommodate your family in the caregiving process	Ease of scheduling follow-up appointments after your discharge	Quality of post treatment	What is your perception about the quality of healthcare? (Very bad;" Bad";"Neutral";" Good perception";" Very good perception)
Room comfort	Pearson Correlation	1	.462**	.428**	-.132	.471**	-.210*	-.113	.411**	-.093	-.348**	-.008	.474**	.333**	.238*
	Sig. (2-tailed)		<.001	<.001	.191	<.001	.038	.262	<.001	.362	<.001	.940	<.001	<.001	.017
	N	100	99	99	100	100	98	100	98	98	99	100	99	99	100
Effective communication with hospital staff	Pearson Correlation	.462**	1	.769**	.104	.653**	-.060	.111	-.024	-.013	-.072	.043	.391**	.427**	.203*
	Sig. (2-tailed)	<.001		<.001	.307	<.001	.562	.273	.815	.897	.479	.672	<.001	<.001	.043
	N	99	99	98	99	99	97	99	97	97	98	99	98	98	99
Clarity of treatment information	Pearson Correlation	.428**	.769**	1	.150	.620**	-.016	.035	-.055	-.059	-.155	.127	.472**	.627**	.244*
	Sig. (2-tailed)	<.001	<.001		.140	<.001	.878	.734	.590	.563	.128	.209	<.001	<.001	.015
	N	99	98	99	99	99	97	99	97	97	98	99	98	98	99
Personalized services	Pearson Correlation	-.132	.104	.150	1	.058	.382**	.382**	.033	.484**	.447**	.152	-.143	.011	-.002
	Sig. (2-tailed)	.191	.307	.140		.561	<.001	<.001	.747	<.001	<.001	.129	.157	.917	.986
	N	100	99	99	101	101	99	101	99	99	100	101	100	100	101
Friendliness and responsiveness of hospital staff	Pearson Correlation	.471**	.653**	.620**	.058	1	-.063	.008	.196	-.051	-.198*	-.026	.436**	.557**	.324**
	Sig. (2-tailed)	<.001	<.001	<.001	.561		.534	.936	.051	.618	.049	.794	<.001	<.001	<.001
	N	100	99	99	101	101	99	101	99	99	100	101	100	100	101
Quality of meals	Pearson Correlation	-.210*	-.060	-.016	.382**	-.063	1	.714**	.039	.630**	.580**	.562**	-.114	-.099	-.247*
	Sig. (2-tailed)	.038	.562	.878	<.001	.534		<.001	.701	<.001	<.001	<.001	.265	.330	.014
	N	98	97	97	99	99	99	99	97	97	99	99	98	98	99
Response to any special requests or preferences previously refered	Pearson Correlation	-.113	.111	.035	.382**	.008	.714**	1	.078	.671**	.630**	.620**	.076	-.048	-.257**
	Sig. (2-tailed)	.262	.273	.734	<.001	.936	<.001		.445	<.001	<.001	<.001	.453	.638	.010
	N	100	99	99	101	101	99	101	99	99	100	101	100	100	101
Available recreation and entertainment options	Pearson Correlation	.411**	-.024	-.055	.033	.196	.039	.078	1	.155	.038	.172	.128	.001	.052
	Sig. (2-tailed)	<.001	.815	.590	.747	.051	.701	.445		.130	.712	.088	.210	.996	.610
	N	98	97	97	99	99	97	99	99	97	98	99	98	98	99
Cultural sensitivity in addressing your needs and preferences	Pearson Correlation	-.093	-.013	-.059	.484**	-.051	.630**	.671**	.155	1	.695**	.452**	.001	-.086	-.125
	Sig. (2-tailed)	.362	.897	.563	<.001	.618	<.001	<.001	.130		<.001	<.001	.990	.399	.217
	N	98	97	97	99	99	97	99	97	99	98	99	98	98	99
Timeliness of services	Pearson Correlation	-.348**	-.072	-.155	.447**	-.198*	.580**	.630**	.038	.695**	1	.508**	-.040	-.077	-.221*
	Sig. (2-tailed)	<.001	.479	.128	<.001	.049	<.001	<.001	.712	<.001		<.001	.698	.448	.027
	N	99	98	98	100	100	99	100	98	98	100	100	99	99	100
Accommodate your family in the caregiving process	Pearson Correlation	-.008	.043	.127	.152	-.026	.562**	.620**	.172	.452**	.508**	1	.219*	.151	-.082
	Sig. (2-tailed)	.940	.672	.209	.129	.794	<.001	<.001	.088	<.001	<.001		.028	.133	.414
	N	100	99	99	101	101	99	101	99	99	100	101	100	100	101
Ease of scheduling follow-up appointments after your discharge	Pearson Correlation	.474**	.391**	.472**	-.143	.436**	-.114	.076	.128	.001	-.040	.219*	1	.749**	.332**
	Sig. (2-tailed)	<.001	<.001	<.001	.157	<.001	.265	.453	.210	.990	.698	.028		<.001	<.001
	N	99	98	98	100	100	98	100	98	98	99	100	100	99	100
Quality of post treatment	Pearson Correlation	.333**	.427**	.627**	.011	.557**	-.099	-.048	.001	-.086	-.077	.151	.749**	1	.404**
	Sig. (2-tailed)	<.001	<.001	<.001	.917	<.001	.330	.638	.996	.399	.448	.133	<.001		<.001
	N	99	98	98	100	100	98	100	98	98	99	100	99	100	100
What is your perception about the quality of healthcare? (Very bad;" Bad";"Neutral";"Good perception";"Very good perception)	Pearson Correlation	.238*	.203*	.244*	-.002	.324**	-.247*	-.257**	.052	-.125	-.221*	-.082	.332**	.404**	1
	Sig. (2-tailed)	.017	.043	.015	.986	<.001	.014	.010	.610	.217	.027	.414	<.001	<.001	
	N	100	99	99	101	101	99	101	99	99	100	101	100	100	101

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 20-Main interview findings

Table 39-Main findings from the interviews (Part 1)

Section	Question	Findings
B-Clarity of treatment	8. Based on your perspective, how important is clarity of treatment information, including details about procedures and associated costs?	Very important Allign the tone for the rest of the experience Give a sense of control and security
	9. Can you share specific moments where the clarity of treatment information had a significant impact on your experience?	"When my daughter was hospitalized the clarity of treatment give me an idea that everything was under control" "When I had hospitalized, the clarity of the treatment process gave me the idea that this was just a phase and everything would be better."
	10. How did the information provided about treatment cost influence your overall hospitalization experience?	Positive correlation (more clear the information; better the overall experience
C-Effective communication with staff	11. In your opinion, how does effective communication contribute to a positive hospital experience?	Essential; crucial; vital
	12. Can you provide specific examples of positive and not positive communication experiences with staff?	Positive-when medical team had availabilty to answer my questions Negative-when the staff didn't hear my concerns
	13. In your point of view, what communication practices contributed most to a positive interaction with staff?	Emphaty, Comprehension; Compassion; sensitivity

Table 40-Main findings from the interviews (Part 2)

E-Room Comfort	17. How important is the comfort of your room during your hospital stay, including factors like ambiance, cleanliness, and amenities?	Very important to improve the well-being and comfort Essential to give a sensation of tranquility and nostalgia
	18. Can you recall specific room features, in any hospitalization moment, that significantly influenced your hospitalization experience? (colour of the walls, a specific frame, a plant..)	Nature picture plant in a blue vase ligh blue wall
	19. Were there any aspects of your room's that affect negatively your experience? (room to impersonal, a specific wall colour…)	Room impersonality Yellow wall harsh lighting
F-Quality of post treatment	20. How did the information provided about post treatment care influence your overall satisfaction with the entire healthcare experience?	Big influence Key that close the overall experience
	21. Were there any challenges in following your post treatment care plan that you wished were explained more comprehensively?	Too complex Difficult to follow
Closing question	22. Is there anything else you would like to share about your hospital experience that we haven't discussed?	Everything was already discussed

Appendix 21-Healthcare Quality Perception

Table 41- Average Healthcare Quality Perception

Statistics

What is your perception about th

N	Valid	101
	Missing	0
Mean		3.19
Median		4.00
Mode		4
Std. Deviation		1.454
Minimum		1
Maximum		5

Appendix 22- Abbreviations used

App-Appendix

EMedicine-Eletronic medicine

Fig-Figure

RQ1-Research question 1

SPSS- Statistical Package for the Social Sciences

Tbl-Table