

# UNDERSTANDING THE ROLE INTERIOR DESIGN PLAYS IN FOSTERING WELL-BEING IN CANCER PATIENTS

IND6639 RESEARCH METHODS  
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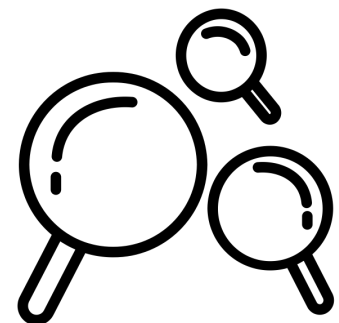
# INTRODUCTION

Over the past several decades, architects and designers have developed an extensive body of research focused on understanding the connection between the interior environment and overall well-being. The focus of this research is to understand how this applies in the healthcare setting and more specifically to cancer patients. Through an extensive literature review, we sought to understand the psychological and physical needs of cancer patients while they undergo various treatments. The research provided evidence of a link between several interior design elements that could aid in the healing process for cancer patients. These elements included color, biophilia, audio and visual privacy, entertainment and furnishings/finishes.

In order to understand how these elements contribute to cancer patient recovery, it was important to understand how cancer patients viewed these five elements throughout the course of their treatment. Therefore, in this study, we applied four research methods to gain an understanding of elements which patients believed contributed to their overall wellbeing.

Two facilities in the South Florida area were selected that both treated cancer patients, but with different methods. The goal was to study and compare a traditional medical facility with one that provides alternative treatments in a resort-like setting. Following the case study, we used the participant observation method to behavior map patients in both facilities. We then used activity and cognitive mapping to further understand the patients perspective on the facilities, looking for themes related to interior design elements. Those themes were then refined through an operationalization chart and measurements for our quantitative and qualitative methods were developed. For the quantitative data, we conducted surveys with the patients at both facilities and built upon the data with interviews to collect the qualitative data.

The data we collected was then analyzed for language patterns and developing themes. We wrapped up the study with the conclusions and recommendations for how to execute healthcare interior design to foster cancer patient wellbeing.





# **RESEARCH METHOD 1:**

## CASE STUDY METHOD



## RESEARCH QUESTION

What role does **Interior Design** play in fostering **well-being** to a faster recovery in **cancer patients** undergoing treatment?

## SUB-QUESTIONS

1. How does **lighting** affect the healing process?
2. What types of **entertainment** foster positive and sustained interactions?
3. How will implementing **biophilic design features** in the built environment affect patients?
4. How does **audio and visual privacy** affect the patients?
5. How do **interior finishes & materials** contribute to patient well-being?

## PROBLEM

Modern healthcare design has been studied since the 1800's when Florence Nightingale published hospital design guidelines that detailed how to promote patient healing through specific placement of interior design elements. According to her 1863 publication, she suggested that "through careful control of interior/exterior interactions and exposing patients to large amounts of natural light and fresh air, the hospital environment could better foster patient recovery" (Nightingale, 1863). Since then, the guidelines have changed to focus on patient wellbeing through the prevention of germs spreading, which left little attention to psychological well being (Topp, 2018). While preventing germ spread has been proven to be extremely effective in promoting patient recovery, it only applies to communicable diseases.

Cancer, however, is a non-communicable disease that generally can not be transferred via person to person (National Cancer Institute, 2019). With the rise of cancer diagnosis each year in the United States, healthcare design needs to change its approach to better reflect the needs of cancer patients.

## RESEARCH

Oncology patients are hypersensitive and experience the environment differently than other types of patients (Mazuch, 2017). Therefore, in order to understand how interior design elements foster patient wellbeing, we need to understand how patients experience their space during treatment. Our belief is that interior design elements can be used to create a calm and restorative environment that relaxes patients, which would enable patients to focus on their healing process. According to Mazuch (2017), a salutogenic design approach for these patients would be better, which focuses on healing the mind, body and spirit as an approach to wellbeing rather than focusing on the causes of disease. The main focus of the research is to understand the patients experience at two different cancer facilities, with one focused on pathogenetic design (the spread of germs) and the other on salutogenic design (mind, body and spirit).

# LITERATURE REVIEW

Research on biophilic design is showing a possible link between interior elements and cancer patients well-being. We explored five theories of biophilic design to understand the emerging theories.

## Color and Light

Color Theory research has shown that there is a link between color and human emotions. For patients in the healthcare setting, the use of color is imperative in order to alleviate negative feelings and to evoke feelings of relaxation, warmth and excitement. Color also plays a crucial role in wayfinding, which is often used to alleviate stress on patients trying to navigate to their treatment room. As cancer patients undergo treatment, the research has indicated that the senses are altered for patients, who may view color and light differently than a typical healthy patient.

## Entertainment

Entertainment although a simple concept, may be the deciding factor of how much stress is filtered throughout the patient's stay. Creating a distracting and joyful environment during lengthy treatments can aid the patient to overcome many stages in the journey of healing. Positive distractions can also improve the mental wellbeing of patients, giving them the stimulation they need in order to heal and promote a sense of wellbeing. Areas for social interaction are also important for patients, who seek a support system or sense of community (Boscherini, Giuseppe, 2017, p.108).

## Biophilic Elements

Another element found in the research is biophilic design which promotes a healthy circadian rhythm by bringing nature inside. Something as simple as giving patients a window in their room syncs them with the times of the day and replenishes them with the healthy sunlight which has been linked to lowering blood pressure and enhancing mental health. Spaces with the most use of biophilic elements should be those where patients may go to restore, meditate or even spend some quality time with their loved ones which are some of the most used practices among the alternative and holistic medicine community.'

## Audio and Visual Privacy

Noise and negative visuals can have a detrimental effect to an already ill patient. The mind is a powerful tool that can control our physical body. Studies show that when a patient observes another patient with an advanced stage of an illness, especially in cancer, the observant may feel the same symptoms and even worsen their condition or hopes for the future. Among all the analyzed elements of the built environment, noise is one of the most detrimental to healing. Noise can raise blood pressure, affect the cardiovascular system and increase blood pressure. Although noise cannot be eliminated, it can be masked with pleasant sounds and even attenuated with the proper materiality. As far as visual stressors a window or even elements of nature in the interior space may alleviate stress induced illnesses.

## Finishes and Furniture

The interior environment influences human behavior . As a result, finishes and materials play a crucial role in creating an atmosphere that patients believe to be calm and restorative. Studies show a home-like environment helps patients relax and focus on healing. Finishes can help reduce noise or mimic natural elements. Simple furniture arrangements that foster sociopetal or sociofugal interactions afford patients different types of privacy which have an effect on their wellbeing. Cancer patients have heightened senses during treatments, so something that feel soft to a healthy person may feel the opposite to someone with a compromised immune system. Volatile Organic Compounds have a detrimental effect on cancer patients, so selection of natural materials is crucial.

The interior environment significantly impacts humans on both a psychological and a physical level. The research has shown that those with compromised immune systems, such as cancer patients are greatly impacted by elements of color, biophilia, entertainment, privacy and materials. The research conducted on the different aspects of interior environments in cancer treatment facilities helps us to understand how the surroundings affect a patient's healing process. Because traditional medical facilities focus on the prevention of germ spread, healing of the mind and spirit are often ignored as are stressors that come from the environment. The two case studies will provide insight into which interior environment best fosters patient wellbeing and provides a comfortable space for patients.

## THESIS PROJECT RATIONALE

Cancer is among the leading causes of death worldwide. In 2018, an estimated 1,735,350 new cases of cancer will be diagnosed in the United States and 609,640 people will die from the disease (National Cancer Institute, 2019). While scientists are continuing to study treatments for cancer following diagnosis, there is an emerging focus on biophilic design and the prevention of cancer. Some areas of focus for cancer prevention research include: changes in diet and lifestyle, early detection, chemoprevention (medicines to treat a precancerous condition or to keep cancer from starting) and risk-reducing surgery.

While all of these areas show promise in cancer prevention, we have narrowed our research to focus on the potential power of lifestyle changes to prevent cancer. We also have first hand experience in dealing with a cancer diagnosis and navigating the road to recovery via chemotherapy. Out of these experiences, it was important for us to explore how the recovery process can be improved for those with a diagnosis. But more importantly, we want to explore how biophilic design can be leveraged for a holistic approach to cancer prevention and long-term recovery.

Studies have shown that psychological wellbeing is a crucial aspect in the healing process. We believe that if the healthcare setting is designed to foster mind, body and spirit wellbeing, cancer patients will be better able to experience healing. Negative beliefs and stressful atmospheres can hinder a patient's recovery and slow down the process. By understanding from the patients perspective what can create a feeling of calmness and restoration, we can better design healthcare facilities that meet the needs of the patient. The environmental design factors that foster wellbeing such as color, biophilia, entertainment, privacy and materials will be the main focus of this research.

## CASE STUDY SELECTIONS

The compromised immune system of a patient adds additional factors that vary based on age, sex, and stage of disease. The mental, physical and spiritual state of the patient all need to be accounted for, in order to effectively treat and receive the best results. As a result of our research, we encountered two different approaches; salutogenic and pathogenic. Salutogenic design focuses on fostering well being of the mind, body and spirit, whereas the pathogenic approach is what we know as traditional medicine, focusing solely on the physical aspect.

As a group we have developed new theories, and in order to obtain the most data and be able to compare both: the salutogenic and pathogenic approach we opted to do two case studies. Defining factors that led to the choices for the case studies were: a facility that incorporated elements of biophilia that could potentially expedite the recovery of a patient, the location, and their approach. The Lennar Foundation Medical Center is the case study that represents the pathogenic approach. Hippocrates Health Institute is the facility used to represent the salutogenic approach.

### **HIPPOCRATES HEALTH INSTITUTE**

Hippocrates Health Institute originally opened in 1956 in Massachusetts and was moved to West Palm Beach, Florida in 1987. Their approach to cancer treatment has always been non-traditional and they state that the campus, located on 55-acres, was designed to blend with its surroundings not disturbing the natural environment and inhabitants. Hippocrates Health Institute does not look institutional, but rather looks like a residential community. It was intended to welcome guests, providing a “home” effect. The guest accommodations are located in houses acquired by the facility over the years. The interior environment is designed to feel like a residence as opposed to a hospital.

### **LENNAR FOUNDATION MEDICAL CENTER**

Lennar Foundation Medical Center was completed in 2016. They state that the facility was designed to invigorate visitors, patients, and employees through their senses. According to their website sustainability also played a major role in their design guidelines. The location of the facility was chosen so it could be utilized by students and employees of the University of Miami, it's proximity to public transportation, and to restore and adapt to the existing site.

We are eager to compare the experience, thoughts and health results patients have in a salutogenic vs a pathogenic facility. We see an opportunity to develop and test our theories even further. And the outcome will give us new perspectives of treatment. The environment in which one finds themselves in is vital to their recovery.

## SITE SELECTIONS



Figure 3.2

### Hippocrates Health Institute

West Palm Beach - 55 acres

Hippocrates Health Institute is a holistic retreat dedicated and designed to help guests understand, reflect and accept their current health challenges. The facility is a raw vegan based diet, they have a greenhouse where they grow their sprouts. They also have a juice bar where patients and guests are encourage to juice their own beverages. The facility hosts seminars, and educational programs in order to provide patients and guests with the tools they need to change their lifestyle. The programs usually last 3 weeks; Life transformation program, Hippocrates weight loss academy, or comprehensive cancer wellness. Through a salutogenic approach, the program is designed to address the individual as a whole, focusing on their psychological, physical and spiritual state,



FIG. 4.2

### Lennar Foundation Medical Center

South Florida 200,000-square-foot

The Lennar Foundation Medical Center is an outpatient cancer center located in Coral Gables, Florida. According to their website, the space was intuitively planned and designed to treat, heal, enhance and soothe patients, while awakening the senses.

## BACKGROUND

### Hippocrates Health Institute

1956

Originally founded by Ann Wigmore and later joined by Viktoras Kulvinskis. They believed in treating the body as a whole. Wigmore beat stage 4 colon cancer using wheatgrass juice.

1961

Wigmore and Kulvinskis officially open the doors to the Hippocrates Health Institute on 25 Exeter street in Boston.

1980

Brian and Anna Maria Clement join the Hippocrates Health Institute in Boston.

1987

The Hippocrates Health Institute is moved from Boston, Massachusetts to West Palm Beach, Florida.

### Lennar Foundation Medical Center

1925

The University of Miami first opened their doors. Enrolling 646 full-time students.

1973

The cancer comprehensive medical center opens their doors.

1974

In the state of Florida it became the first Cancer Control Research program.

1976

Funded by the National Cancer Institute, the program is established as the Regional Cancer Information Service Center.

1986

Harcourt Sylester Jr. donates \$27.5 million for the Cancer research programs. The program is then renamed after Sylvesters parents.

1992

The new 117,500 square-foot clinical facility opens their doors: The Sylvester Comprehensive Cancer Center.

2012

The Lennar Foundation donates \$50 million to make the Lennar Cancer Center possible.

2016

Lennar Foundation Medical Center first opened its doors on December 6.



# Hippocrates Health Institute

## Legacy

Wigmore's ideal legacy for the institute was to assist individuals and encourage them to take responsibility for their lifestyle. According to Wigmore's findings by incorporating the raw diet, people could be free from premature aging and diseases. This theory encompasses the essence of the salutogenic approach, having a balance in order to be healthy.

Helping people help themselves. At HHI, it's about giving people the tools they need to help themselves achieve their goals. The campus is designed for individuals to walk outdoors between buildings. As found in our research soothing sounds such as the birds chirping and the water features have positive effects for the psychological, physiological restoration and creative performance. Biophilic design is how we explain our attraction to nature. The connection to nature can be perceived through all of our senses (Mazuch, 2017). HHI reinforces outdoor activities because studies show the higher quality of life.

## Regional Uniqueness

Hippocrates Health Institute is located in a tropical setting in order to reinforce their beliefs in a healing environment. The facility is found in a semi-isolated area, avoiding the exposure unnecessary noise such as highly trafficked roads.

The project was developed to coexist with the natural environment not disturbing the current occupants of the space. The facility is composed of one story buildings that are connected via natural paths, and open courtyards. We need the sun. All color is light, light is energy, and energy affects every cell of the body. For centuries, scientists have known that people depend on the sun for physical wellbeing, The sun catalyzes many metabolic processes, and when we lack exposure to sunlight, some metabolic pathways sit dormant, reducing our ability to burn fat and expel toxins (Huelat, 2008, p.32)

West Palm Beach is rich in culture, they have a history preservation program, and a high level of public safety. Wigmore and Clement, the current director, took a trip to Europe to spread the word of Wigmore's findings. When relocating the facility, it was ideal for them to choose a city that met the need to accommodate patients flying in from other parts of the world.

The small town character that West Palm Beach processes is welcoming to individuals that live within the city and those who do not. The pathways and the scale of the buildings in Hippocrates Health Institute encourage individuals to feel welcomed.

Their values for overall well being begins with educating individuals with a program tailored to the patients needs held in their facility.

A form of entertainment is the open air fitness center, it's designed for individuals to use their own weight to help them become stronger. Several of the machines are designed to be utilized with another individual, encouraging communication and the sense of community.



Figure 5.6

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# Lennar Foundation Medical Center

## Legacy

Lennar Foundation Medical Center aims to provide a comprehensive human experience for patients, families and employees. They state that they aim to improve and promote wellbeing as a whole, focusing on each individual sense; sight, sound, touch, taste and smell, and well as sustainability, biophilic design, alternative transportation methods, site development, public wellness, material selection and resiliency.

According to its website, Lennar Foundation Medical Center provided a valet service at both public entrances to ease the flow of traffic and confusion upon arrival. Based on our literature review, this design should eliminate conflict and as a result, reduces the stress associated with visually seeing chaos. By also shortening travel distances for staff and promoting a sense of peace in public spaces, stress levels were reduced for both employees and patients. However, through our research, we will see if this was actually the case.

The facility also incorporated natural views to emphasize biophilia and highlight the impact of color within the built environment, which led to reducing the interior palette. This promotes the adjacent exterior spaces, natural features, builds the connection to nature therefore reducing stress and anxiety. Through surveys and interviews, we will determine if this actually happened.

The interior materials and finishes also meet or exceed the criteria for LEED VOC restrictions to improve the indoor air quality.

## Regional Uniqueness

The University of Miami is located in Coral Gables, Florida. According to our findings, being located directly in the city can have positive and negative effect. Upon deciding the site for the facility they considered public transportation, and accessibility for the staff and students currently attending the University of Miami. Lennar Foundation Medical Center is the first academic based outpatient facility. It is also the first medical building directly on the University campus.

The site is conveniently placed across the street from a Miami Metrorail station, encouraging the use of public transportation while also reducing traffic noise. while reducing emissions affecting the environment.

The location could potentially foster a sense of community as well. Close proximity to the local neighborhood could result in more engagement with the local community. As far as entertainment; art therapy showed promising results. It teaches individuals to control and express their anxiety in a healthy manner. Local artists are able to curate and showcase their art within the facility.

Each side of the building complements the existing site. On the ground level, a terrace adjacent to a canal was restored. Natural vegetation was taken from parts of the campus and lined along the canal. The terrace on the fifth level features a public meditation garden and a view to the Miami Skyline.



# Demographics

## Coral Gables

### LOCATION

Located west of Miami, Florida, Coral Gables is centrally located near restaurants and shopping. Characterized by rows of giant Banyan trees, Coral Gables is considered an international city.

### CULTURAL

Known as the “Capital of Latin America” due to the high population of Spanish speakers, Coral Gables is also known for its rich heritage and Spanish architecture. The percentage of foreigners is the highest in this region. The cultural background of people affects the way treatment is offered by health facilities. The presence of various nationalities and cultures plays a significant role in the development of recognized treatments.

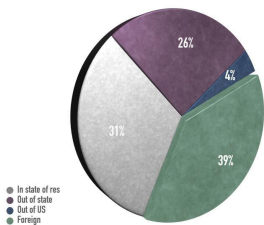


FIGURE 6.2

### PEOPLE

According to the latest census, Coral Gables, FL has a population of 50,533. The median age is 41 years old and 56.5% of people are of Hispanic or Latino origin. However, Figure 6.3 shows the city's population ranging from 0 to 17 year old, revealing that 53% are predominantly millennials.

## West Palm Beach

### LOCATION

Located along Florida's Atlantic Ocean coast, West Palm Beach is also centrally located near restaurants and shopping. It has a long history preservation and renovation.

### CULTURAL

The census of 2019 shows that the population of West Palm Beach comprises of 57% White, 34 % Black, 2.8 % Asian and 6.2 % other races. The ratio of male to female population is 0.9:1. Religious affiliations include Christianity, Judaism, Jewish, Islam.

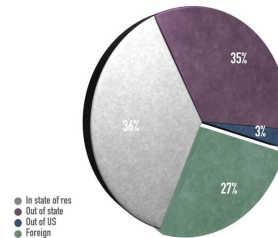


FIGURE 6.7

### PEOPLE

West Palm Beach has a population density of 106,805 per sq. The median age of 39.6.

# Users

## Lennar Foundation Medical Center

People's cultural background affects the way treatment is offered at health facilities including The Lennar Foundation Medical Center. Coral Gables is a middle-high class section, therefore, people with that kind of income are the ones being targeted. However, those who do not meet the financial criteria of the area, they are still welcome into the facility as long as they are able to cover their costs. Lennar is a medical facility so the users healing will be based on traditional medicine practices which will solely focus on the physical well-being.

## Hippocrates Health Institute

It is not necessary to be a patient or have health insurance to access the Hippocrates Health Center. It has different users. Which is contains patients with **heart disease, obesity, cancer, and People suffering from stress**. Worker and users Center believe in "natural habitat," which is created suitable habitat for people by being surrounded by nature, which helps remain instrumental to people's physical and mental health, fitness, and wellbeing.

# ORGANIZATIONAL STRUCTURE

Biophilic design encompasses more than just the architecture of a space. It requires reinforcing emotional attachments to settings and places (Kellert, 2019). One of the ways in which an organization can foster emotional attachments is through its organizational structure by designing it to afford users easy access to the executive teams. Additionally, the key executives in an organization must have the necessary experience and credentials to build trust with the patients.

In comparing the organizational structures, Lennar Medical Center has a traditional hierarchy structure, in which a CEO is at the top and the entire organization branches out underneath. Hippocrates Health Institute consists of Brian Clement and his wife Anna-Maria Clement, with very little organizational structure branching out underneath them. From a culture standpoint, Hippocrates Health Institute's structure creates more of an open culture by affording access to the directors of the program.



Figure 7.1

**Edward Abraham, M.D.**  
CEO of UHealth System

Dr. Abraham received undergraduate and medical degrees from Stanford University and trained in internal and critical care medicine at the University of California, Los Angeles. Dr. Abraham is a Fellow of the American College of Physicians and the American College of Critical Care Medicine, as well as a Diplomate of the American Board of Internal Medicine and Critical Care Medicine and a member of the American Society for Clinical Investigation, Association of American Physicians, American Thoracic Society and the Society of Critical Care Medicine (University of Miami, 2019).



Figure 7.2

**Brian Clement, PHD, LN**  
CO-Director Hippocrates Health Institute

Brian Clement has an undergraduate degree in biochemistry and a research PHD in Nutrition from the University of Sciences, Arts, Technology in Montserrat (a small Caribbean island). Brian is licensed in the State of Florida as a nutritional counselor and can not perform or order medical services (Florida Department of Health, 2019).

**Anna Maria Clement, PHD, LN.**  
CO-Director Hippocrates Health Institute

Anna Maria is a naturopathic medical doctor, Ph.D. nutritionist, iridologist, bodywork therapist, Touch for Health facilitator, and nursing health care provider served to enhance the instinctive qualities she possesses. She founded the first living food organization in Scandinavia and was a member of the Natural Health Care Coalition, a government supported effort in unifying the field of complementary health care in her native Sweden. Anna Maria is also licensed in the state of Florida as a nutritional counselor and can not perform or order medical services (Florida Department of Health, 2019).

## Analysis

The educational approach to understanding cancer treatment is extremely different between Lennar Medical Center and Hippocrates Health Institute.

The Lennar Center aims to employ those who come from prestigious medical schools in the United States and who are properly certified in pathogenesis medicine. Hippocrates, on the other hand, takes a different approach. The directors of this institute have spent their education focusing on nutrition, stress reduction and holistic medicine to treat cancer.

Depending on the school of thought believed by the patient, both Dr. Abrahams and the Clements have credibility in their field of study.

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## LICENSURE

Hippocrates Health Institute operates in the state of Florida under a Massage Treatment license. The medical procedures are operated under a loophole in the Florida Agency for Health Care Administration (AHCA). In an email dated January 28, 2015, the AHCA explains the lack of proper medical licensing for Hippocrates Health Institute:

*“After some additional Agency research, unfortunately this “Health Center” does not meet the definition of a Health Care Clinic, see [Florida Statutes] Section 400.9905(4), “Clinic” means an entity where health care services are provided to individuals and which tenders charges for reimbursement for such services, including a mobile clinic and a portable equipment provider. Since this institute is a cash-only business, it does not fall under AHCA’s regulation. (ScienceBasedMedicine, 2016).*

On the other hand, The University of Miami Healthcare System and Lennar Foundation Medical Center operate under full medical licensing from the State of Florida. The facility is connected with the University of Miami and is seen as a legitimate, reliable source of medical treatments. Because the facility accepts third-party reimbursement from both private and public insurance companies, it is a highly regulated establishment with standardized operating procedures and protocols.

## PATIENTS

According to testimonials posted on its website, Hippocrates Health Institute tends to be a last resort for Stage 3 and Stage 4 cancer patients after traditional medicine has failed. David Martin Raines first went to Hippocrates with Stage 4 Lymphoma in both kidneys. It was his second time with cancer. Following his three-week stay at Hippocrates, his cancer had gone into remission (Hippocrates Health Institute Testimonials, 2019). Because Hippocrates Health Institute does not accept medical insurance and operates as a cash-only business, it is costly to seek treatment here. Therefore, most patients are more financially secure than those that attend traditional medical facilities.

While both facilities successfully treat cancer patients, the lack of traditional medical licensing at Hippocrates Health Institute has left it open to harsh criticism from supporters of the medical community. While our research is not focused on medical treatments or the political affiliations of the healthcare system, it is vital for us to be aware of these aspects.

The focus of our research is to understand healing from the patients perspective and so our

Lennar Foundation Medical Center is a pathogenic research facility that is well-accepted and well-respected by the community. This facility is typically the first line of defense for those battling cancer. The age of the patients varies through all age groups as do the ethnicities and social standings of all the patients.



# MAJOR FUNCTIONS

## HIPPOCRATES HEALTH INSTITUTE

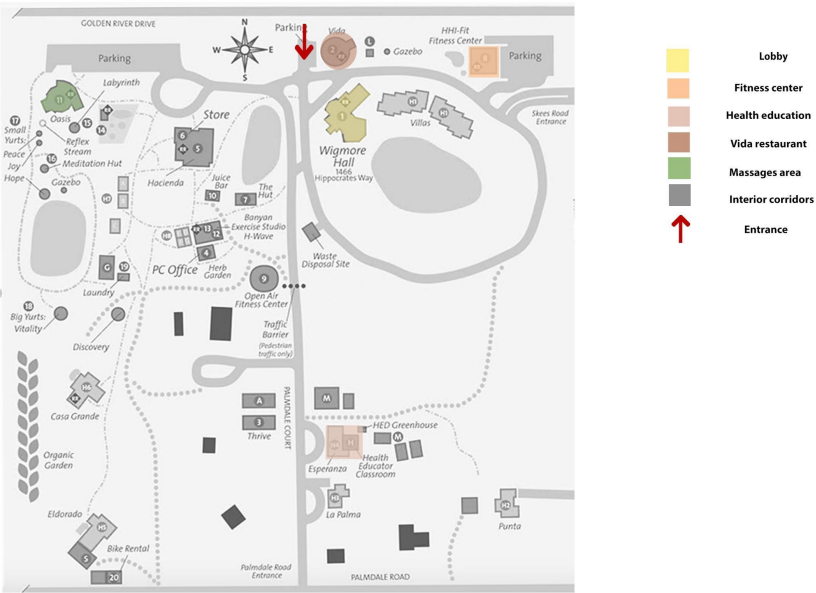


FIGURE 1.8

Hippocrates Health Institute takes a non-traditional approach to the treatment of cancer. Instead of treatments such as chemotherapy and radiation, the institute believes treatment should encompass the mind, body and spirit. Counseling and educational courses are prescribed for the healing of the mind. The main treatment of the body is through a raw vegan diet accompanied by wheatgrass juice twice a day. The body is also healed through massage, infrared therapies, exercise and salt mineral pools. The spirit is renewed through a strong sense of community created among the 55-acres of native Floridian jungle. The facility used local materials throughout with a neutral color palette. In our research, we will test if these aspects had an effect on patient healing.

# Hippocrates Health Institute

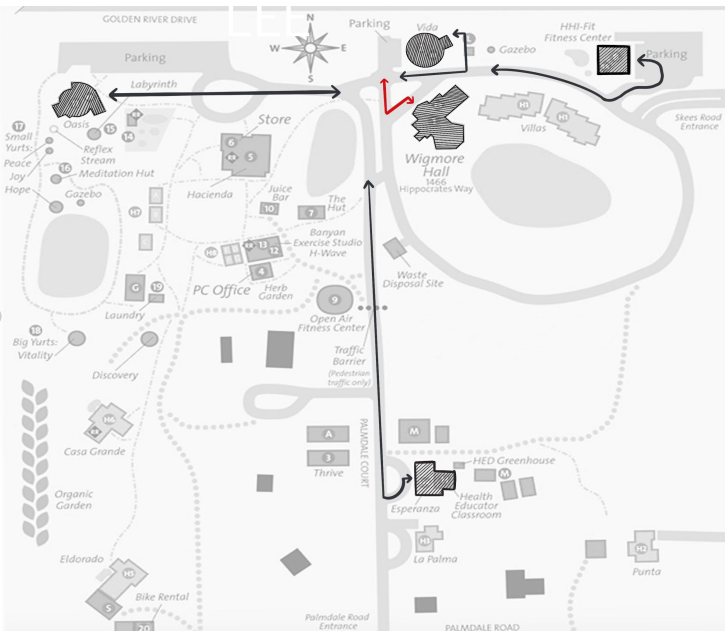
## Master Plan Zoning



Hippocrates Health Institute was designed with connecting walkways that enable patients to walk from building to building among the natural vegetation. Many of the walkways circle around a pond or fountain, incorporating the biophilic element of water everywhere. The lush vegetation blocks any unwanted noise such as traffic and guests are also afforded visual privacy from the same vegetation.

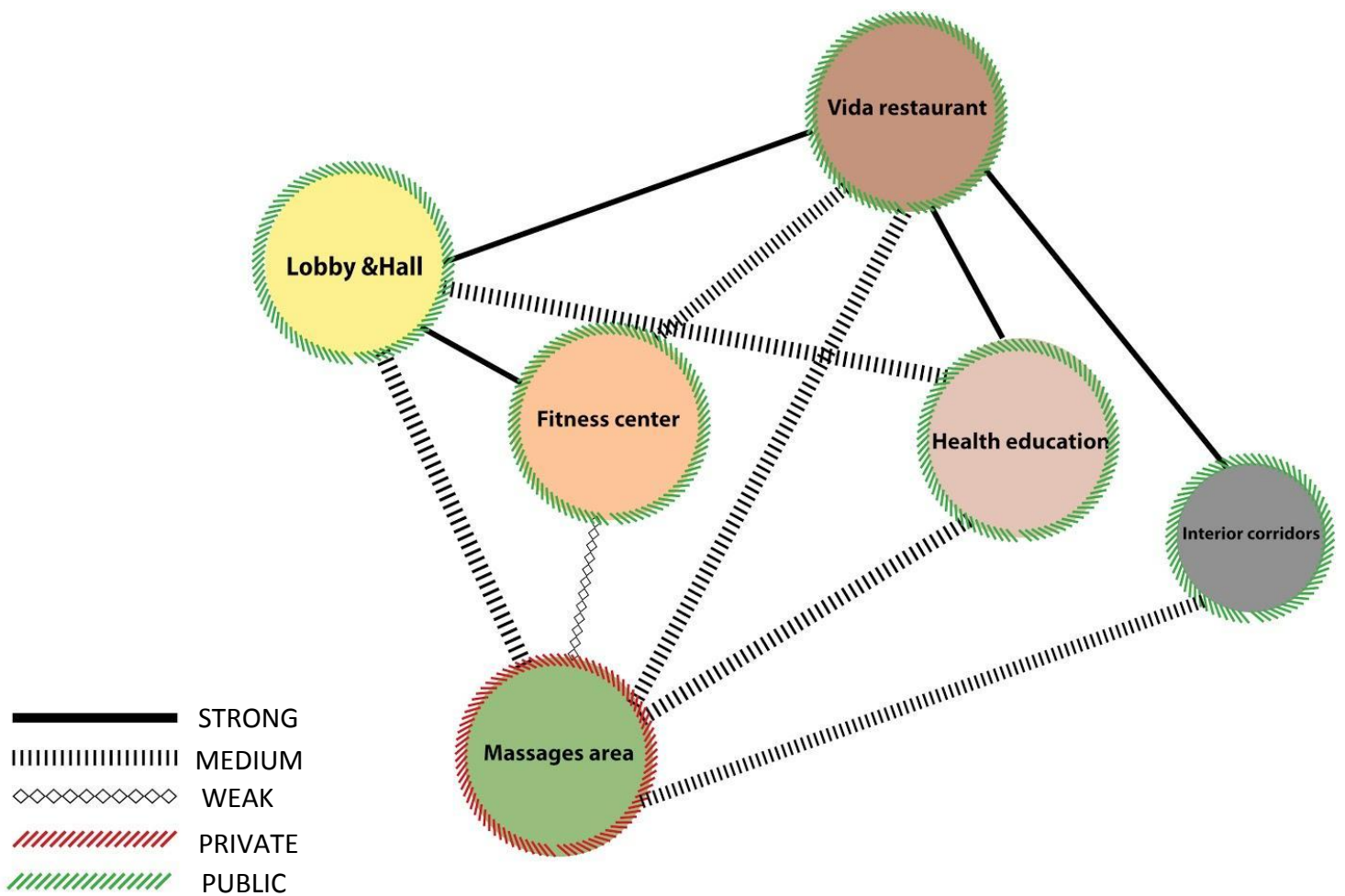
The main building, Wigmore Hall, is located at the main entrance and is also situated on a large pond. The Oasis Spa, Vida Medical Building and the Fitness Center are in close proximity for those who have trouble walking. The wheatgrass juice hut is located in close proximity to the sleeping accommodations, which are directly in the middle of the campus.

## Relationship Diagram



# BUBBLE DIAGRAMS

## HIPPOCRATES HEALTH INSTITUTE





# MAJOR FUNCTIONS

## LENNAR FOUNDATION MEDICAL CENTER



FIGURE 2.8

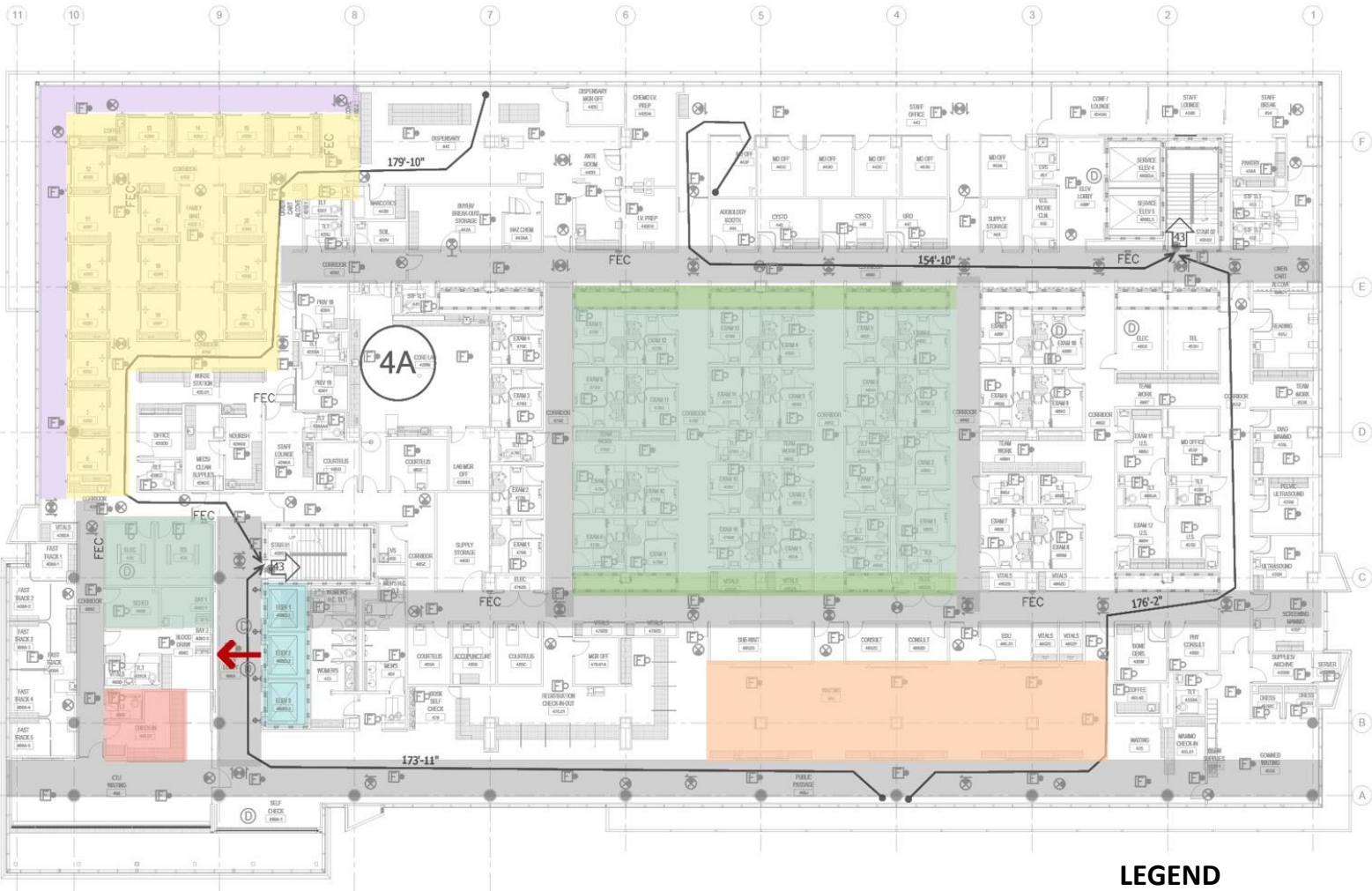
Lennar Foundation Medical Center provides traditional methods of cancer treatment, including chemotherapy and radiation. The interior design of the facility was intended to promote healing through the creation of a soothing atmosphere. Biophilic design features were integrated with modern urbanism through the **INDIRECT EXPERIENCE OF NATURE** such as the use of natural materials and colors as well as access to plenty of daylight throughout the facility. Through our research, we will test if patients at Lennar Foundation Medical Center feel a sense of calm while receiving treatment. We will also see which biophilic elements resonate the most with patients.

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# AREAS OF STUDY ZONING

## LENNAR FOUNDATION MEDICAL CENTER

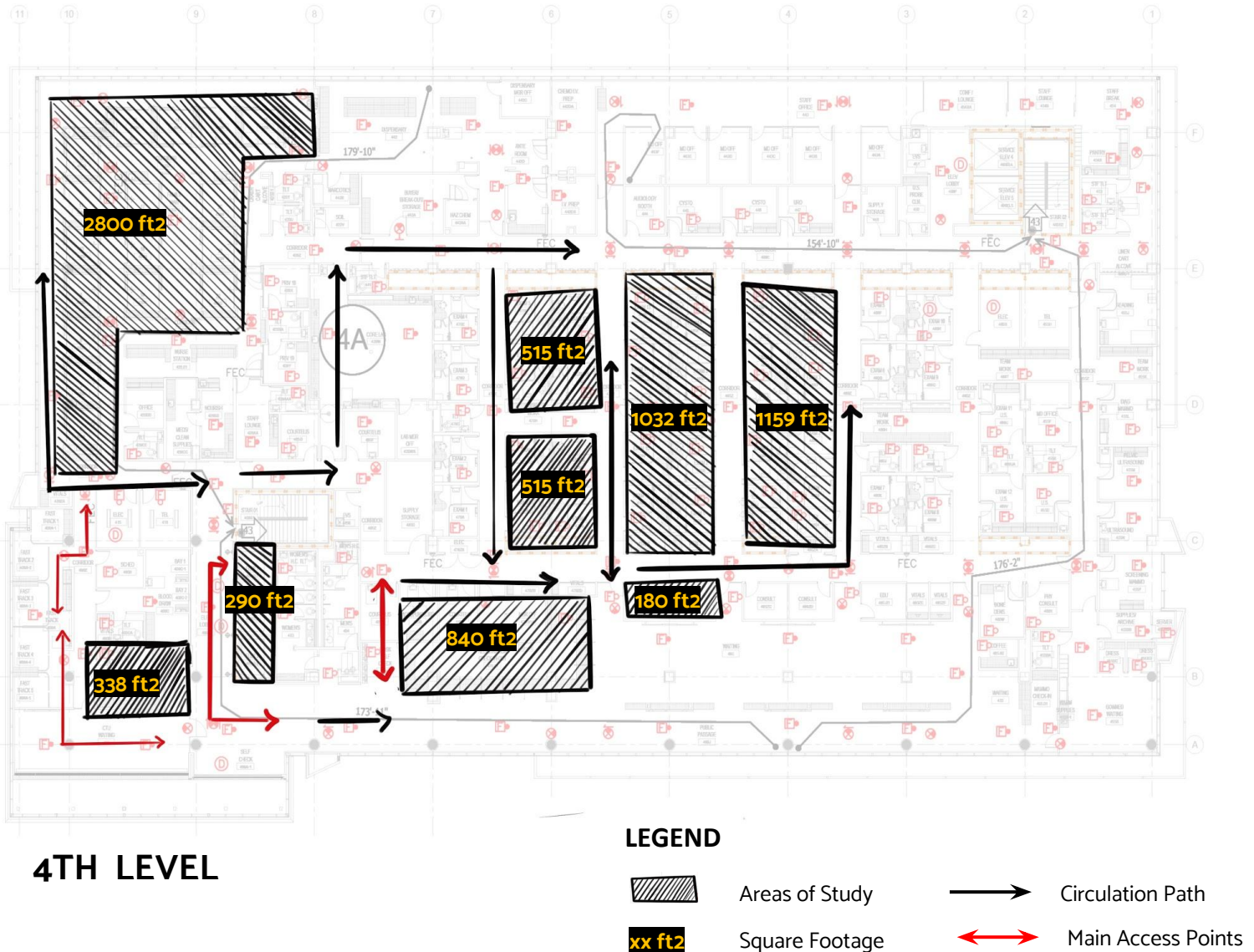


4TH LEVEL

- LEGEND**
- Entrance
  - Interior corridors
  - Family Waiting
  - Treatment Rooms
  - Exam Rooms
  - Oncology Reception
  - Elevator Lobby
  - Triage
  - Waiting Area

# RELATIONSHIP DIAGRAM

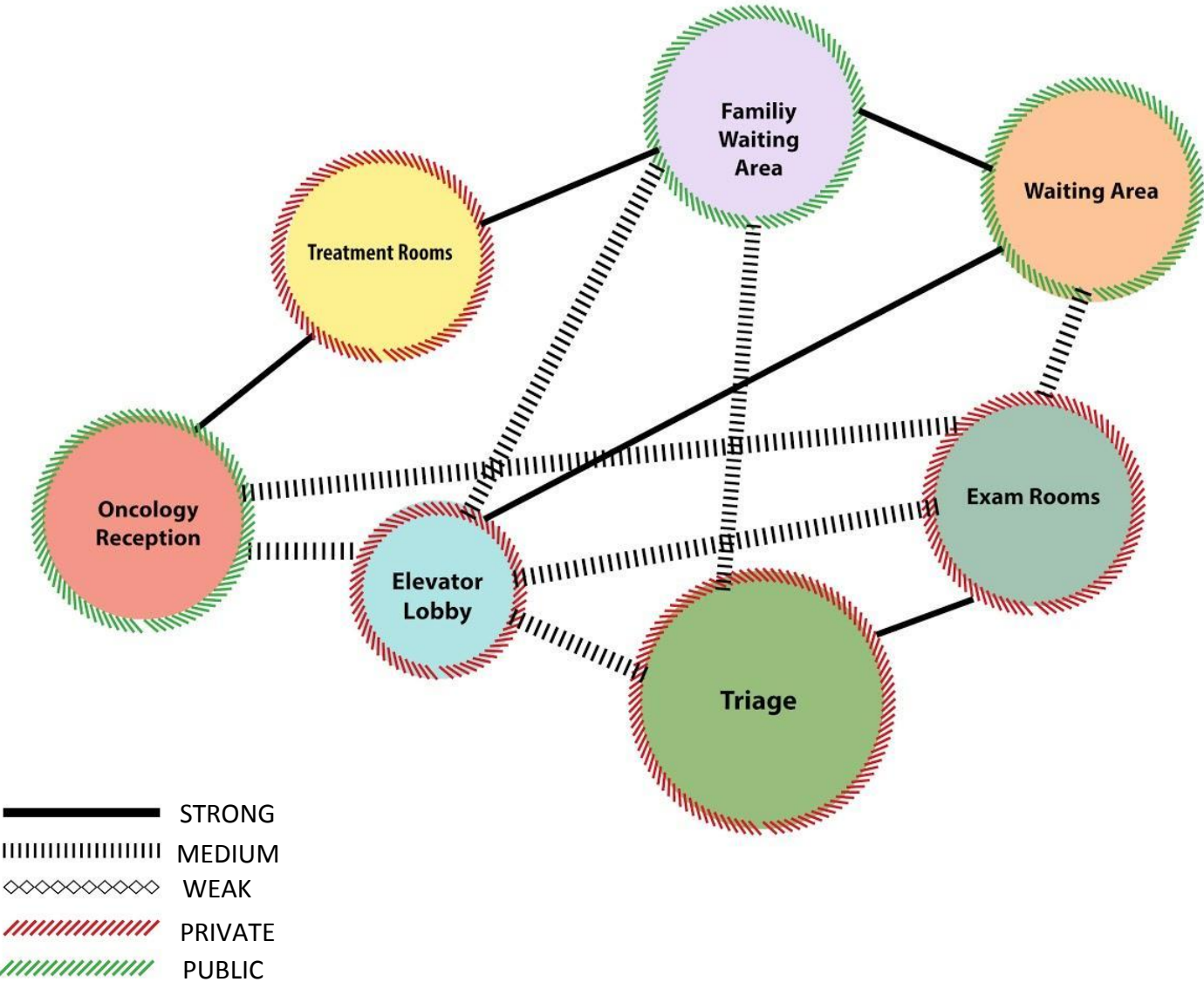
## LENNAR FOUNDATION MEDICAL CENTER



The relationship diagram highlights the areas which are most frequented by the patients at Lennar Foundation Medical Center. These include: elevator lobby, waiting area, oncology reception, triage, exam rooms, treatment rooms and family waiting area. The treatment rooms, where patients spend up to 6 hours, were strategically placed by the curtain wall in order to provide them with the most access to daylight. This is optimal for the purposes of the research since the data collected will help determine the link between day lighting and well-being. The composition of all the blocking reveals a **simple and legible** circulation path which aids in the wayfinding.

# BUBBLE DIAGRAMS

## LENNAR FOUNDATION MEDICAL CENTER



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# CONCLUSION

This research focused on comparing and contrasting Lennar Foundation Medical Center, a pathogenic facility, with the Hippocrates Health Institute, a salutogenic approach. Each facility has a different approach when it comes to cancer treatments. Lennar Foundation Medical Center focuses on the overall pathology of the disease by treating the illness with techniques that attack the bad cells but also the good ones. On the other hand, Hippocrates Health Institute believes in healing from within. Its aim is to change unhealthy lifestyle patterns and rewiring the body through natural and alternative practices, focusing on food as the cure rather than chemotherapy.

In terms of location, both case studies are strategically located based on treatment approach. HHI in West Palm Beach is surrounded by nature and native vegetation while the LFMC in Coral Gables has more access to public transportation. Hippocrates' location was strategically placed to allow emphasis on biophilic natural elements, which promote both mental and physical well-being.

In order to reinforce their beliefs in a healing environment they are located in a semi-isolated area reducing the exposure to outside elements which might interfere with the healing process.

On the other hand, Lennar Foundation Medical Center is located in Coral Gables with easy access to public transportation and user accessibility. Another reason for their location is the sense of community they aim to share with the user. Coral Gables is mostly surrounded by small family owned businesses, residences and the University of Miami. To enhance the community feeling, they invite local artists to showcase their art within the facility and their rooftop terrace is open to those who wish to gather among the community as well as having a rooftop terrace open to public.

Demographics also play a key factor in the patients healing experience. Hippocrates Health Institute does not accept insurance and patients must pay in full before receiving treatment. The high cost of the care at the facility leaves it as an exclusive treatment option for the wealthy. This is also highlighted by the lack of public transportation surrounding the facility. The treatments at HHI, such as a raw vegan diet, massages and other therapies, are expensive to maintain.

On the other hand, Lennar Foundation Medical Center uses a different approach when it comes to healing, using their central location as a tool to encourage community support among its users and easy access to the facility for consultations and treatments.



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Lennar Foundation Medical Center has incorporated sensory engagement, while addressing design features that aid an individual's physical and mental state. Unfortunately the city traffic is unavoidable given the location of the facility, sound masking could be incorporated to alleviate this concern. The public transportation access to the site is convenient to have although the majority of the visitors do not utilize it. However, it brings a lot of noise to the interior space. Hippocrates Health Institute provides their guests with an overall natural environment. Therefore the connection to nature is restored, however the spaces are not well designed with individuals with disabilities, those who are in later stages of illness would not be able to utilize the amenities. The audial disconnection from the city was beneficial to the guests and visitors allowing them to connect with what is directly in the space.

One of the most important differences we noticed dealt with how the organizational structure was created. The pathogenic facility (Lennar Foundation Medical Center) tended to have a formal design, led by a CEO and trickled down from there. These types of organizations tend to be more formal with more formal lines of communication and standards. The salutogenesis facility (Hippocrates Health Institute) had a less formal organizational structure, which in turn creates a more open and supportive environment.

Another important difference dealt with the formal education and formal licencing between the two facilities. Because pathogenic facilities are considered more traditional treatment centers, they are subjected to higher regulations, which can in turn drive costs up. Often times, these higher costs can dictate a streamlined approach to the design - efficiency in the design means more revenue. Focusing patient recovery on the causes and treatment of just the disease often leaves the emotional, mental and spiritual healing of the patient out of the equation. It is also important to note that because Lennar Foundation Medical Center accepts insurance, it is typically the first preferred method of treatment. On the other hand, Hippocrates tends to be the last resort for treatment because of the high out-of-pocket costs associated with attending.

## NEXT STEPS

Through observational methods and data collection, the study will focus on analyzing the environment of both practices in order to ascertain whether alternative methods prove to have a higher healing rate than the conventional scientific methods when combined with biophilic elements. Comparing and contrasting will make it possible for the group to obtain evidence based, unbiased conclusions which can be later applied to the development of a more sophisticated oncology facility.

While developing the research, special attention will be paid to specific biophilic elements such as color, materiality, audio/visual and entertainment, along with building analysis, past history, unique factors and any additional observations deemed useful to the research. Furthermore, the users of the space will be studied and observed through different mapping methods at different periods of the day for multiple weeks. This user data collection helps determine their interaction with the biophilic element in the space enhances or diminishes their entire healing experience as well as the link between biophilia and well-being.



# **PARTICIPANT OBSERVATION METHOD**

# PARTICIPANT OBSERVATION AND BEHAVIOR MAPPING

## Introduction

The theory of biophilic design seeks to connect our inherent need to affiliate with nature in the modern built environment (Kellert, 2019).

With ninety percent of our time now spent in the built environment, the design intent behind a space may leave some discrepancies with how a space is actually used. The goal of this behavior mapping is to understand how Lennar Foundation Medical Center and Hippocrates Health Institute implemented biophilic design and whether patients are using the spaces as intended. The main goal was to understand how patients move about a space and look for areas of improvement. From our research viewpoint, we are looking at the following environmental features:

**Color:** Determining existing color palette within the spaces

**Biophilia:** Catalog which natural elements are incorporated into the space and whether patients are interacting with them.

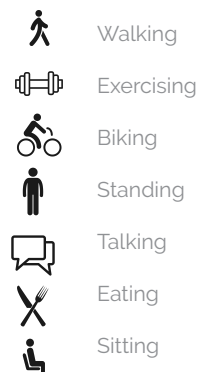
**Entertainment:** A look at what activities are provided for patients and whether they being used.

**Privacy:** Analysis of existing privacy conditions and whether patients seem satisfied.

**Materials:** Determining what types of materials are currently being used in the space. We will also look at the furniture arrangements to see if they foster privacy or community.

Behavioral mapping is a research method that is used to understand how humans interact with the environment. Focusing on “person-centered” behavior mapping, we executed our observations as participant researchers, sitting at a distance in public areas to track behavior but refrained from engaging. Behavioral mapping is important because of bias that often sets into patients viewpoints. Depending if they had a positive or negative experience that day can determine the feedback received. Because Lennar Foundation Medical Center and Hippocrates Health Institute have drastically different approaches to treatment and different campuses, we anticipated a few additional activities that would be found at Hippocrates Health Institute only. Exercising and biking were two activities that we expected to not observe at Lennar Foundation Medical Center.

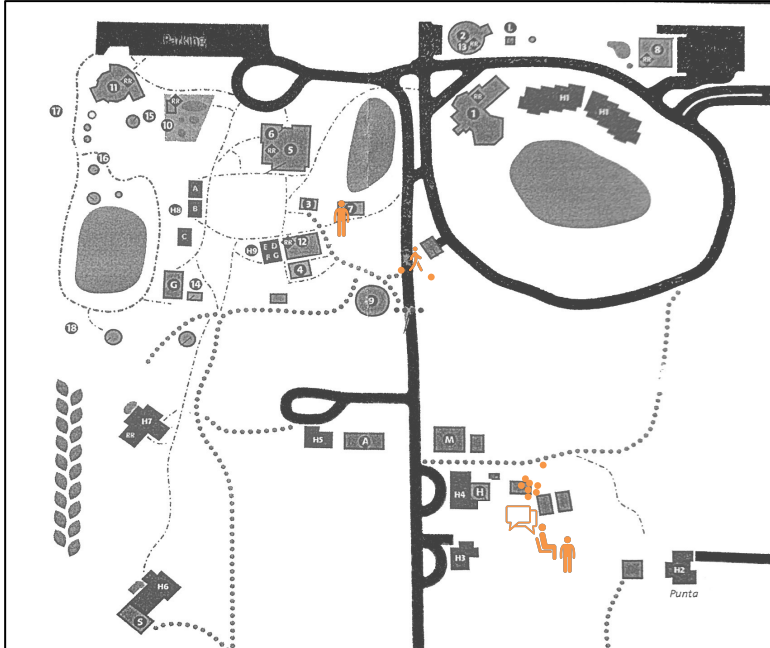
### Key Activities Observed





# BEHAVIOR MAPPING

## Hippocrates Health Institute



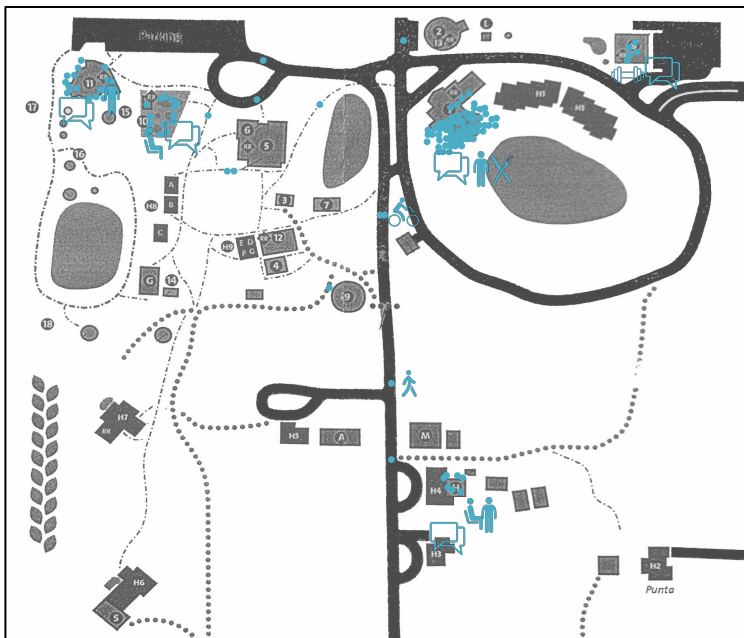
Whole Campus Mapping

### Wigmore Hall

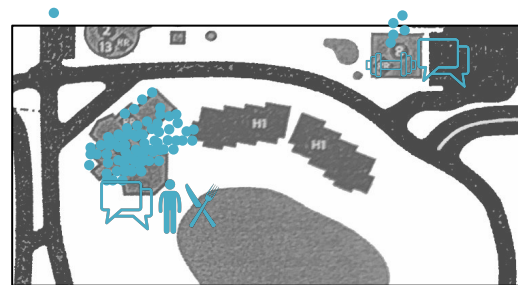


- Thursday, September 19, 2019  
8 AM - 11 AM
- Thursday, September 19, 2019  
12 PM - 3 PM

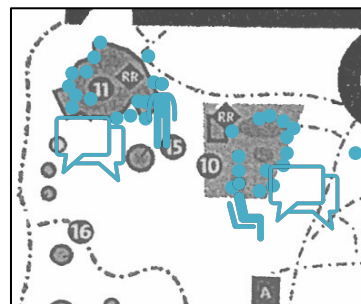
Oasis Spa



Whole Campus Mapping



Wigmore Hall

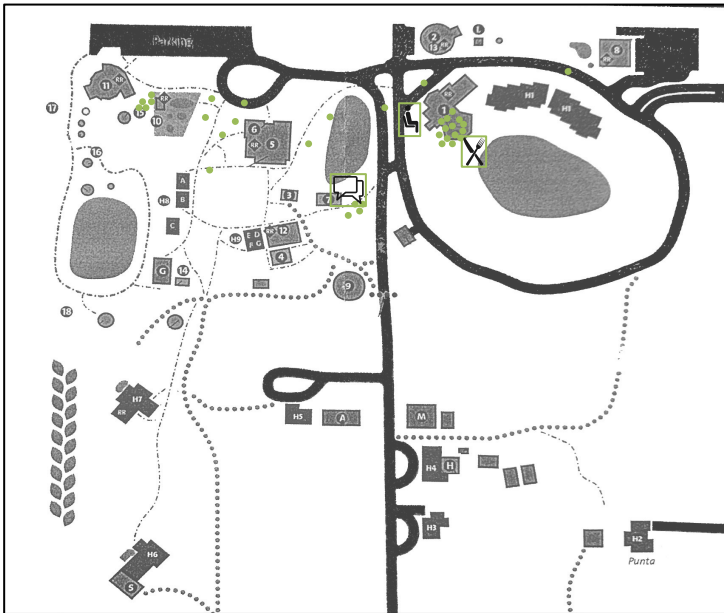


Oasis Spa

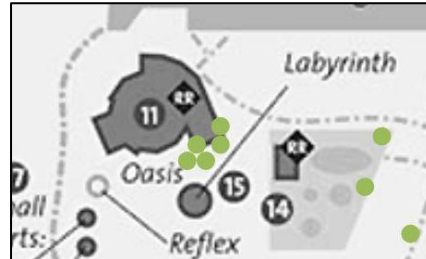
- Walking
- Exercising
- Biking
- Standing
- Talking
- Eating
- Sitting

# BEHAVIOR MAPPING

## Hippocrates Health Institute



Whole Campus Mapping

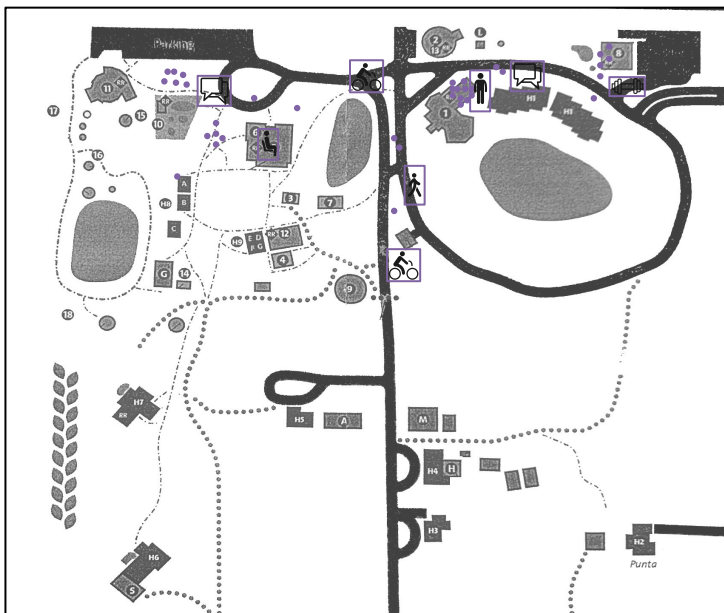


Oasis Spa

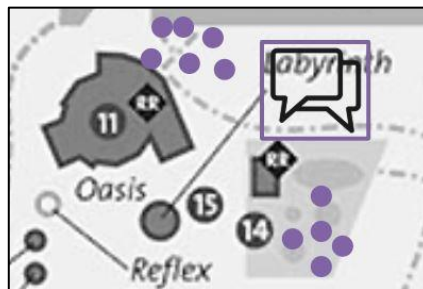


Wigmore Hall

- Saturday, September 21, 2019 8 AM - 11 AM
- Saturday, September 21, 2019 12 PM - 3 PM



Whole Campus Mapping



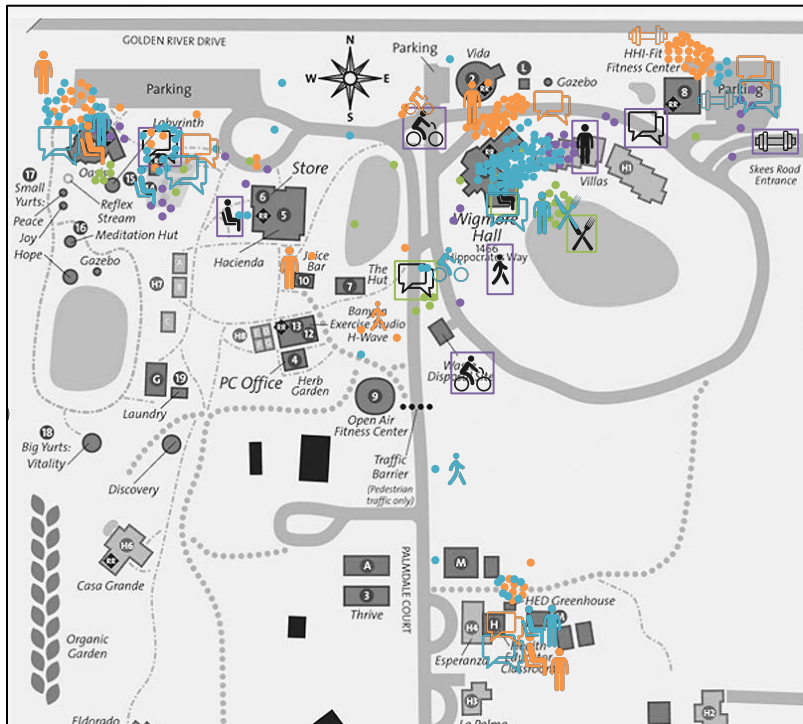
Oasis Spa



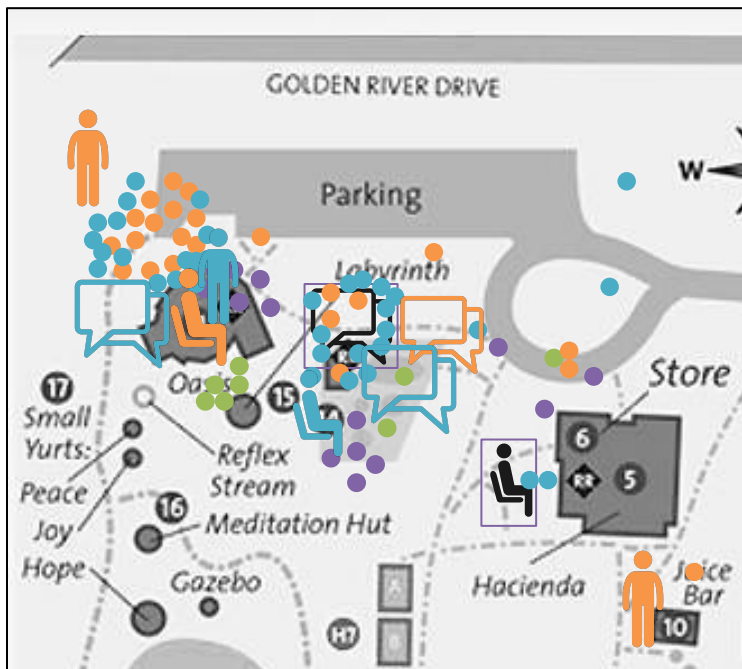
- Walking
- Exercising
- Biking
- Standing
- Talking
- Eating
- Sitting

# AGGREGATED DATA COLLECTION

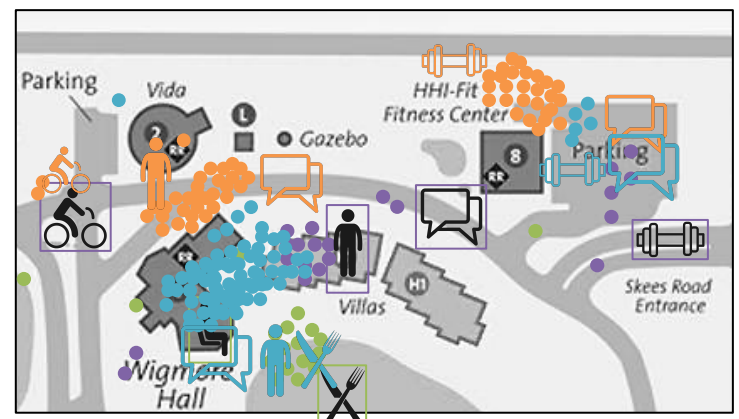
## Hippocrates Health Institute



Whole Campus Mapping



Oasis Spa



Wigmore Hall

- Thursday, September 19, 2019 8 AM - 11 AM
- Thursday, September 19, 2019 12 PM - 3 PM
- Saturday, September 21, 2019 8 AM - 11 AM
- Saturday, September 21, 2019 12 PM - 3 PM

- Walking
- Exercising
- Biking
- Standing
- Talking
- Eating
- Sitting

# CAMPUS ANALYSIS

## Hippocrates Health Institute

### OVERVIEW

The site is located in multiple buildings over a 55-acre site. The most stable observation of patients was in Wigmore Hall, the Fitness Center and the Oasis Therapy Center. These areas had the most behavior activity on a consistent basis due to ongoing activities for patients. Because of the large scale of the campus, it was rare to see large groups of people traveling around, with the exception of a 27-person tour group that occurred on the morning of Thursday, September 19, 2019. If a group of patients was observed walking around the campus, it contained between 2-5 people. The largest groups observed were at lunch in Wigmore Hall. Other than the few patients sprinkled around the grounds of the space, the user group most consistently seen were the grounds workers doing landscaping and general maintenance around the property.

- The Oasis Therapy Center had a consistent flow of traffic throughout the day. We noticed that the majority of people who were at the reception desk were either checking-in, making an appointment or changing an appointment. On the morning of Thursday, September 19, 2019, there was a group of approximately 10 people who were meeting with a nurse from the facility for an educational seminar.
- In the Oasis Therapy Center, there is a center atrium with a water feature and rock garden that patients can sit around on curved wooden benches with throw pillows while waiting to be called for their service. Also placed around the atrium are water stations, which patients help themselves to while waiting as well as receiving from staff after the treatment.

### ANALYSIS

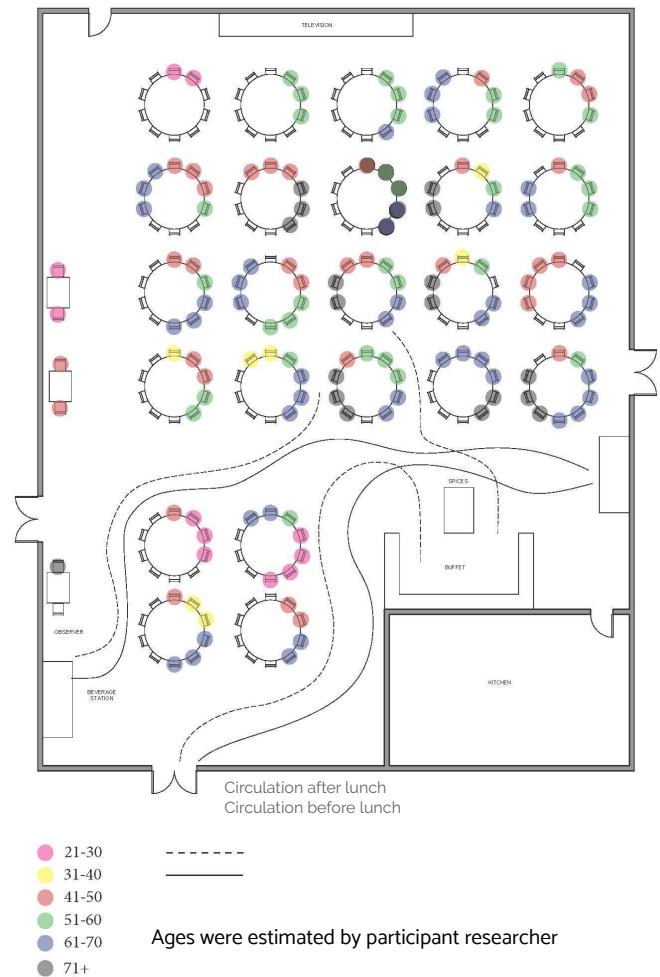
All the programs at Hippocrates Health Institute include weekly services at Oasis Therapy Center. Given the high volume of traffic (in comparison with other spaces on campus), patients are utilizing the services of the spa. Inside the spa, the majority of activity occurred at the reception desk. However, little activity was occurring inside the atrium. There was one patient who was early for service, and so she sat around the atrium, grabbed a glass of water and enjoyed the music playing. When the group arrived for the lecture, they gathered in the atrium space as well and all grabbed a seat on the benches. The atrium was designed to have a direct experience of nature with natural light, water, plants and weather coming into the area. The idea of prospect and refuge was integrated into the space, with lower ceilings around the perimeter of the atrium while the center was open to the natural elements. Observing the behavior between the lone patient waiting treatment and the group awaiting a lecture, all appeared to be relaxed and content. It could be attributed to the natural environmental features introduced into the space.

# WIGMORE HALL ANALYSIS

## Hippocrates Health Institute

### ANALYSIS OF LUNCH BEHAVIOR AT WIGMORE HALL

The lunch buffet was an important part of the behavior mapping study. We observed various age groups throughout the lunch period. Most of the young adults, aged 21-40 tended to sit at the four tables closest to the door, and separated from the rest of the tables. The oldest age groups (61-70 and 71+) were among the first to come, first to leave and situated themselves in the row directly across from the buffet. As patients left and seats became available, the next person would grab a seat, regardless of age group at the table. The middle age groups (41-50 and 51-60) seemed to not mind sitting with younger or older age groups and tended to move further back towards the large monitor that plays a looped slide show. The round tables foster positive and sustained interaction while helping create the community culture at Hippocrates Health Institute. What was notable was that the tables furthest from the views of nature filled up first. Recent studies would have us believe that the tables with the views to the lake would be the optimal seat, but this was the opposite. Some possible reasons could be the proximity to the food, but also the health of the patient and ability to walk. The tables with the views were the furthest into the space and the social interactions with other patients seemed to be of higher importance than seeing the lake outside. During our interviews, it will be important to determine whether social interaction or views of nature hold more importance for the patients.



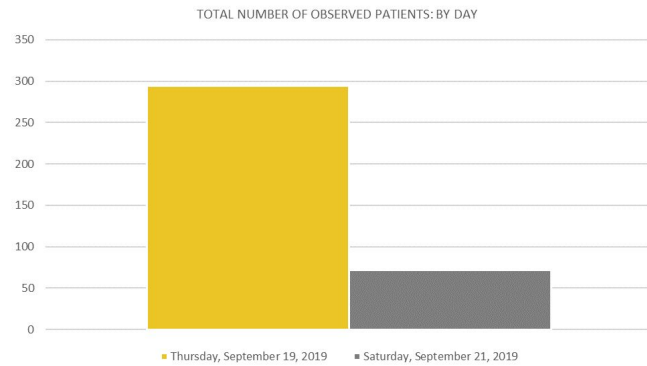
- Wigmore Hall during lunch (12pm - 2pm) was the best observation time to understand population demographics and social interactions. The buffet consisted of 24 round 5 tables, each seating 5 people and 3 tables that sat only 2 people. Patients tended to group with familiar people and often invited people sitting by themselves to join their table.
- The circulation and seating patterns were the best way to observe the behaviors of the age groups.



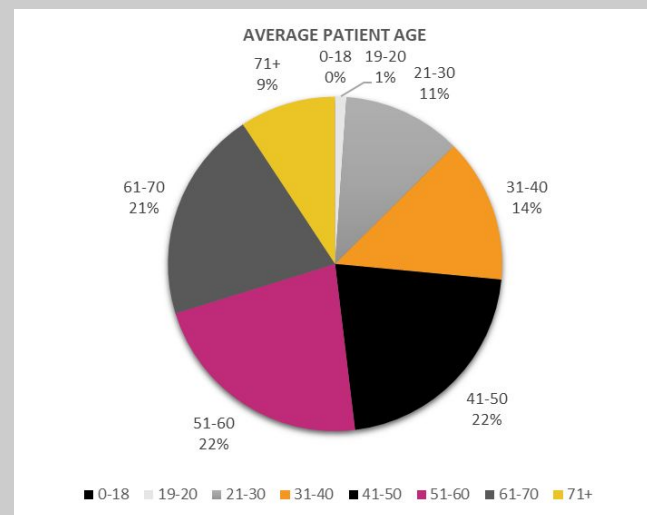
# CAMPUS ANALYSIS

## Hippocrates Health Institute

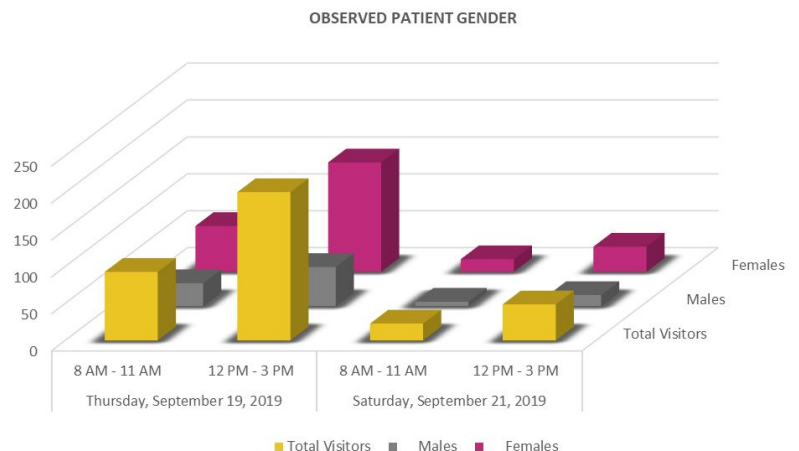
The total number of visitors by day is opposite of what we originally expected. Originally, we expected the weekend to be busier than during the weekdays, but Saturdays are move-out days for patients and Sunday's are move-in for the new groups. So the lunch buffet is much quieter than during the week.



The average age observed is in line with expectations, with more older age groups (41-71+). This could be due to the high cost associated with staying at Hippocrates and younger adults might not be able to afford it yet. The time required (3 weeks) might also be harder for younger age groups that are still working full-time. Another assumption to be explored would be that young adults have less instance of cancer versus older demographics.



The male to female ratio was quite uneven. There were significantly more females than males at the facility. Several theories will be explored to determine the cause, including whether females tend to not go to the doctor until the situation is desperate, whether females are more emotional and tend to believe in alternative medicine more than males or whether females tend to get cancer at higher rates than males.



# BEHAVIOR MAPPING

## Lennar Foundation Medical Center

1

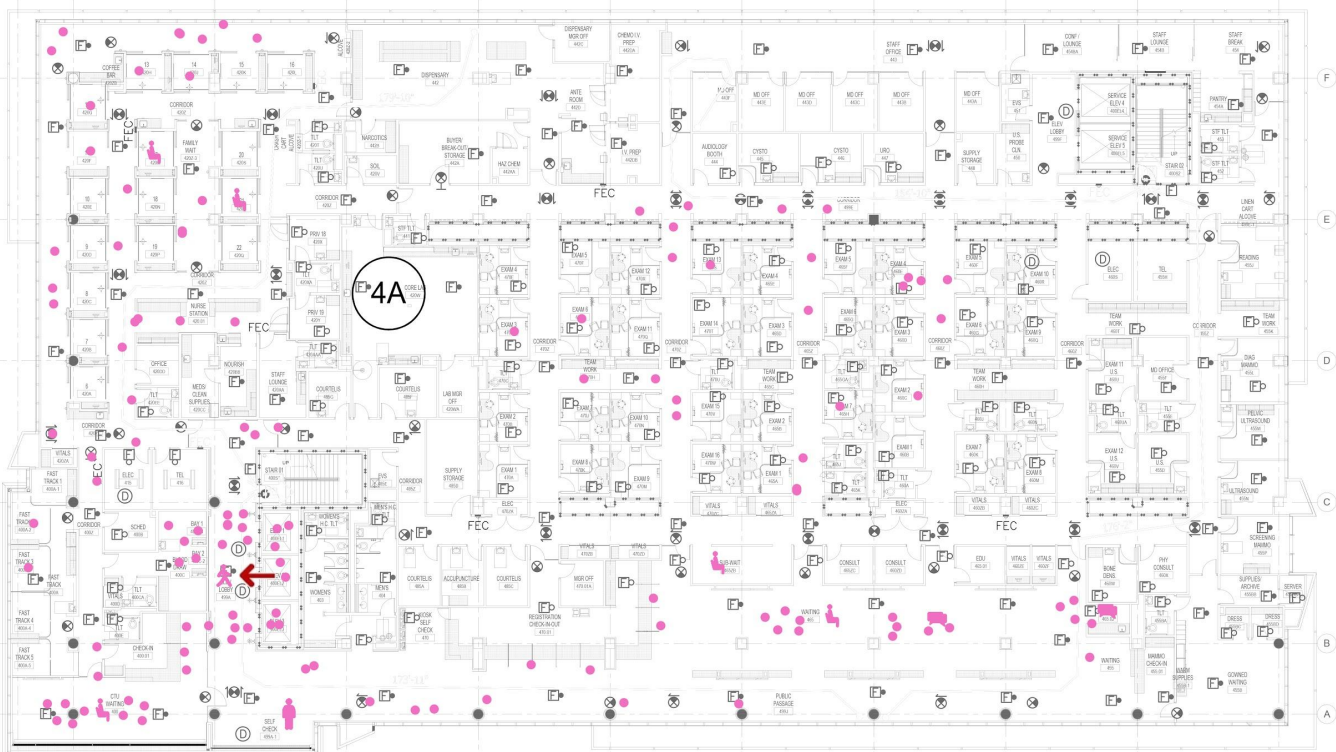
Wednesday, September 18, 2019  
3:00 pm - 4:30 pm



Cancer Care - 4th FLOOR

2

Thursday, September 19, 2019  
8:00 am - 9:00 am

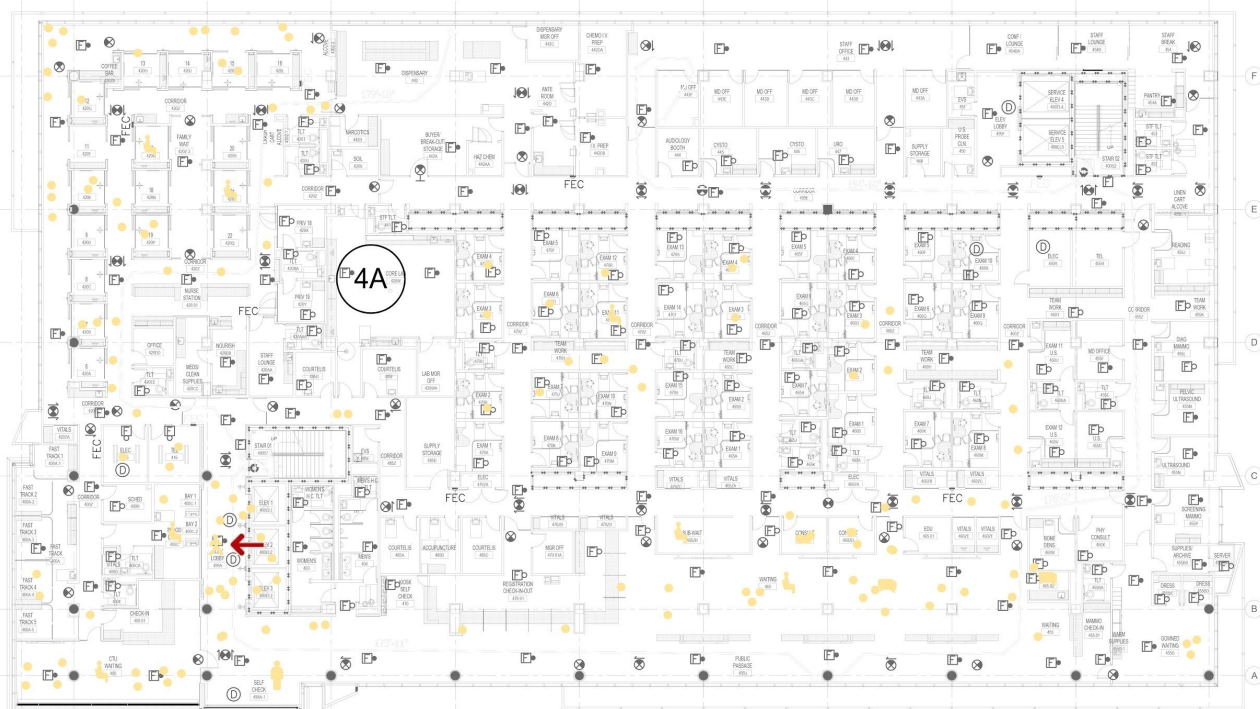


Cancer Care - 4th FLOOR

# BEHAVIOR MAPPING

## Lennar Foundation Medical Center

**3** ● Friday, September 20, 2019  
9:30 pm - 11:00 am



Cancer Care - 4th FLOOR

**4** ● Monday, September 23, 2019  
8:00 am - 9:00 am

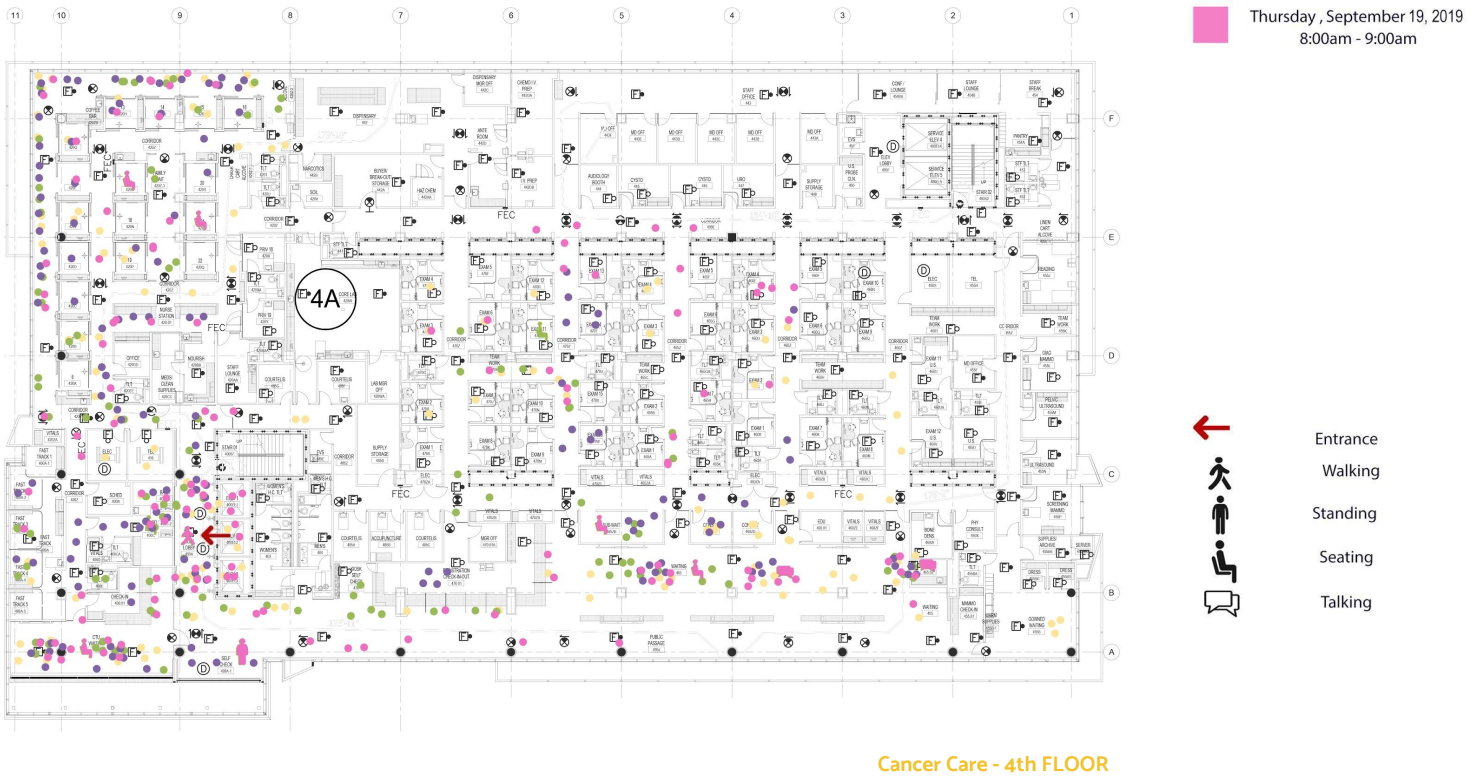


Cancer Care - 4th FLOOR



# 4TH FLOOR ANALYSIS

## Lennar Foundation Medical Center



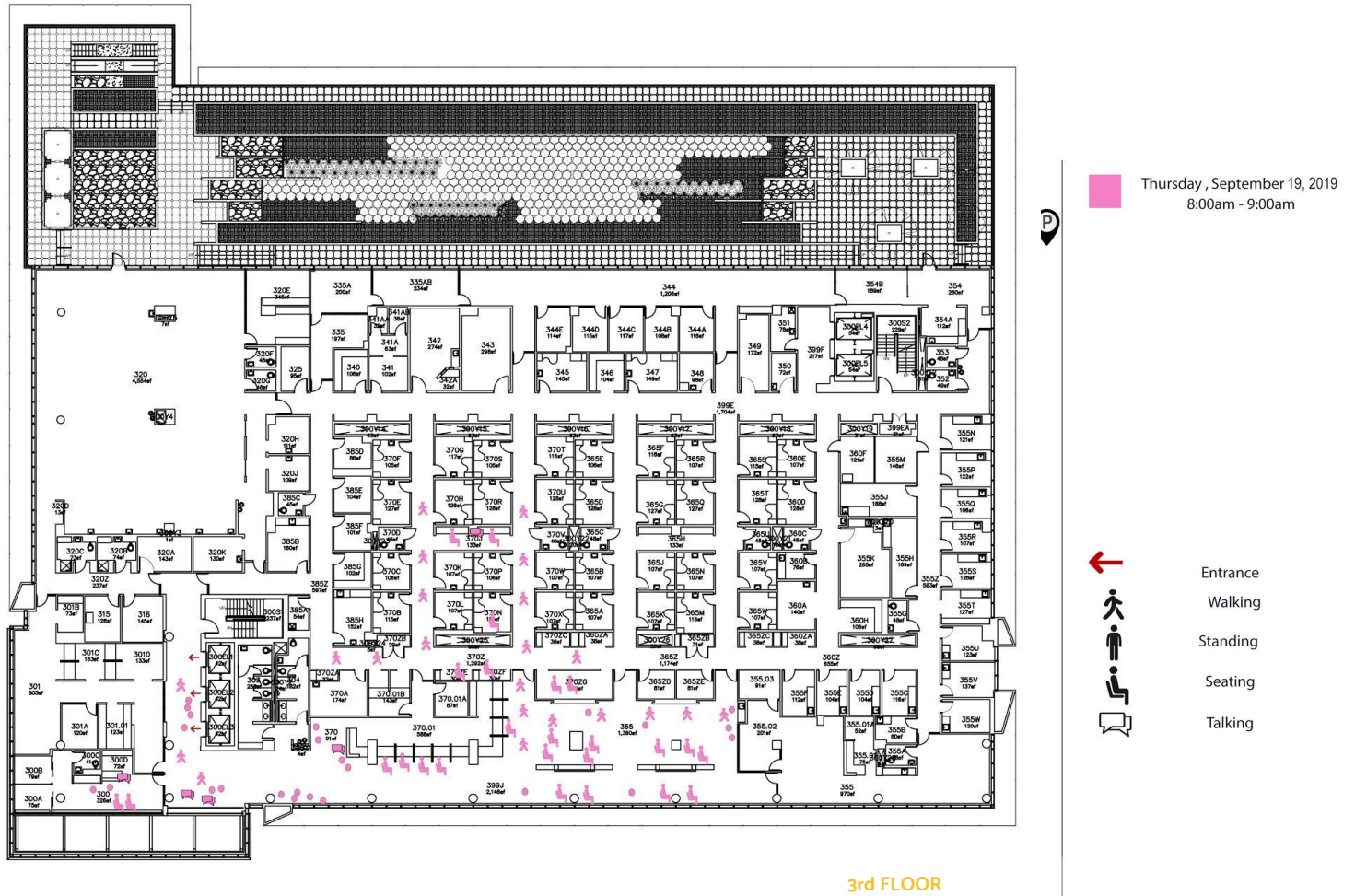
### OVERVIEW

Thursday September 19th from 8-9am

The first behavior mapping was taken place on **Thursday September 19th** in the 4th floor of the building. It is an extension of the Sylvester Cancer Center located in Downtown. It is dedicated for cancer patients in order to receive treatment and also having consultations with their doctors. The fourth floor is a where they have treatment rooms, chemotherapy bays, rooms for lab work, pharmacy for the nurses in order to get the drugs, plenty of visitors waiting areas, back of the house areas for the staff members, as well as what you would see on a typical floor such as reception desk, kiosk, cafeteria, consultation rooms, triage spaces and so forth.

# 3RD FLOOR ANALYSIS

## Lennar Foundation Medical Center



### OVERVIEW

Thursday September 19th from 8-9am

An extra behaviour mapping was done **Thursday September 19th** in the 3rd floor of the building in order to understand the common areas where the patient is welcomed upon entering the space. There are many options of checking Kiosks so the patient has the ability to choose how they want to register for the cancer treatment. On the waiting area there are multiple seating styles for better serve the patients. This is where their journey starts, so the first impression is equally important as the treatment areas. The third floor is a typical floor where they have clinics for patient consultations, a reception desk, registration kiosks, checkout booths, seating area, coffee area and TV's. There is a big curtain wall that brings a lot of natural light and there was the area that people were staying the most.

There are 2 TVs for patients entertainment. However, there was a lot of glare. The circulation was very smooth and as soon as you walk in the space from the elevators there is people to help you with any questions and direct you to the right place. The reception desk is placed in a hidden space and it's not really convenient for the patients. Staff mentioned that that was strategically placed there because they are transitioning the check in to be all online at the kiosks.

# AGGREGATED MAP

## Lennar Foundation Medical Center



Cancer Care - 4th FLOOR

- Wednesday, September 18, 2019  
3:00 pm - 4:30 pm
- Thursday, September 19, 2019  
8:00 am - 9:00 am
- Friday, September 19, 2019  
9:30 pm - 11:00 am
- Monday, September 23, 2019  
8:00 am - 9:00 am



- Entrance
- Walkin
- Standing
- Seating
- Talking

# FACILITY ANALYSIS

## Lennar Foundation Medical Center

### OVERVIEW

The Lennar Foundation Medical Center is an outpatient center located on a 200,000 square foot lot in the University of Miami. The facility is made up of 1200 physicians, students and other workers. In the behavior mapping conducted in 4 different times throughout the week, a similar pattern of behaviour can be observed. Peak times in the facility vary, but according to the mapping, **Wednesday, September 23rd** was the busiest time for the facility starting at 3:00pm. Patients all come in through the elevators and are directed towards the self check-in areas strategically located for easy finding. This process provide the patients with autonomy by allowing them to control the initial phase of treatment. Patients that will receive treatment have a separate waiting area and check in area, while cancer patients that will have consultations or other exams would check in and wait on the main waiting lounge of the floor, located on the south wing.

The 4th floor is where cancer treatment is received, however, examinations, consults and labs are also available on the same floor which draw more traffic to the floor. The space has access to natural daylight thanks to the curtain wall, which closely observed in the plan, is one of the areas with the most concentration of people.

The quietest, least trafficked day was **Monday, September 23rd**. Because it is a Monday morning the expectation of the group was to find very few people which led to be true. The early hours helped those who came in relax and be able to enjoy a time of contemplation and solitude.

The areas most frequented all throughout are the waiting areas, the elevator lobby and the self check-in kiosks. Every 10 or 15 minutes concentrations of groups of no more than 7-8 people could be seen in no particular grouping along these areas.

### ANALYSIS

Lennar Foundation Medical Center does a good job in directing the visitors of the 4th floor to the public areas of the floor. Each area has its own self check-in, assisted check-in and waiting areas. This helps in controlling busy points and crowding which is often stressful for the patients. Each waiting area has a coffee/snack station which is located at each end of the floor. It could be inferred that this helps patients and their families to take the walk and engage along the way as well as on the final destination. Community support helps patients relieve anxiety by sharing common experiences and providing support to one another. Waiting times are short which helps to move people out so new patients can come in. Another way to help patients relax is by playing ambient music on the background, this can also be a strategy to mask conversation and equipment noise. Finally, patients are allowed to bring family members to accompany them through the long treatment sessions. The treatment bays are private and companions are encouraged to wait by the curtain wall where seating is arranged for them. The patient has the option to get a private room if they wish, however, those do not have access to windows and nature views and might feel a very enclosed space.. The light reaches all the way into the treatment bays providing natural daylighting to the patients which may be a positive element that may aid in their recovery process.

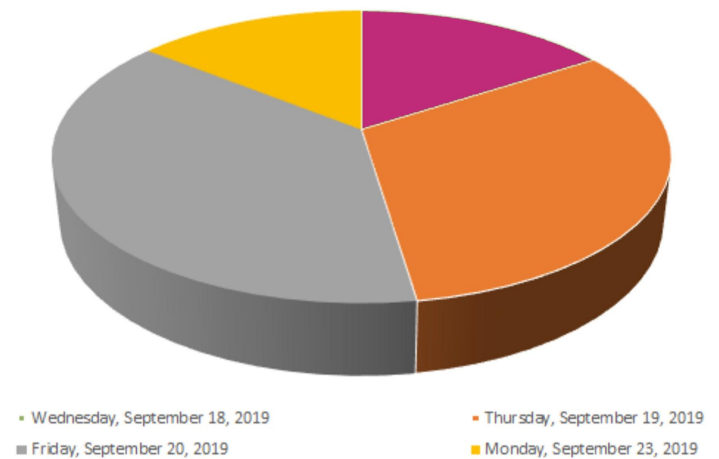


# CAMPUS ANALYSIS

## Lennar Foundation Medical Center

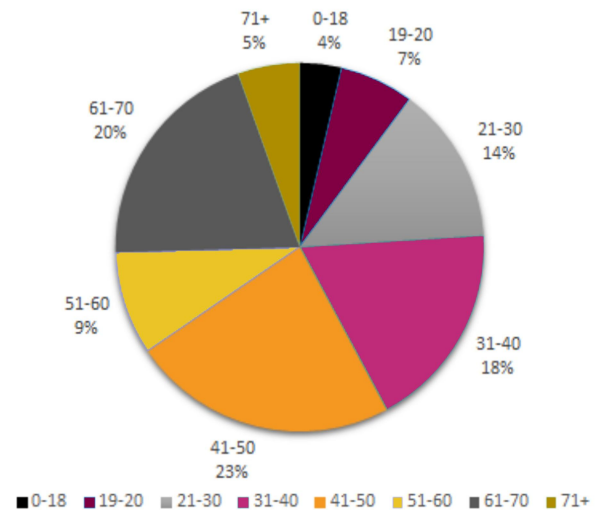
The amount of visitors for each day the analyses were conducted vary in an expected way. Monday mornings was the least frequented day and Fridays were the busiest days. These pattern aligns with life outside the facility therefore it reflects on the number of visitors per day.

TOTAL NUMBER OF VISITORS: BY DAY

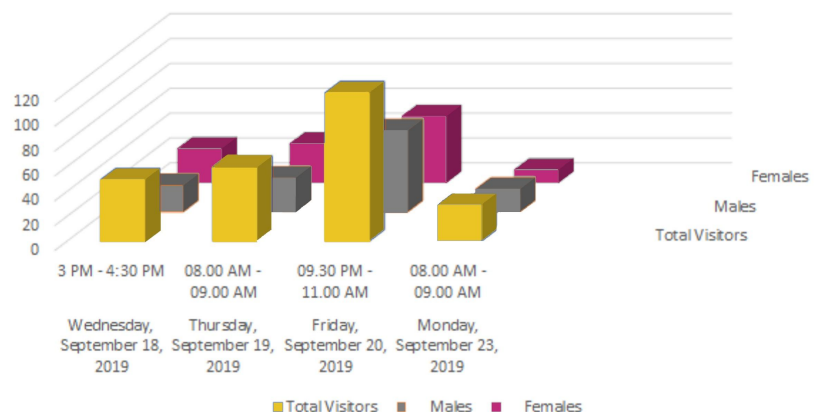


The graphic shows that people from 41-50 years old were the age demographic that visited the facility the most followed by 61-70 years old. On the third floor, the higher age demographic was between 21-30 years old due to the fact they have a big orthopedic department and there were lots of injured athletes waiting to be seen by doctors.

LENNAR VISITOR AVERAGE: AGE DEMOGRAPHICS



LENNAR FOUNDATION AVERAGE: BY GENDER



The gender ratio was pretty consistent with a similar number of men and women visiting the space. The number of men was slightly higher, specially on the third floor where they had many injured athletes there.



# BEHAVIOR MAPPING

## Lennar Foundation Medical Center

### Conclusion

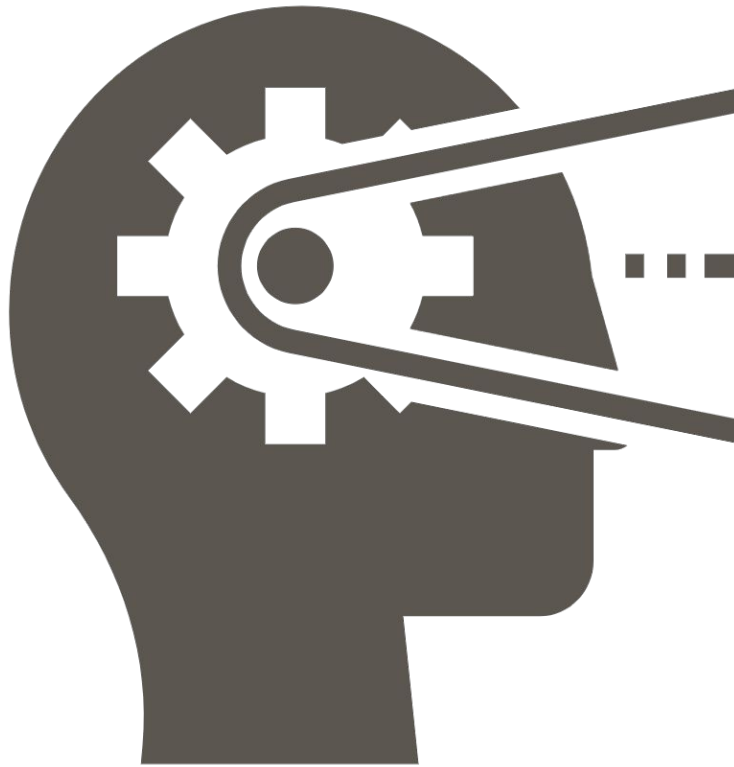
Patients at both Hippocrates Health Institute and Lennar Foundation Medical Center acted on a consistent basis at each facility, but each group acted differently when compared.

Patients at HHI are long-term residents (most for 21 days) and tended to be in treatment by themselves without their family around. This encouraged patients to interact with each other on a more consistent basis than patients at LFMC, where they tended to keep to themselves.

HHI also encouraged positive interactions among patients by providing round tables in Wigmore Hall.

Autonomy was also observed by patients at both facilities. At HHI, patients were in control of their treatment through making their own wheatgrass juice and serving themselves at the buffet. At LFMC, patients experienced autonomy through self-check in kiosks.

The major difference observed in the behaviour mappings was that at LFMC even if common areas are laid out in a way that it offers sociopetal opportunities, users will not engage. On the other hand, at LFMC the users are encouraged to interact and the facility's layout promotes engagement.



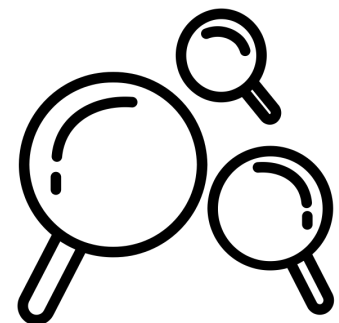
## ACTIVITY MAPPING

# Activity Mapping

## Introduction

Activity mapping is conducted by observing individuals and taking note of the activities performed within a specific place. Through this exercise some of the factors we hope to see guide our participants are biophilic elements, amenities, colors, and audio.

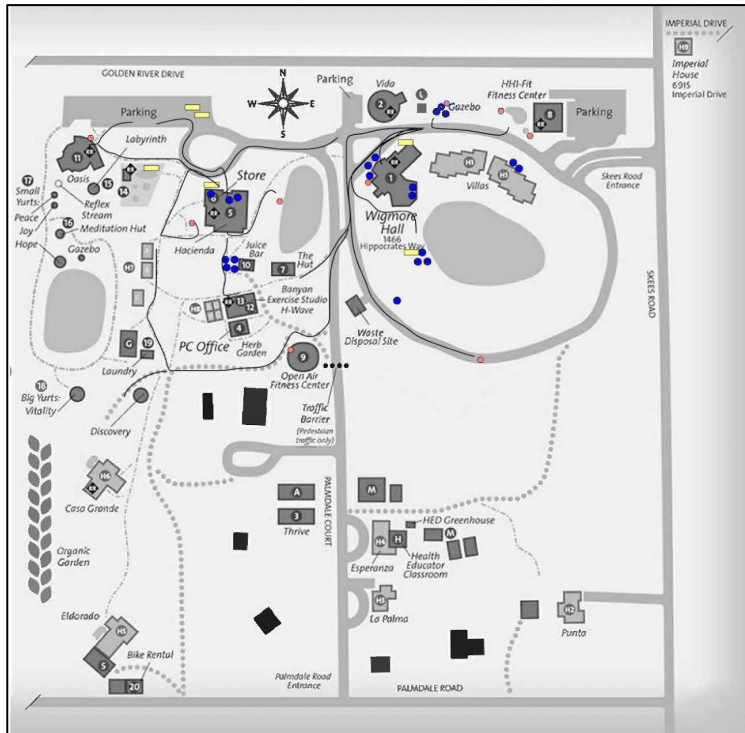
As we perform our research, it is vital to understand the function of a space and how individuals move within. An individual's response will differ based on age, sex, physical and psychological state therefore incorporating an element that benefits one individual does not guarantee a positive response from another.



# ACTIVITY MAPPING

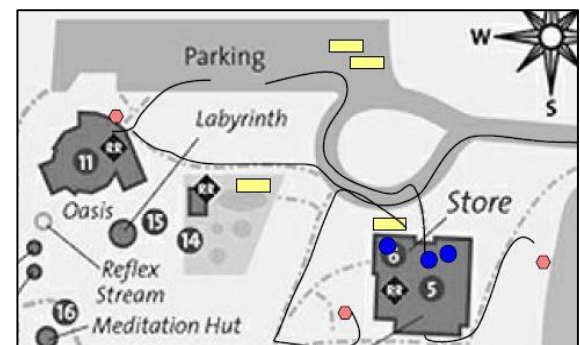
## Hippocrates Health Institute

Sunday, September 29, 2019 5PM-7PM

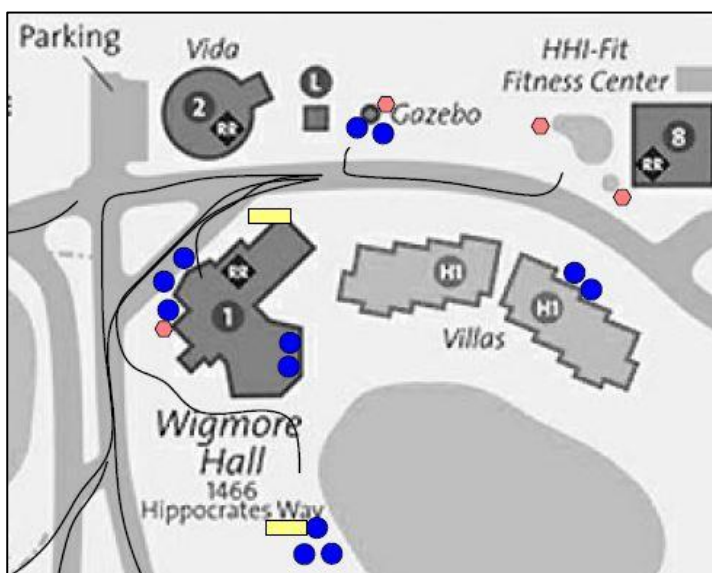


Campus Map

- Standing
- Talking
- Sitting
- Walking



Oasis Spa



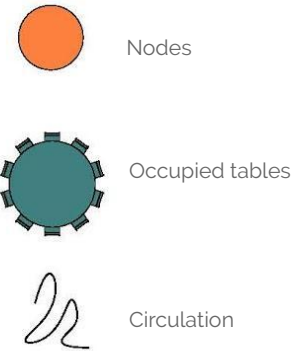
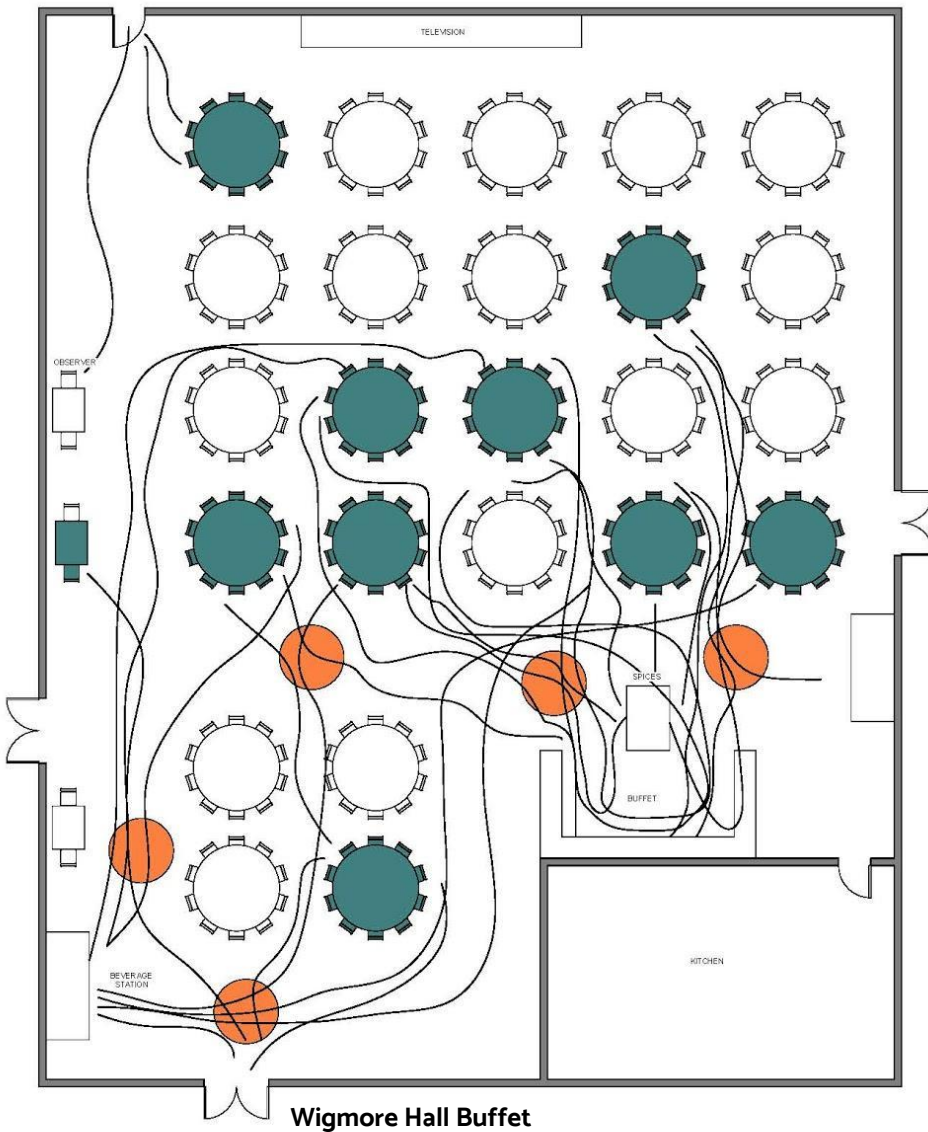
Wigmore Hall

Hippocrates Health Institute provides their patients and guests with outdoor spaces designed to be utilized throughout the day. Individuals were drawn to seating areas that were near bodies of water or on the other hand were isolated from crowding. While walking through the spaces the individuals who were the farthest from crowds were completed unbothered by anyone passing by. It was clear they were focusing on the natural audial surrounding. The individuals who were near bodies of water were directly looking at the how the water was traveling. The presence of water must indicate its clean. Its to use fluctuating water over predictable stagnant water (Wang, Puksza, 2017)

# ACTIVITY MAPPING

## Hippocrates Health Institute

Sunday, September 29, 2019 5PM-7PM



within the space. The dining hall was designed as an open area with no place for visual privacy and very little audial privacy. The chatter levels grew as individuals finished their meals. High levels of noise can cause stress when perceived negative, however for the majority of this observation it this was not the case, There was laughter throughout the space. Another factor that concerned us was the proximity of the tables. The nodes did not have a high impact on the choice of seating. Individuals did walk around some tables however for the most part there was a sense of community and individuals smiled at each other as they walked by. The form of entertainment here was encouraged to be direct contact with one another, given the shape of the tables it was successful. Towards the end the two individuals who sat near the back did seem to be bothered by the noise level. Given that the facility may have very ill patients the built interior space should provide a sense of prospect and refuge.

Upon entering the space, we noticed that patients and guests waited for family members or loved ones before entering the dining hall. Small groups were formed between patients and guests walking from their respective residences. We noticed that individuals who were accompanied by family or friends preferred to sit in tables alone with them. Those who shared the table with other residents chose to sit near the front closer to the buffet, One concern was the noise level



## ACTIVITY MAPPING

### Hippocrates Health Institute

Saturday, October 5, 2019 12pm - 1pm



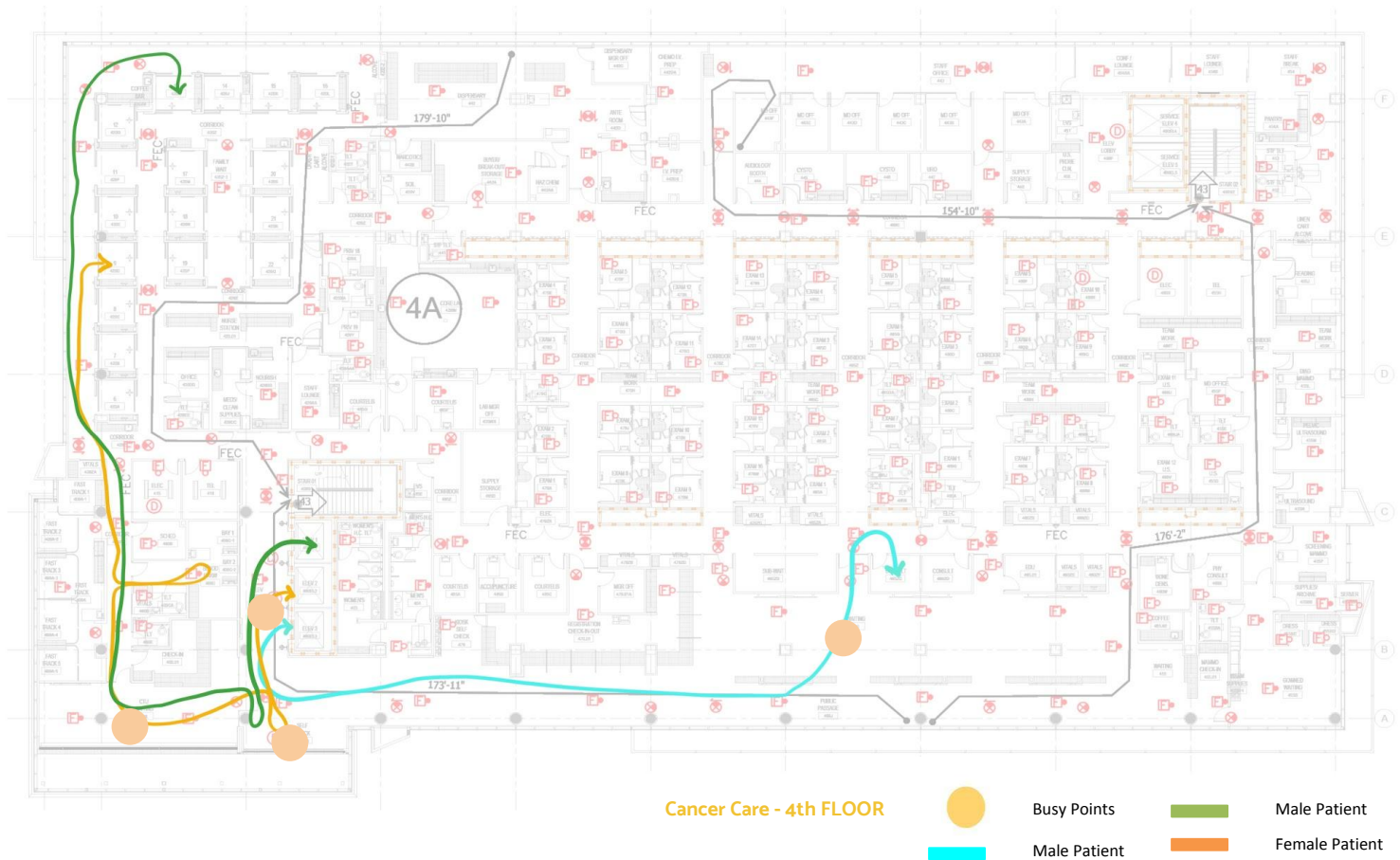
Campus Map

The main pool area in Hippocrates Health Institute uses organic shapes to evoke the sense of nature. Natural vegetation affords both audio and visual privacy for patients. Patients within this space utilized the different temperature pools, washing off and then laying in the sun. Conversation was a major activity of the patients in this area. They seemed engaged in the conversation, at times laughing and other times more serious. Most of the conversation was around each patient telling about themselves and what brought them to HHI.

A strong sense of community was present at the pool area. The informality of this treatment area lent itself to the conversations. Patients seemed relaxed while they bathed in the pool. They utilized the noodle floats to sit in the pool while conversing.

# ACTIVITY MAPPING

## Lennar Foundation Medical Center



This Activity Mapping shows 3 different experiences for patients and their companion in Lennar Foundation Medical Center on **Wednesday 1:00 PM to 2:30 PM September 25, 2019.**

### Male Patient:

1:15 PM UNTIL 2:10 AM 55 MINUTES

1- Patient comes off the elevator then proceeds to the self check-in and finally seat on the waiting area while he waits to be called into the consult.

### Female Patient :

2:13 PM UNTIL TREATMENT IS OVER (APPROX. 4 HOURS)

1- Upon arrival the patient goes over to the self check-in. She then waits in the waiting area until the nurse calls her and leads her into the Blood Draw area. Once finished she is taken to a treatment bay

### Male Patient :

1:30 PM UNTIL TREATMENT IS OVER (APPROX. 4 HOURS)

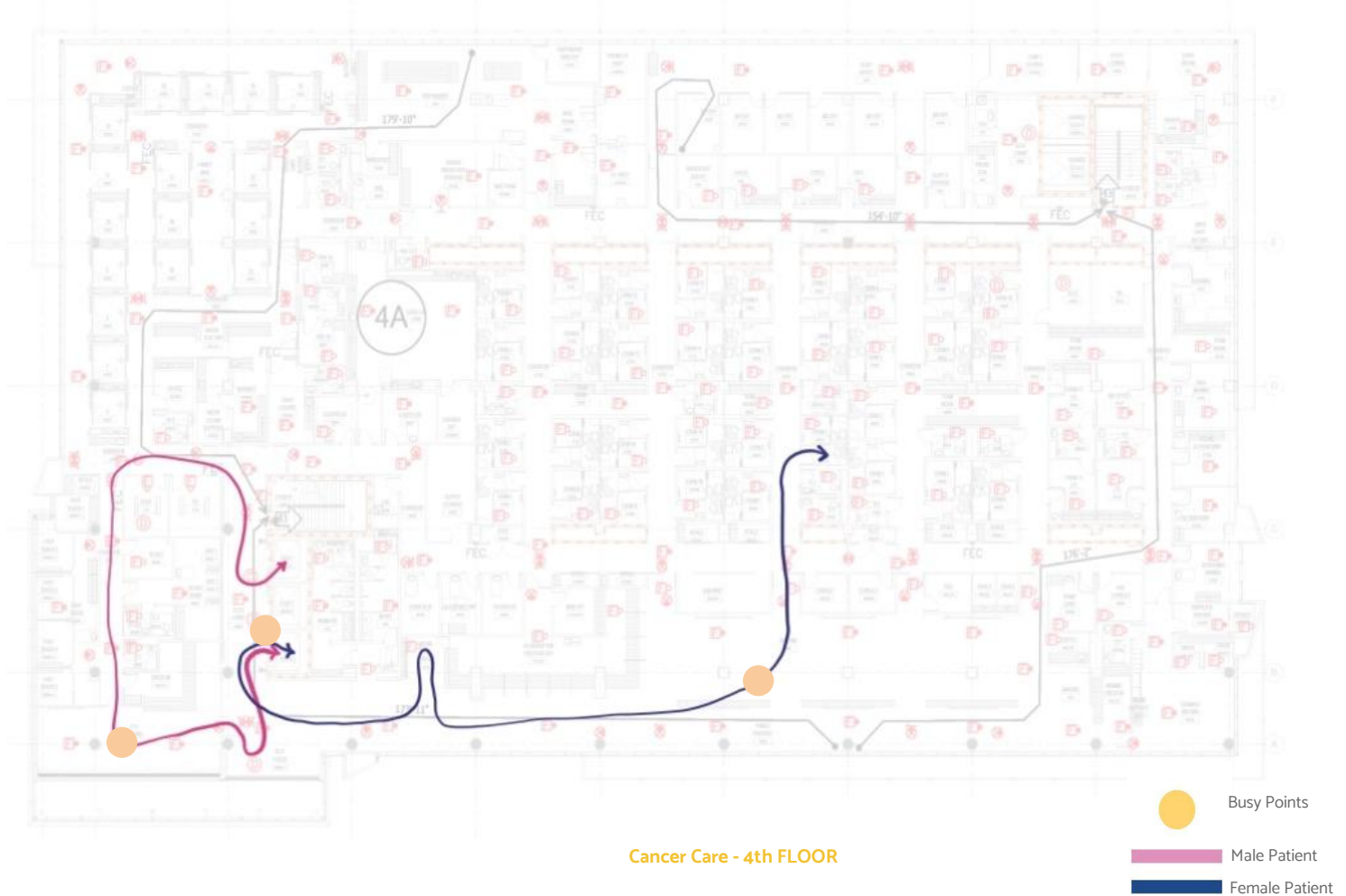
1- The patient arrives and proceeds to the self check-in. He then waits on the waiting area until a nurse comes to pick him up to take him to his treatment bay.

### Observations:

Right after coming off the elevator, patients are offered autonomy by being allowed to self check-in. This speeds up the initial process of treatment. Waiting times in the waiting areas were very short and patients would usually engage with one another while enjoying coffee by the machines. The treatment bays, although not directly against the window, received a vast amount of natural daylight which could be positive for treatment.

# ACTIVITY MAPPING

## Lennar Foundation Medical Center



This Behavior Mapping is showing different experiences for two patients at Lennar Foundation Medical Center on **Thursday 9:30 AM - 11:00 AM September 26, 2019.**

### ■ Female patient: 9:30 AM UNTIL 10:00 AM (30 MIN)

1- This particular patient arrived to the facility and used the self check in. Once in the waiting area she's called inside and taken to the blood draw area.

### ■ Male patient: 9:30 AM UNTIL 10:30 AM (1 HOUR)

1- The patient arrived and used the self check-in kiosk of the exam room area. He waited for 10 minutes and was called inside into one of the exam rooms.

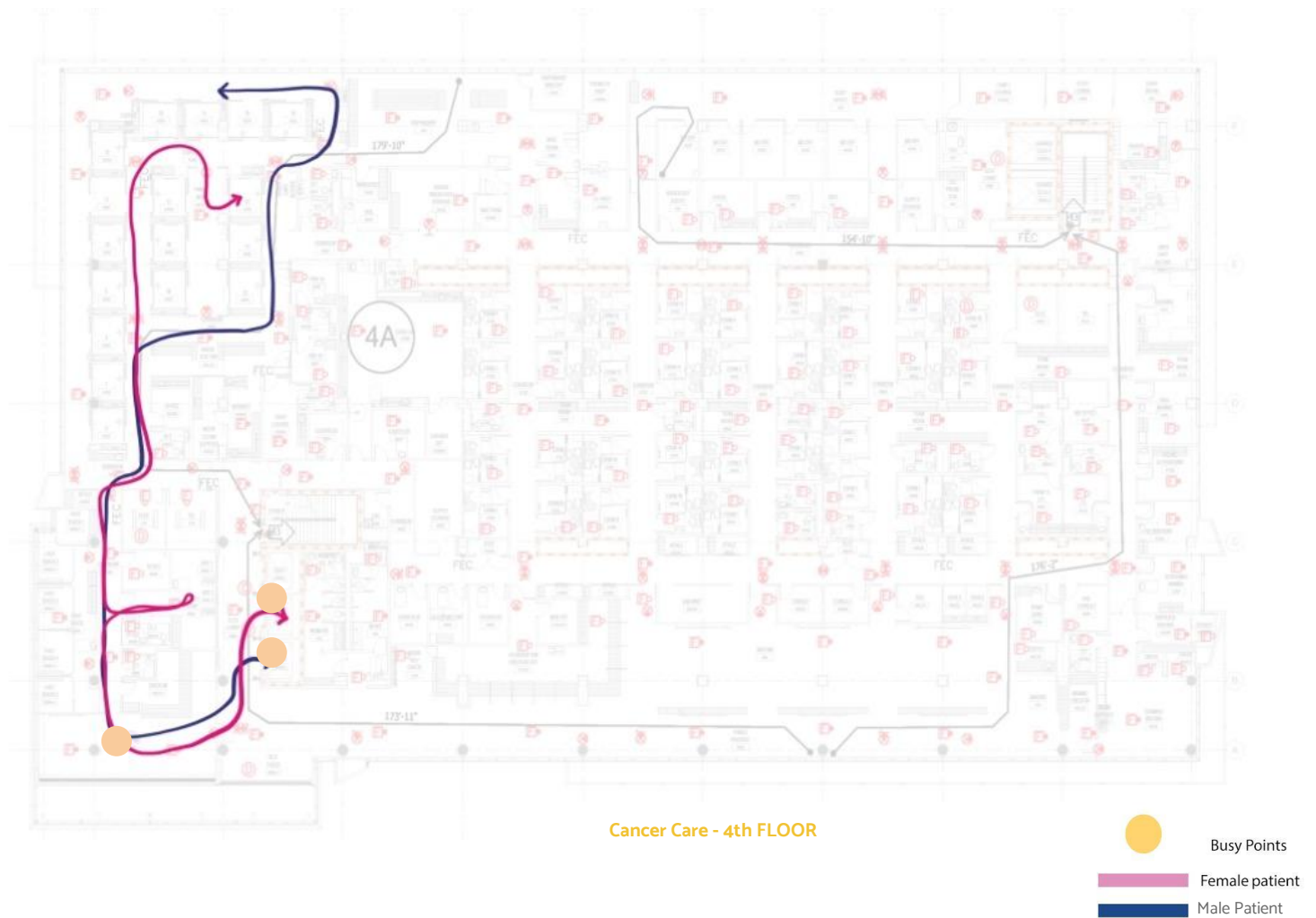
### Observation :

One observation was the layout of the furniture. It was laid out with the intent to have people engage. However, the male patient did not seem willing to engage with others while on the waiting area. He kept conversations short and was always looking down at his phone.. The space does not offer Sociofugal opportunities and only focuses on Sociopetal layouts.

On this particular day, a vast amount of sunlight was coming in through the curtain wall and more conversation could be heard. One could infer that sunlight makes people feel more energized and as a consequence more engaged.

# ACTIVITY MAPPING

## Lennar Foundation Medical Center



This Activity Mapping shows two different experiences for a patient and a nurse at Lennar Center on Tuesday 9 AM - 11: AM September 27, 2019.

### Female patient: 9:00 AM UNTIL TREATMENT IS OVER (APPROX. 4 HOURS)

1- Patient arrives to the facility and uses the self check in. Once in the waiting area she's called inside and taken to the blood draw area and to her treatment bay after.

### Male patient: 10:30 AM UNTIL TREATMENT IS OVER (APPROX. 4 HOURS)

1- The patient arrived and used the self check-in kiosk and is later called inside into one of the exam rooms.

### Observation :

The two patients observed on this day, had long hours ahead of them. Time perception plays a big role in how these treatments affect the user psychologically. After inquiring with the nurses they informed us of the acupuncture room located on the same floor across from them. Aside from acupuncture, Lennar Foundation Medical Center also offers other workshops and other sessions which aim to aid with the side effects caused by the treatments.

# ACTIVITY MAPPING CONCLUSION

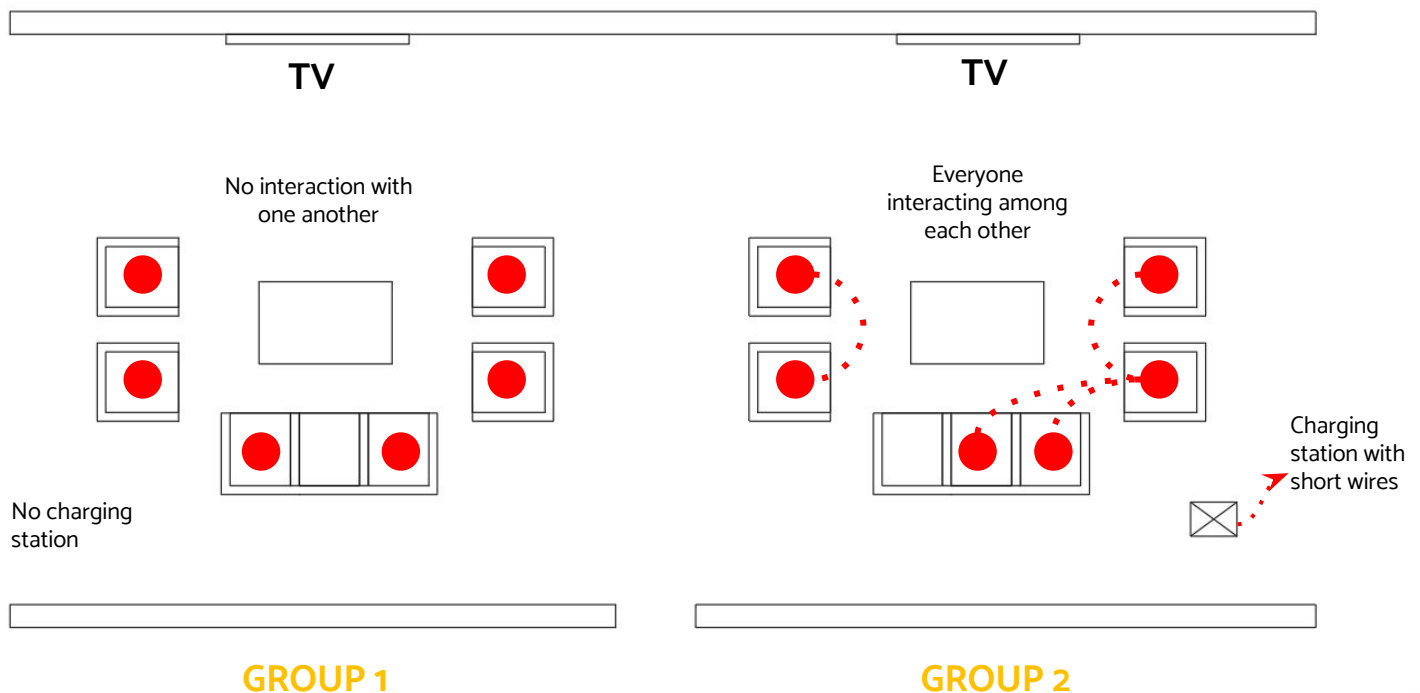
## Lennar Foundation Medical Center

A behavior study of two groups of patients that were in two different lounge areas was analyzed. These waiting areas on the fourth floor are supposed to promote eye contact and communication while the patients wait to be seen.

In group 01, there were 6 people sitting next to each other but no communication whatsoever was achieved. All the group members were looking at their phones. The hospital offers access to free wi-fi so they were connected to the internet at all times.

Surprisingly, on group 02, there was a lot of communication happening and that was because there was a charging station for people to charge their phones nearby while waiting. Usually when there are plugs nearby, the users can plug their charges and keep using their phones since the wires are longer. In this case, the charging stations had short cables so the users were forced to leave their phones there and that opened the opportunity for communication in the group.

This is a good example of sociopetal and sociofugal spaces. The layout of the furniture remained sociopetal, yet one group decided to not engage making the space overall space sociofugal. On the other hand, the station in addition to the Sociopetal furniture layout, encouraged interaction among its users as seen in group 02.





# ACTIVITY MAPPING CONCLUSION

## Lennar Foundation Medical Center

The multiple visits to Lennar Foundation Medical Center left a few things to be pointed out. There were a variety of subjects studied and followed for spans of over an hour. These subjects had different purposes in the facility so the variety in perspectives helps analyze the data and reach a few conclusions.

The busiest area during this mapping session were the elevators, the self check in kiosk and finally the lounge/waiting area. This trilogy can be also characterized as a psychosocially supportive design strategy. The space is easily accessible to users and it becomes a central point where the general needs can be met.

On the second day of observation and mappings (September 26, 2019), three different subjects were studied. The common pattern observed was the ease with which the patients located the self check in kiosk. The user is more likely to show satisfaction when the wayfinding is clear and the paths are not confusing or a cause to get lost. Upon further conversation with some of the users, they mentioned the pleasantness of a space with a loop circulation such as the Lennar Center. It allows them to not waste time getting lost or asking for help to find their way around. Within 5 minutes they would be checked in and ready to be called inside the more private areas. This speeds up the treatment/consultation time allowing them to get back to their regular routine which is always a positive thing specially for patients fighting cancer. On the contrary, long waiting periods affect time perception which in turn can have bad effects on the patient's mood. This could lead to factors such as the patient going into their treatment with a negative mindset and predisposed.

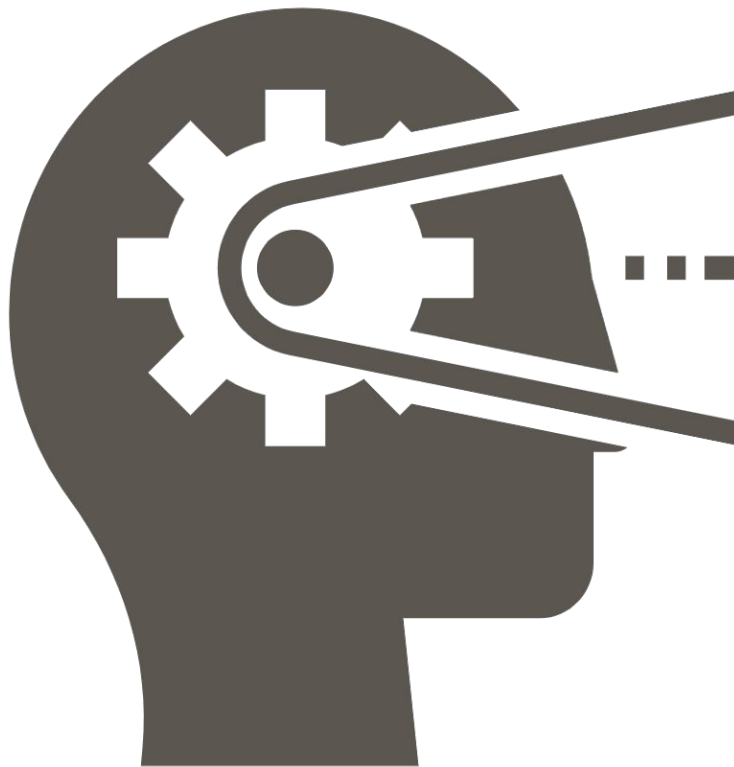
A great feature of the space is the curtain wall which overlooks the double double height ceiling that features a hanging art piece. These elements allow for natural daylight to come inside the waiting areas, opens up the space and serves as a distraction for the patients. Through the study of this space, the group will be able to find the effect natural daylight has on healing and well being. Patients may feel more energized and an improvement in their mood. Sunlight promotes well being, happiness, visibility and a healthy circadian rhythm. Daylight can also open up the interior of a space, making it seem more spacious and agreeable to be in.

Another aspect of the observation to point out, was the music that played in the background. Although very faint, this type of entertainment serves as a psychosocially supportive design strategy which enhances feelings of well-being. Also, the melody that could be heard suddenly masked most of the traffic as well as the conversational and machinery noise. Noise tends to cause aggravation which naturally impedes proper healing by provoking negative feelings that in consequence affect their physical and emotional well-being.

An advantage of the 4th floor is that although more controlled access is found, these spaces do a job at offering privacy and solitude situations since the access to these areas is usually more restricted, giving patients the opportunity to encounter some of the above mentioned instances.

Throughout the entire observation period, staff was never seen around the halls unless they came from inside. The elevator lobby was only used by patients and on rare occasion staff. This effect is a widely used technique in the design field best known as the "Disney" effect. Patients circulation is separate from staff which helps keep corridors clutter free during peak hours. This can be tied to the biophilic element of visual cues. Allowing the patient to only see an uncluttered, controlled environment reduces stress as well as the anxiety of waiting areas. Coffee machines as well as entertainment create found throughout the areas offer comfort opportunities which stimulate patients and make the wait less tedious.

Finally, the materiality and color scheme of the public areas in the 4th floor such as the waiting areas are worth mentioning. The furniture was comfortable and ergonomically shaped. Biophilia was observed through the neutral color scheme and materiality of the space. Lennar Foundation Medical Center prides itself in the careful selection of materials that are safe for people and the environment by being free of VOCs.

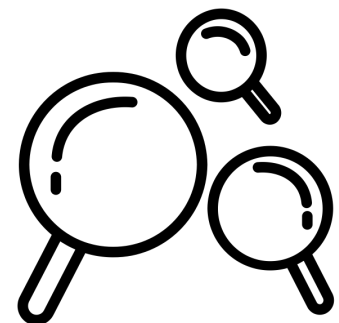


## COGNITIVE MAPPING

# COGNITIVE MAPPING

## INTRODUCTION

Cognitive mapping is the representation in sketch form of how an individual sees the layout of their environment. These sketches allow us to take a look through that individual's perspective. Environmental features, the function of spaces, color, an individual's senses and light are some of the factors that will impact the outcome of these sketches. For this component, we asked patients to draw the respective facility as they viewed it. Through this exercise, we will be able to understand how patients view and experience the facilities.

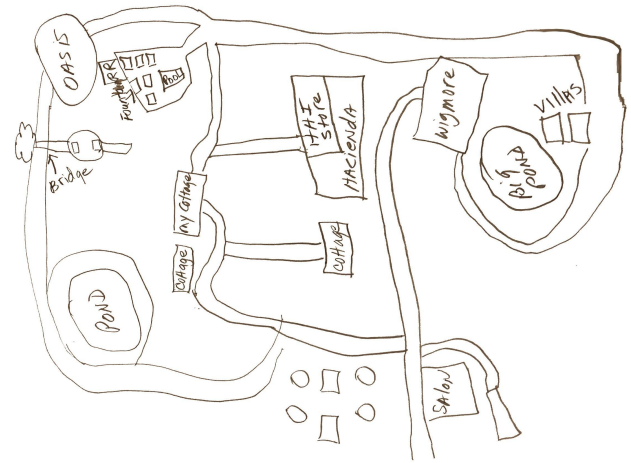


# COGNITIVE MAPPING

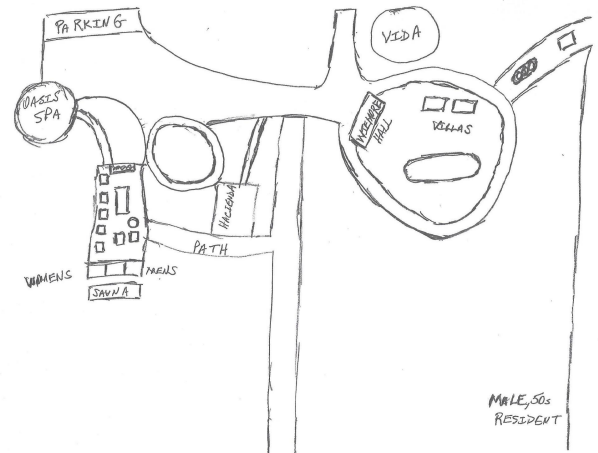
## Hippocrates Health Institute

**A**WHITE FEMALE, AGED 61-70  
RESIDENT

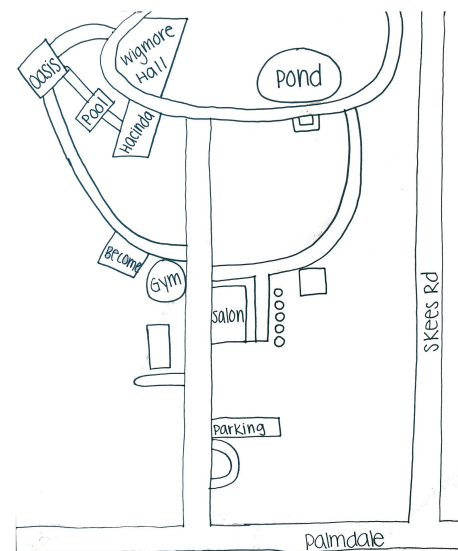
Participant A lives in Cottage A in the middle of campus. She has been at Hippocrates almost the full three weeks and was preparing to check out. During her time, she liked to use the outdoor gym and Salon in addition to the Oasis Spa. On a few occasions, she would stop at the pool for a bit.

**B**WHITE MALE, AGED 51-60  
RESIDENT

Participant B lives in the Villas next to Wigmore Hall. He too had been on campus for 3 weeks and was checking out Saturday, September 28th. He tended to use the pool and the spa the most often and many of his classes were in the Hacienda.

MALE, 50s  
RESIDENT**C**LATIN FEMALE, AGED 21-30  
SALON EMPLOYEE

Participant C works at Become Salon, which is currently in a temporary location off of Palmdale Court due to renovations. She has worked at Hippocrates for 2 years. For lunch, she typically walks to the lunch buffet located in Wigmore Hall via a walking path that directly links the Salon and the driving circle around Wigmore.



# COGNITIVE ANALYSIS

## Hippocrates Health Institute

Before beginning, the standard Hippocrates Health Institute map was shown as reference to help participants get a sense of how to begin drawing. All three participants were already familiar with the map, as they had used the same one to get acquainted with the campus when they first arrived. It can be assumed that the campus map influenced the way participants then drew their maps. Also of importance to note is that the Participants were sitting next to each other at a round table in Wigmore Hall when the maps were completed. Another possible area of influence in the cognitive mapping. Despite some similar qualities in the map drawing, there are several differences with how they drew and what they included on the map.

### START

All three participants started their drawing with the area they were most familiar with, trying to gauge where on campus that building or area was situated and then tried to place that area as the start point on the paper. Participants A and B began where their housing was located. Participant C began where she typically enters the campus to come to work. From there, they tracked their most familiar paths.

### SCALE

All three participants drew the most familiar areas out of scale compared to other areas. For instance, Participant A drew Cottage A (her housing) much larger than the villas by Wigmore Hall even though the Villas are more than double the size of the cottage. They also ran out of room on the paper to draw some areas, as these areas were least familiar to them. Another notable difference was the orientation of the campus: the two residents (Participants A and B) drew their maps landscape while the employee (Participant C) drew hers portrait. The possible meaning behind this is that beyond the roadblock is typically where employees tend to come and go off the campus as well as back-of-house buildings such as shipping and receiving. Therefore, residents typically do not go into these areas which could explain a linear versus horizontal view of the campus.

### INCLUSION

The participants drew only the areas that were most familiar to them, leaving out paths and buildings they typically do not use or ran out of room to draw them. The level of detail was also higher in the areas of most consistent use. Participant A uses the outdoor gym so she included some of the equipment. Participant B tends to use the pool more often than the other participants so more detail was included to show the three different pools, sauna, chairs and restrooms. Participant C walks to lunch everyday using a walking path that connects the temporary Salon to the back of the Wigmore Hall pond. It leaves the question whether or not Participant C would have included that path if Become Salon was in its typical location. Participant A also included more walking paths in the middle of campus, which shows how she gets around. Participant B's housing is located on the paved road next to Wigmore so he tends to walk on the pavement as opposed to the paths, possibly explaining why he did not include the meditation pond in his drawing.



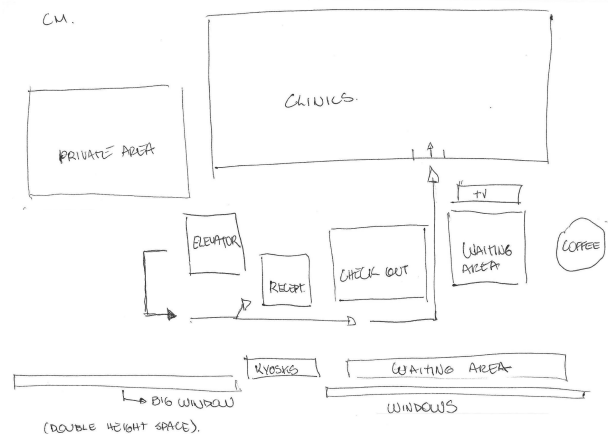
# COGNITIVE MAPPING ANALYSIS

## Lennar Foundation Medical Center

### A

WHITE MALE, AGED 47  
PATIENT

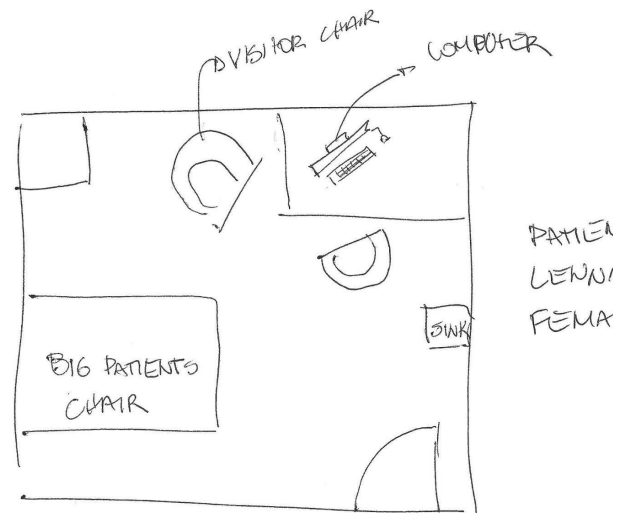
Participant A was approached by the group while he waited at the reception of the Exam Rooms (CTU waiting area). He said he would be drawing that exact area where he was. It was curious to see him start with the coffee station. From there on, he continued drawing the mapping in random order and everything in small boxes. After he was done, he insisted on transcribing the drawing to a more organized and "scaled" one.



### B

WHITE MALE, AGED 56  
PATIENT

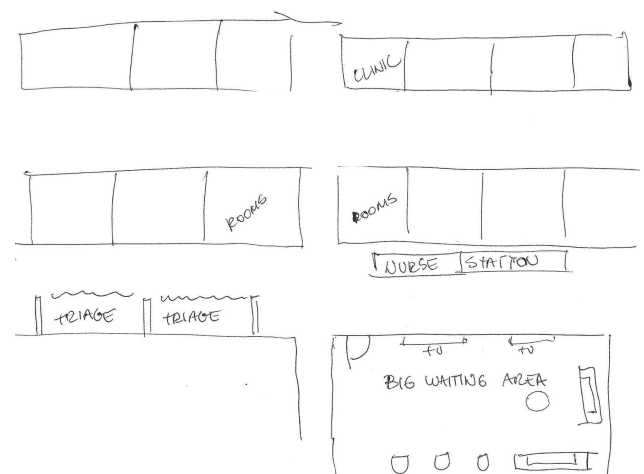
Participant B was waiting in the waiting area to be called to get his treatment. In a quick sketch he depicted the interior of the treatment bays where he has been spending up to 5 hours every week. He made a remark saying that although he would rather have his wife with him at all times, it was impossible since the visitors' chair was too small and uncomfortable for the long hours of wait.



### C

FEMALE, AGED 31  
PATIENT

Participant C was waiting to be called into the treatment bay to receive her treatment. She started the mapping with what she called "Big waiting area" which is curious to note since both waiting areas on the floor are approximately the same size. She then showed the nurses station but skipped reception which is right before. She was finally called in and finished the mapping with the treatment rooms.



# COGNITIVE MAPPING ANALYSIS

## Lennar Foundation Medical Center

At Lennar, the areas being studied are: elevator lobby, oncology reception, waiting area, triage, exam rooms, treatment bays and family waiting areas which are all in the 4th floor of the facility. This is where all of oncology treatments take place. The cognitive mapping participants were shown a referenced plan and were asked to draw from memory a “map” of the space.

### START

All the participants were current patients who were already familiarized with the space, however, their perception of the space varied. Participant A decided to start his drawing with the coffee machines area which could be inferred he frequents most since it was the first space that came to mind. The rest of the participants started with the areas where they usually sit. For participant B it was his treatment chair while for Participant C it was the waiting area from where mapping was being drawn.

### SCALE

All participants drew the most areas in somewhat accurate scale. The bigger the space they decided to draw the harder it was to draw scale accurately. For Participant A he insisted on re-drawing the mapping for a more accurate depiction of the space. The rest of the participants did ok in terms of hierarchy of spaces but not accuracy of scales. This is observed on the mapping done by participant A, where the TV is the same size as the second waiting area and even for participant C where the rooms are not consistent in size.

### INCLUSION

All participants drew pretty much the entire floors but they focused on details on the areas they used the most or the ones they were at while drawing. Participant B drew furniture and the layout of the room while the others did only blocking of the spaces and circulation paths - showing their experience throughout the space. In the drawings, the scale of the space was crucial for the analysis of each space. Participant B was very specific with what did not work in the room such as the patient chair being too big for the space and the doctor having a stronger eye contact with the visitor instead of the patient. Details that would always be included were tvs, coffee stations and specific furniture layout. It could be inferred that since this is the only entertainment opportunity offered by the facility, patients tend to remember. Circulation paths were also drawn very clear by Participant A and C. However, it is only the circulation paths they frequent on their visits.



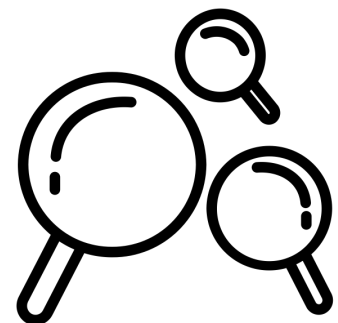
## TRACE BEHAVIOR

# TRACE BEHAVIOR

## INTRODUCTION

Behavior Tracing shows the unique characteristics of an environment and the user's perception of the space. The perceived relationship between the many elements is what allows the user to form impressions and possible decisions. The group visited both case studies, The Lennar Foundation Medical Center and Hippocrates Health Institute, in search for a list of environmental attributes and keeping data by photographing these existing factors.

This study helped analyze the space from the user's viewpoint by aiming to understand if these behaviors which were found in both facilities add any value to the user experience on the space. Responses to an interior attribute are individual, however, certain factors tend to cause the same effect on multiple users whether positively or negatively. This study helps determine if those existing factors are needed or irrelevant to the general user experience.



# ENVIRONMENT BEHAVIOR

## Hippocrates Health Institute



### 01 Personal Space

The set-up of the Wigmore Hall buffett allows for personal distance, 18-30". It is a comfortable zone for social interactions between friends. This distance helps create the culture around Hippocrates Health Institute.



### 04 Solitude

This bench by the meditation pond allows for solitude and for intimacy. The location affords the opportunity to be alone in the midst of others. Patients can also experience solitude if they opted for private accommodations.



### 02 Sociofugal/Sociopetal

**Sociopetal** spaces encourage interaction among its users, while, **Sociofugal** spaces minimize interaction between the users. The set-up of chairs around the pool can accommodate both types of interaction. The chairs are far apart enough to allow for sociofugal, but can be moved to accommodate sociopetal arrangements.



### 05 Sociality

The game area allows an area of sociality, where patients can interact with others but in a controlled environment.



### 03 Privacy

This setting of privacy allows for intimacy with friends as opposed to solitude. However, the entire campus of Hippocrates Health Institute is set up to foster social cognitive freedom, privacy in the sense of being yourself.



### 07 Crowding

The collection of bikes on campus reflects crowding, but the lunch buffet in Wigmore Hall demonstrates a crowd. The difference between the two is that crowds tend to gather like-minded people whereas crowding refers to density.



# ENVIRONMENT BEHAVIOR

## Hippocrates Health Institute



### 08 Focal Point

A focal point is a point of interest. This staircase encompasses the focal point and also adds mystery to the space.



### 13 Delight

A positive emotion when interacting with a space. These wall tiles made to look like flowers create delight in the space.



### 09 Prospect and Refuge

Prospect and refuge ties back to the idea of biophilic design, when humans engaged with the natural environment in a survival mode. This image shows the modern built environment concept of refuge, where patients can look out, but they are hidden enough for safety under the awning.



### 16 Restoration

Nature can help us restore ourselves. At Hippocrates Health Institute, restoration begins with wheatgrass juice and this example of the wheatgrass bar helps foster restoration.



### 12 Mystery

Mystery is the promise of future involvement, which is what this winding path creates. Because you can not see where the path ends, it suggests that one can learn or interact with the environment further.



### 26 Wayfinding

Around the campus, most paths are curved and follow biomorphic forms. This particular area has linear paths and street signs, which help patients find their way around campus.



# ENVIRONMENT BEHAVIOR

## Lennar Foundation Medical Center



### 01 Personal Space

In this entrance seating area the furniture for this section is place at a distance that unable the users to interact. This is a way to offer users some personal space. The seats are far enough for everyone to have the option of seeking their own personal space without isolating the user.



### 04 Solitude

This term is best described as the need to be alone away from others.



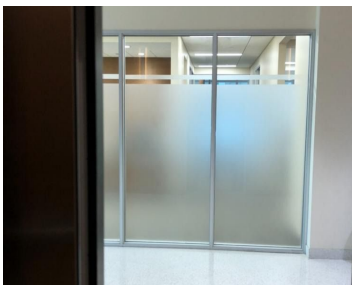
### 02 Sociofugal/Sociopetal

In this lounge area guests are welcomed to interact according to where they decide to seat. If next to each other they may hold a conversation, however, the user can choose to move his seat or seat back to back with another person. It is important that a space is flexible enough to allow user controllability in certain situations



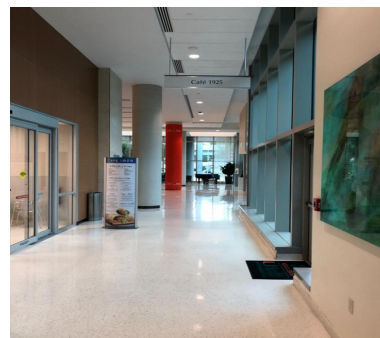
### 05 Sociality

Throughout the clinic' waiting areas, sections with refreshments can be found. These areas encourage sociality among its users. Small talk is started there and then continued onto the seating areas for continued social interaction.



### 03 Privacy

In Lennar all the clinic and patient areas have this frosted glass which offers privacy to the users on either side. However, they are not isolated since daylight is allowed to peek through and figures can be seen across the glass when passing by.



### 07 Legibility, Control And, Safety

Circulation path in building are characterized by linear design as this greatly helps in the process of controlling the place and also where there is a wealth in controlling the place enhances the chances of **Safety** and also Legibility for For both working and Patient users.



# ENVIRONMENT BEHAVIOR

## Lennar Foundation Medical Center



### 06 Delight and Adaptability

**1-Delight:** large windows allow daylight to enter the space, increasing the feeling of wellness for patients.

**2-Adaptability:** The design adopts natural elements in both direct and indirect ways, which helps patients and workers by communicating abroad and not just being in an isolated place



### 14 WOW Factor

Upon entering the facility, patients are greeted by a double height ceiling full of natural sunlight and an artistic paper crane hanging fixture which wows patients. This serves as a distraction which can calm anxiety.



### 08 Focal Point

Promotion of high quality service is achieved through the design by the placement of the reception in front of the main entrance gate and in the middle of the place to be the orientation and focus point for the user.



### 16 Restoration

Restorative spaces are those where the user can sit and relax, catch their breaths and even enjoy moments of contemplation. Water proves to be very soothing mentally and spiritually. At Lennar, users are welcome to either sit inside or outside with access to a fountain which spouts water all day producing a calming sound.



### 12 Mystery

Mystery is the promise of more information through interrupted view. It evokes feelings of curiosity, however, if not carefully done it can create avoidance behaviors. In this case the expectation of where the path of columns will lead may cause some anxiety for the final purpose of the space is not fully legible. However, behind every angled wall there is a different room, so the user can expect to receive more information as they approach each angled wall.



### 25 Branding

The University of Miami logo is on the wall as soon as you walk in the space.

# TRACE BEHAVIOR

## CONCLUSION

Behavior Tracing shows the unique characteristics of an environment and the user's perception of the space. The perceived relationship between the many elements is what allows the user to form impressions and possible decisions. The group visited both case studies, The Lennar Foundation Medical Center and Hippocrates Health Institute, in search for a list of environmental attributes and keeping data by photographing these existing factors.

This study will help analyze the space from the user's viewpoint by aiming to understand if these behaviors which were found in both facilities add any value to the user experience on the space. Responses to an interior attribute are individual, however, certain factors tend to cause the same effect on multiple users whether positively or negatively. This study will help determine if those existing factors are needed or irrelevant to the general user experience.





# OPERATIONALIZATION

## RESEARCH QUESTION

What role does **Interior Design** play in fostering **well-being** to a faster recovery in **cancer patients** undergoing treatment?

## CONCEPTS

1. How does **lighting** affect the healing process?
2. What types of **entertainment** foster positive and sustained interactions?
3. How will implementing **biophilic design features** in the built environment affect patients?
4. How does **audio and visual privacy** affect the patients?
5. How do **interior finishes & materials** contribute to patient well-being?

## DEFINITIONS

### Lighting

Lighting in the interior built environment, whether natural or artificial, enhances the emotional and psychological factors that affect the healing process and well-being of patients.

### Entertainment

Entertainment within a healthcare facility will help comfort, welcome, and help with the perception of time (Boscherini. Giuseppe 2017). Entertainment can range from physical activities to listening to music while resting.

### Biophilic Design Features

The connection to Biophilic elements can help reduce stress, improve mood and self-esteem (Mazuch, 2017) Biophilia helps explain the human attraction to nature.

### Audio and Visual Privacy

Human senses do not work in isolation, in a healthcare facility positive audio and visual elements will assist patients reducing distress, while improving the healing process, and sleep patterns. Audio and visual elements range from partitions obstructing the view to sound systems incorporated for sound masking.

### Interior Finishes and Materials

The proper selection of finishes and materials can improve the experience one has within the built environment. Interior finishes and materials range between the paint color on a wall to the furniture that occupies a space.

# OPERATIONALIZATION TABLE

To ensure alignment between the main research concepts and the survey questions, an operationalization table was used. These concepts were drawn from the literature review.

OPERATIONALIZATION TABLE							
THEORY	RESEARCH QUESTIONS	CONCEPT	VARIABLE	DEFINITION OF VARIABLE	INDICATOR	DATA SOURCE	SCALE OF MEASUREMENT
Well-being	How does lighting affect the healing process?	Lighting	Autonomy	Being in control of the amount and type of light available in the space	Lighting control	Quantitative	Ordinal
	What types of entertainment foster positive and sustained interactions?	Entertainment	Positive Distraction	Activities that help with distracting the patient and shift their time perception	Entertainment activities	Quantitative	Nominal
			Positive Distraction	Activities that help with distracting the patient and shift their time perception	Sense of community	Quantitative	Nominal
Well-being	How will implementing biophilic design elements in the built environment affect patients?	Biophilic Elements	Presence of nature	The need or want for an individual to be near or within the natural environment	Attraction to nature	Quantitative	Nominal
Well-being	How does audio and visual privacy affect patients?	Privacy	Visual Privacy	Free of exposure relating to visual information from the public	Comfort Degree of Privacy	Quantitative	Nominal
			Audial Privacy	Free of exposure relating to audial privacy from the public	Noise Level	Quantitative	Nominal
Well-being	How do interior finishes and materials affect patient well-being?	Interior Finishes and Materials	Architectural Finishes	Relationship between materials, finishes and comfort	Comfort Color Palette Presence of Natural Materials	Quantitative	Ordinal

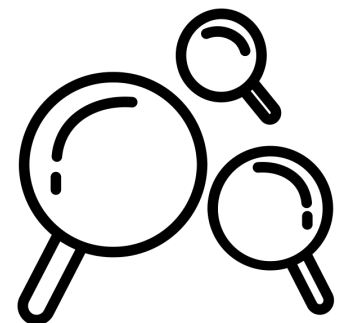


## RESEARCH METHOD 3: SURVEY

# **SURVEY METHOD**

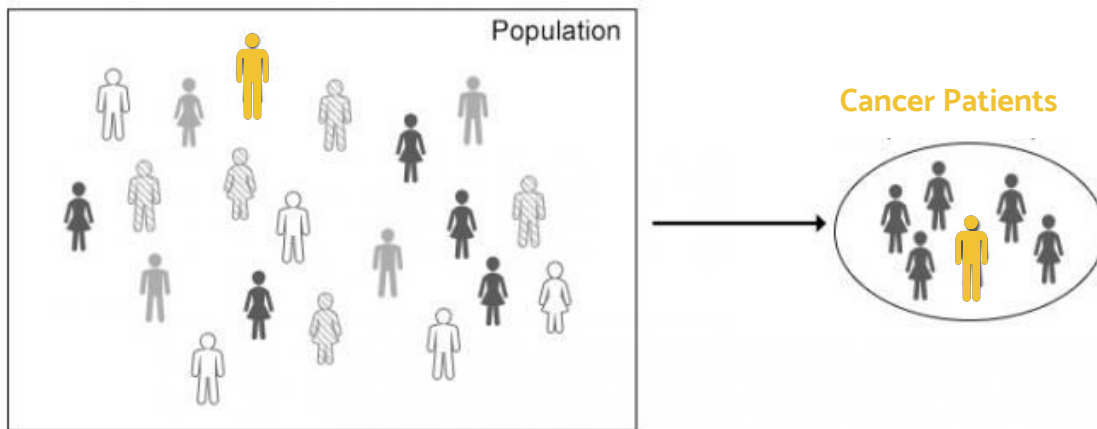
## **INTRODUCTION**

The survey questionnaire was developed through carefully revising the literature review and developing concepts with indicators that could be measured. The intent for these indicators was to understand what helped a patient while undergoing treatment. To best gather the accurate data the questionnaire was created with a variety of questions measuring satisfaction.





# SAMPLING



## PURPOSIVE SAMPLING

Our sampling method is purposive as our audience is formed by patients who are currently diagnosed with cancer or are in remission. Hippocrates Health Institute and Lennar Foundation Medical Center treat other patients, their focus is not solely oncology patients. Therefore, cancer patients needed to be identified in both facilities.

### Sampling Size

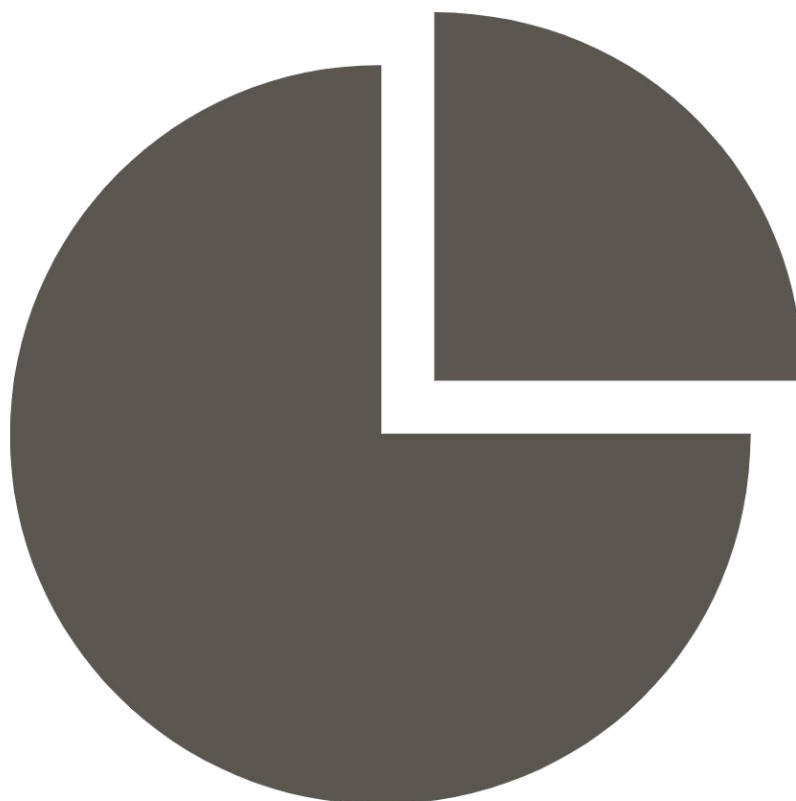
Pilot Questionnaire: 10 participants from Hippocrates Health Institute

Final Questionnaire: 42 participants Hippocrates Health Institute

Pilot Questionnaire: 10 participants from Lennar Foundation Medical Center

Final Questionnaire: 35 participants Lennar Foundation Medical Center

Hippocrates Health Institute typically has 80 patients enrolled in their programs. The sampling size for this facility is representative of their population as , per week. Therefore, it is a very generous sampling of the entire population of cancer patients. In regards to Lennar Foundation Medical Center, thousands of patients visit the facility each week, so a sampling of 40 patients provides a generalization based on the whole population.



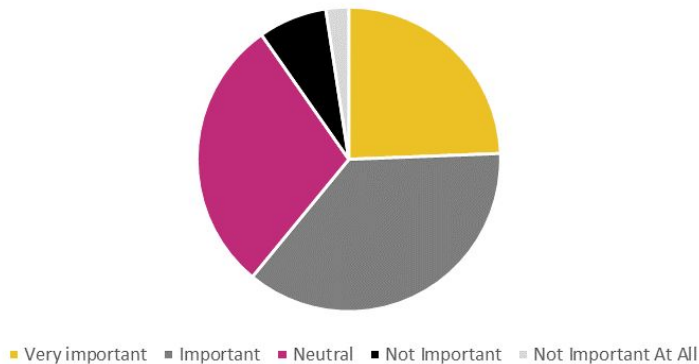
# DATA ANALYSIS AND FINDINGS

**Hippocrates Health Institute**

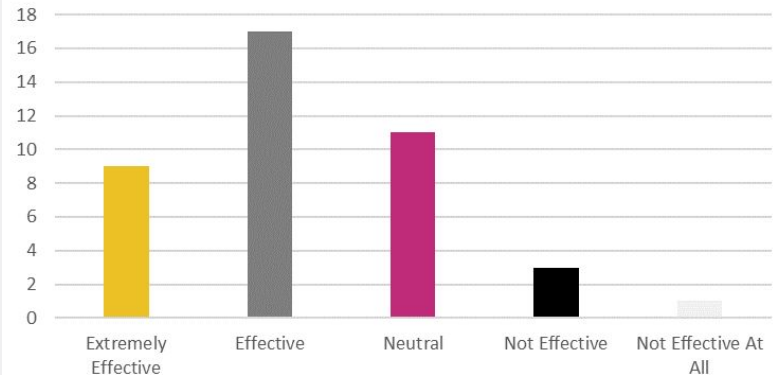
# DATA ANALYSIS

## Hippocrates Health Institute

Q1. How Important was it for you to control Lighting in the Treatment Room?



Q2: In Regards to your Healing, How Effective was Having Lighting Control in your Room?



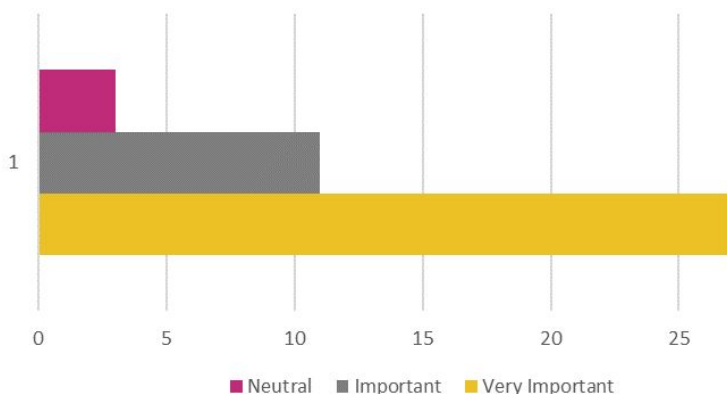
## LIGHTING ANALYSIS

Understanding lighting control at Hippocrates Health Institute (HHI) was difficult to evaluate due to the patients understanding of the words “treatment room.” The data indicates that 40% of patients felt neutral, the question should’ve been more specific when referring to lighting during their treatment. “Treatment” encompasses various aspects of healing. In addition, because patients stay on campus for the duration of the treatment, lighting control also encompassed their personal accommodations, which is possibly the reasoning behind the varied effectiveness of lighting control.

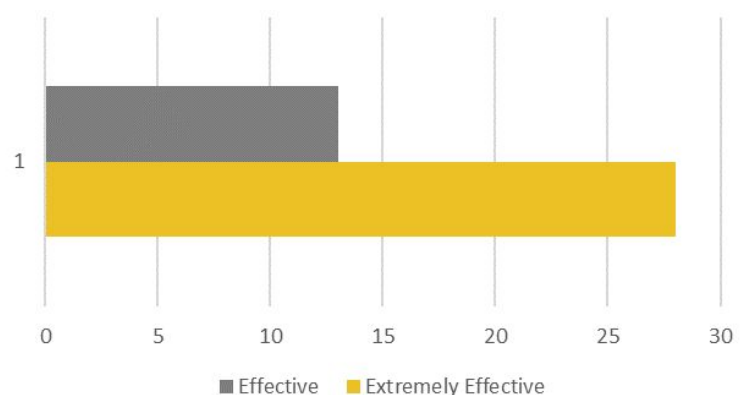
## ACTIVITIES ANALYSIS

Activities such as yoga, swimming and workshops are considered extracurricular activities at most facilities. However, at Hippocrates Health Institute, the activities are considered essential parts of the overall treatment program. Therefore, all patients participate in the physical activities as long as their health enables them to do so. Regardless of health, the interactive workshops are attended by all patients, which is why we noted such a strong effect on these activities to patient healing.

Q3. How Important is Access to Interactive and Solo Activities During Your Treatment?



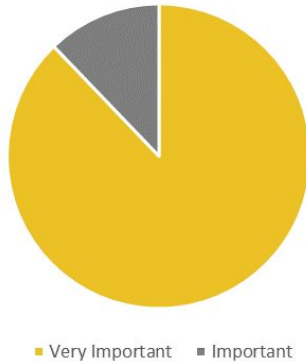
Q4: During your Stay, You Had Access to Various Activities. (Yoga, Swimming, Workshops). How Effective Were These Activities in Contributing to your Healing?



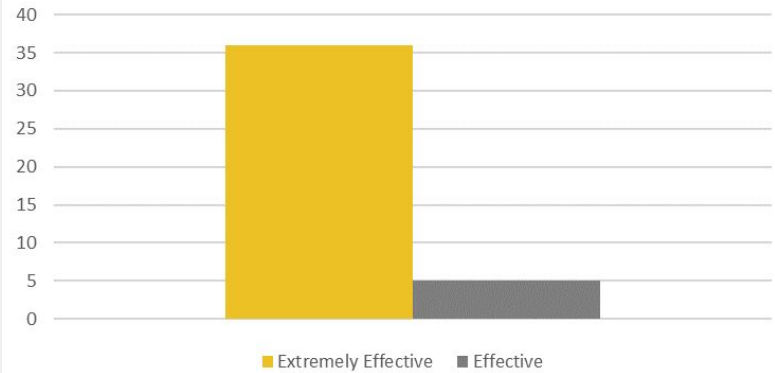
## DATA ANALYSIS

### Hippocrates Health Institute

Q5: How Important was Community Support in Your Healing Journey?



Q6: How Effective was the Community Support in Your Healing Journey?



## COMMUNITY ANALYSIS

For patients at Hippocrates Health Institute, community plays a crucial role in healing. As researchers, we initially expected to see significant importance placed on the alternative treatments, rather than community. However, we see that patients credit a lot of their healing to the support system at the facility.

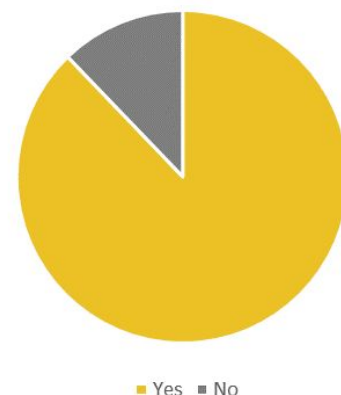
## BIOPHILIA ANALYSIS

It is indicated that Hippocrates Health Institute was designed with biophilia in mind. For the duration of the treatment, patients are removed from a built environment and submerged into native tropical landscape where water features and fountains around the property. Therefore, it was not a surprise to see patients correlate the native Florida landscape to their healing.

Q7: How Important is it for You to Have a Visual Connection to Nature? (Water Feature, Gardens, Daylight)



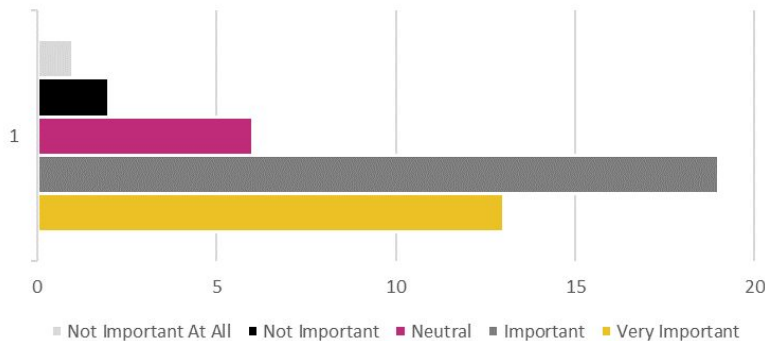
Q8: Does Having Access to Nature During Your Treatment Affect Your Experience?



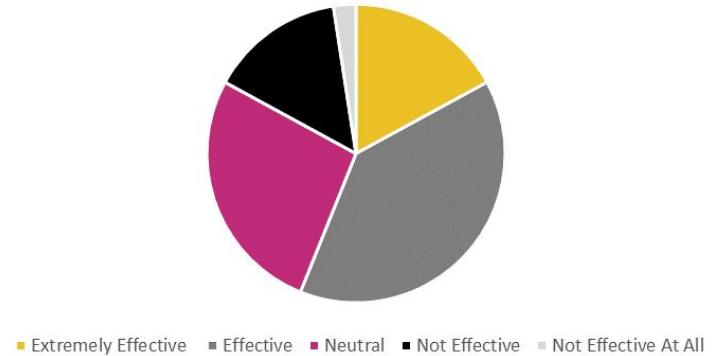
## DATA ANALYSIS

### Hippocrates Health Institute

Q9: How Important was it for Your Healing Process to Limit the Amount of Visual Access People had to You When Getting Treatment?



Q10: How Effective was it for your Healing Process to Limit the Amount of Visual Access People had to you During Treatment?



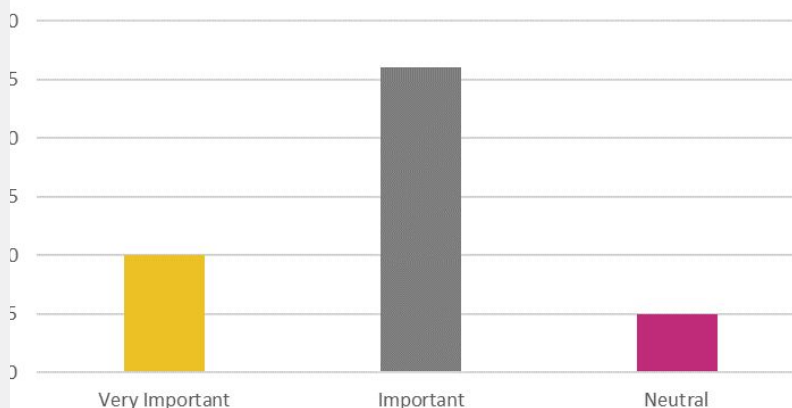
## VISUAL ANALYSIS

In the privacy categories, we noted more variation than initially expected. We believe it was led through the definition individuals had of what “treatment” means. We defined treatment as any form of activity/environment that led to wellbeing. The expectation was to see high importance outweigh the other categories. However, depending on which treatment patients were thinking about when answering had an effect on the outcome. For instance, visual privacy is not important during workshops or group therapies. It is of significant importance when receiving spa treatments, injectables and other alternative medicine therapies.

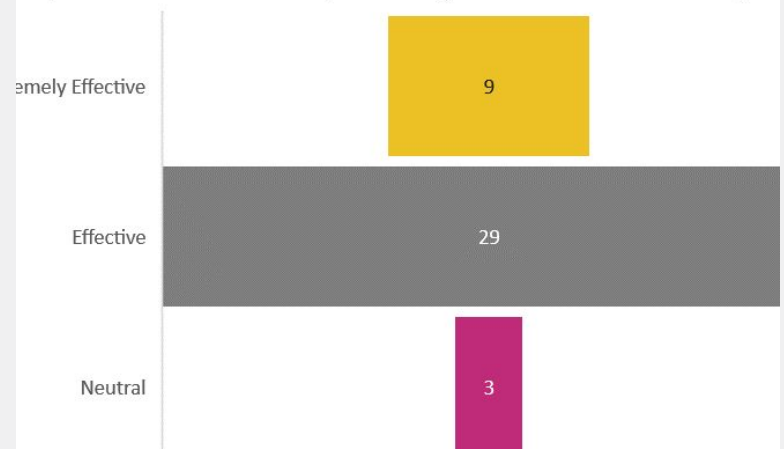
## AUDIO ANALYSIS

We observed a varied response from patients regarding audio privacy, with more patients stating that privacy was effective. Surprisingly were the amount of patients that rated audio privacy as neutral in terms of effectiveness. Considering that part of their “treatment” in Hippocrates Health Institute is to be open and share one’s story, than it is not surprising that about 25% of patients concluded that audio privacy was not effective or necessary in their healing. Individuals do not need high levels of audio privacy if provided with a similar environment, as they wanted to hear others and be heard.

Q11: How Important was it for your Healing Process to Have Audio Privacy?



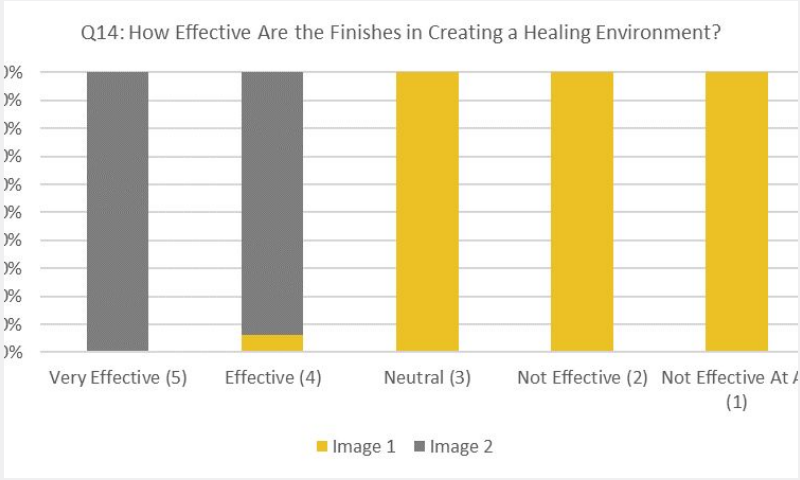
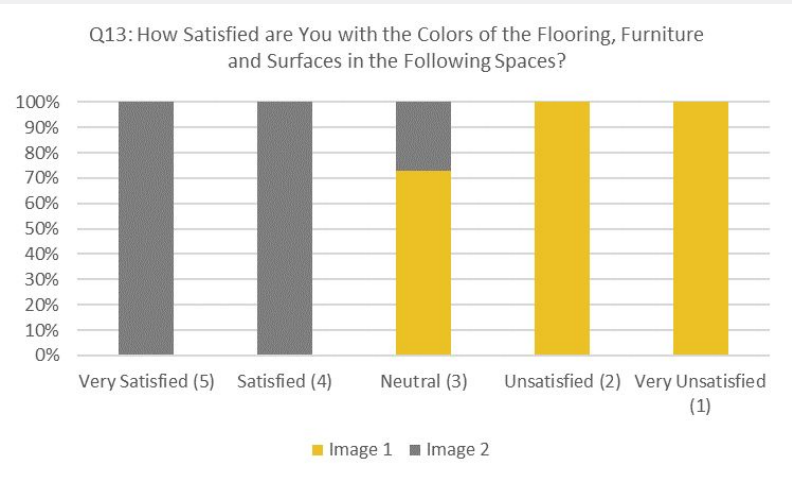
Q12: How Effective was it for your Healing Process to have Audio Privacy?





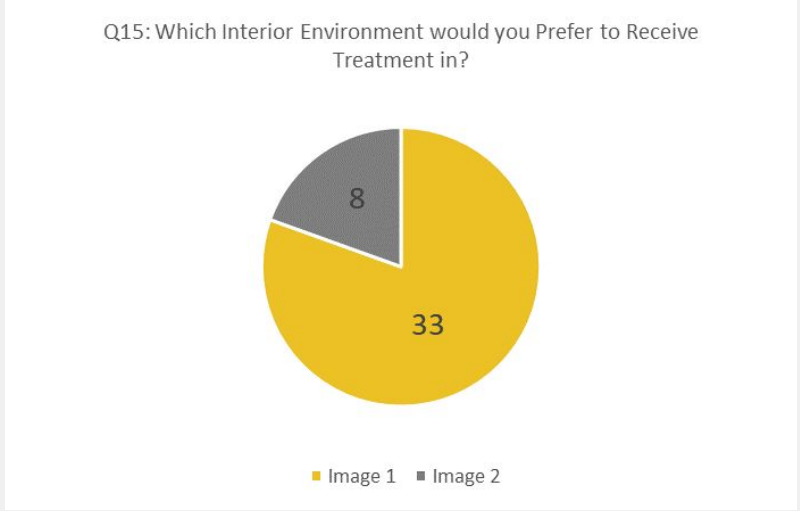
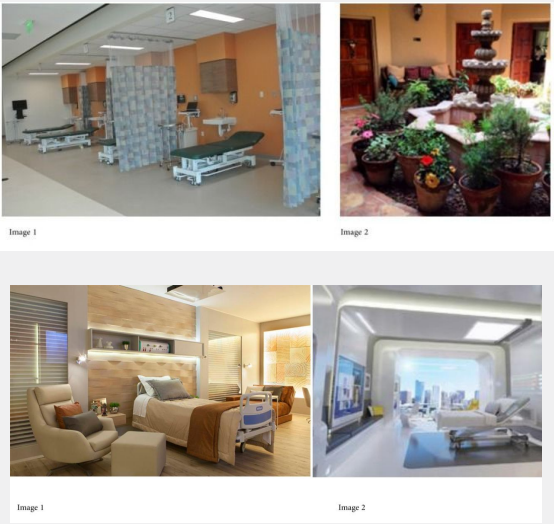
# DATA ANALYSIS

## Hippocrates Health Institute



# FINISHES ANALYSIS

Finishes at Hippocrates Health Institute were selected and arranged in a way to create an environment that resembles a home. Therefore, research showed a preference for Image 2 over Image 1 in questions 13 and 14. The major difference between these two images was the incorporated use of greenery and a water fountain, which add to the idea of biophilic design. In regards to color, guests overwhelming preferred the warm color palette with indirect lighting as opposed to the cool color palette, also with indirect lighting. In question 15, Image 1 evoked more of a home-like environment as opposed to Image 2, so it was not a surprise to noted more patients who preferred Image 1.



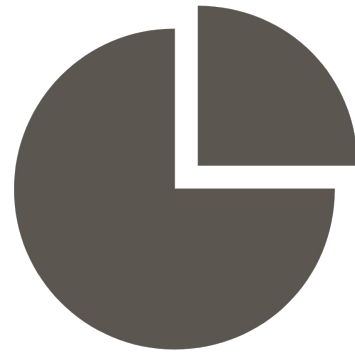
## FINDINGS

### Hippocrates Health Institute

As we reviewed previous mappings along with the results of the questionnaire we began to see connections between what was observed and participant responses. Hippocrates Health Institute uses form to encourage socialization. According to our survey questionnaire patients credit a lot of their healing to the community support system found in the facility. This could be enforced with the activity mapping done in Wigmore hall, the tables within this space were round and placed in close proximity. Groups of individuals shared tables as they held conversations over lunch and dinner. Non-verbal communication was also observed as patients sitting in different tables smiled at each other as they walked by.

Our data indicates that patients see activities as an essential part of their overall treatment. Through the cognitive maps we noticed that the participants drew areas they were most familiar and attracted to, out of scale. Participant A used the outdoor gym, the salon, the oasis spa, and the pool. Participant B used the pool and the oasis spa the most throughout their stay. All of these spaces have one aspect in common; they are all spaces where activities occur. These patients were also sitting together during lunch when they were asked to participate. Reinforcing the positive aspects gained from different activities. This leads to our next finding; patients at HHI did not desire audio privacy. In fact 25% of the patients said audio privacy was not effective in relation to their healing. They wanted to hear others and be heard. In order to better understand this aspect we referred back to our trace behaviour mapping, patients interact with others as they desire. The campus fosters social cognitive freedom. Environments provide prospect and refuge. Seating was built in exterior areas that allow patients to be outside without completely being exposed.

When analyzing the results of visual privacy we obtained unexpected results. We believe this was because HHI (Hippocrates Health Institute) gives treatment a new definition. It can range from juicing to spa treatments. The results were based on the specific treatment the patient had in mind at the moment of answering the question. For instance

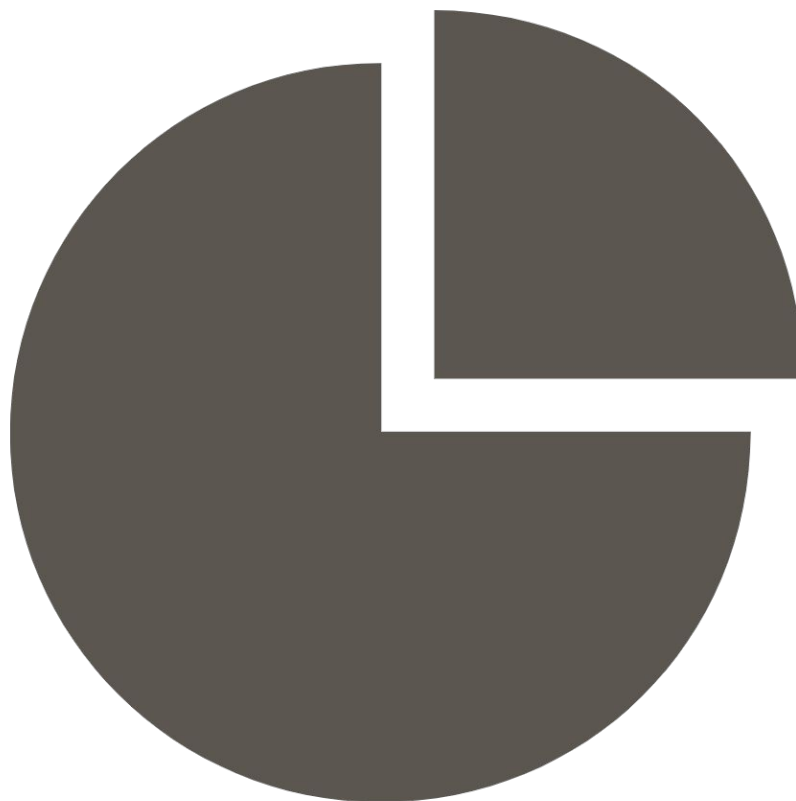


during our activity mapping individuals who were furthest from crowds were likely to be meditating, they did not require visual privacy but some degree of audio privacy.

As we expected, the data supported our hypothesis; patients correlate the natural landscapes to their healing process. During our activity mapping individuals were drawn to seating areas where bodies of water were present whether it was alone or accompanied by others. HHI was designed to encourage patients to be outdoors, even if it is just when they are walking from one building to another. Along the paths benches and different seating areas were observed. Traces of footsteps and chairs out of place were documented.

At HHI, patients do not have really have control over their lighting sources in common areas. Although 26 patients indicated that lighting control was important in treatment rooms, we are uncertain if the results reflect what they know as a traditional treatment room such as where they receive a massage. This was certainly one of our limitations, along with measuring visual privacy. Our conclusion cannot solely be based on the results of the questionnaire, we had to make connections with all of the other data in order to make the best assumption.

Regarding materials and finishes, as expected, the audience opted to select the image that created a home like experience and warm lighting. Based on all three participants for the cognitive mapping, individuals are inclined to specific areas because they are familiar to them, they feel comfortable and want to spend more time there. This led to select the image that reminded them more of their home versus an institution.



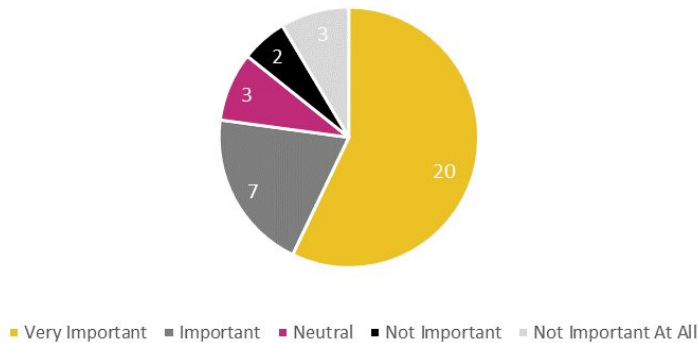
# DATA ANALYSIS AND FINDINGS

**Lennar Foundation Medical Center**

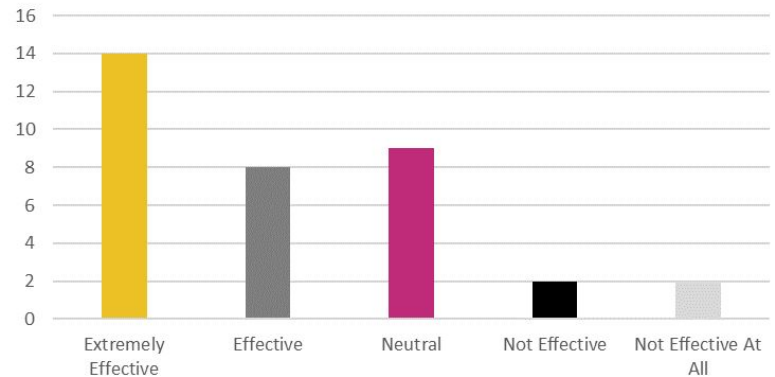
# DATA ANALYSIS

## Lennar Foundation Medical Center

LQ1: How Important was it for you to Control Lighting in the Treatment Room?



LQ2: In Regards to Your Healing, How Effective was Having Lighting Control in your room?



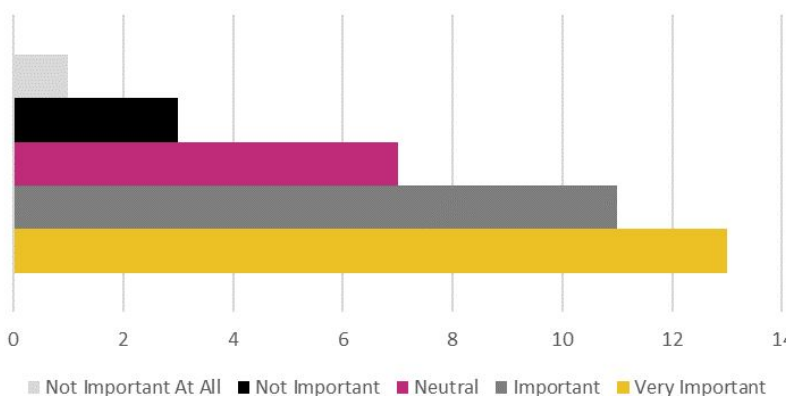
## LIGHTING ANALYSIS

In regards to lighting, the pie chart shows that 57% (20 participants) concluded that lighting was very important. At Lennar Foundation Medical Center light control is not offered, however, they were still questioned about lighting control in order to determine the effect the lack of control had in their healing. There is only an on/off switch which is next to the entrance and away from the patient's treatment chair. Since the patients are bound to the chair, they are unable to control it themselves, yet the majority of the survey participants still believed that the current lighting control at Lennar was effective to their healing.

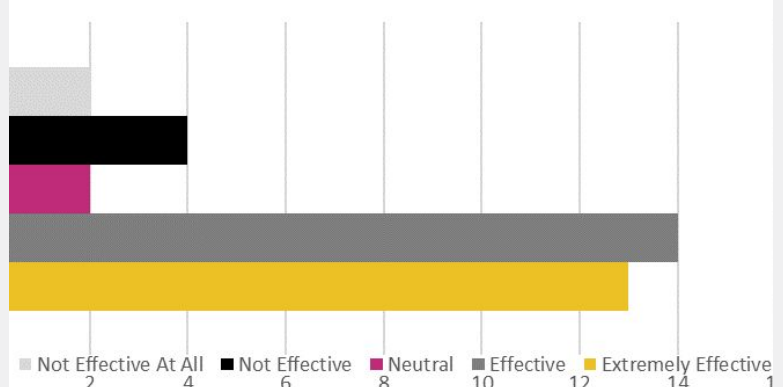
## ACTIVITIES ANALYSIS

Lennar's patients have access to entertaining activities which serve as a distraction to make time perception during treatment feel shorter. These include volunteers who play music for them as well as arts and crafts. With treatments lasting as long as 6 hours, the majority of the survey participants believed that these activities were very important during treatment as well as effective. The activities made the patients feel that they were not in a hospital environment. A very small group of interviewers said they were not satisfied with the activities offered and they would prefer to use their phones and work on laptops while they were receiving the treatment.

LQ3: How Important is Access to Interactive and Solor Activities During Your Treatment?



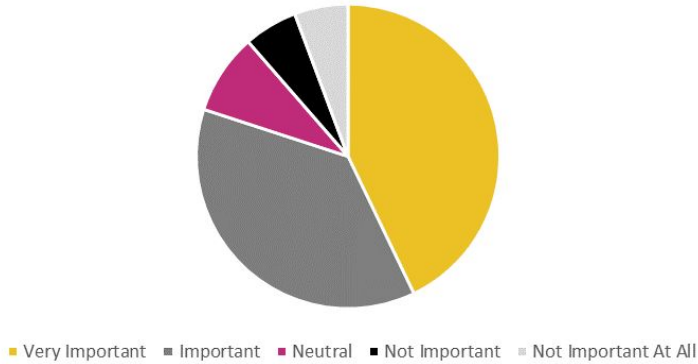
LQ4: During your Stay, You had Access to Various Activities While Getting Treatment (Crafts, puzzles, listening to music). How Effective were these Activities in Contributing to your Healing?



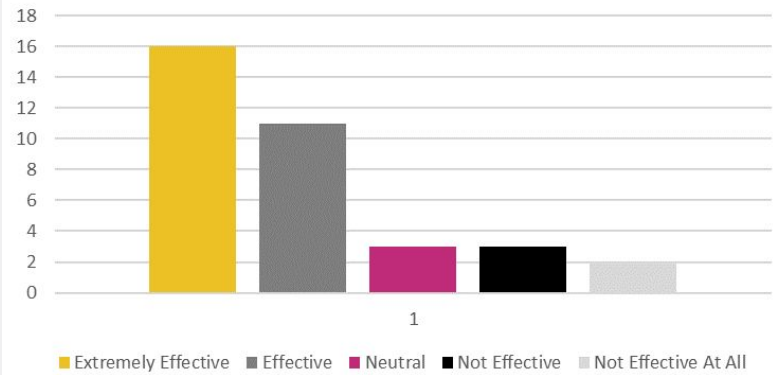
## DATA ANALYSIS

### Lennar Foundation Medical Center

LQ5: How Important was the Community Support in Your Healing Journey?



LQ6: How Effective was the Community Support in your Healing Journey?



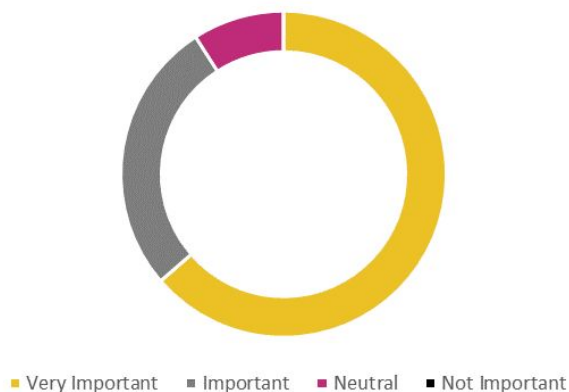
## COMMUNITY ANALYSIS

Community support varies at Lennar. It can come from family, staff, and friends. The majority of the survey participants believed that this kind of support is very important as well as extremely effective in their healing journey. Only a small percentage believed that it was not important or effective this may be because either they had no access to a support system or it really did not make a difference to their journey. However, 40% of the interviews mentioned that the community support was not important at all for them.

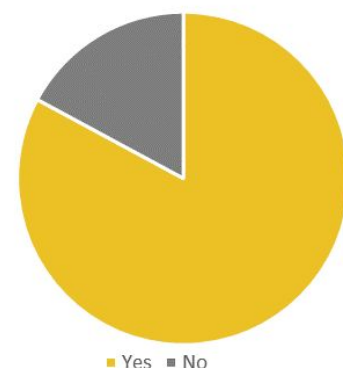
## BIOPHILIA ANALYSIS

Lennar has spacious curtain walls which can be seen across treatment rooms. From the windows, the streets of Coral Gables and the train station are seen. However, patients from the treatment rooms have no access to this view, only to daylight. For safety issues they do not include plants inside the rooms but they have a rooftop garden to which patients can be wheeled into. Since the facility is lacking a visual connection and easy access to nature, it was not a surprise when the majority of participants believed that a visual connection with nature was very important and having access to nature would have affected their treatment experience.

LQ7: How Important is it for you to have a Visual Connection Nature?



LQ8: Does Having Access to Nature During Treatment Affect Your Experience?

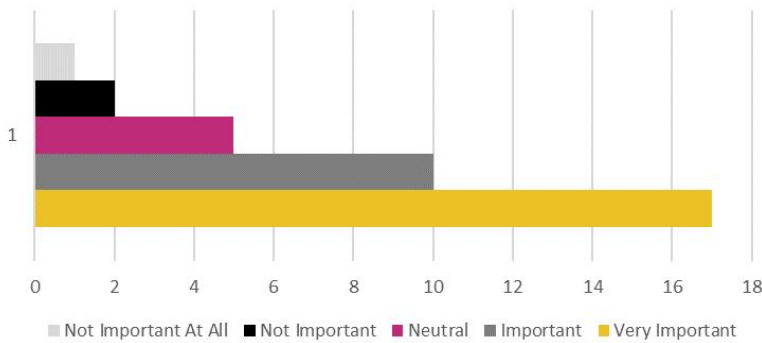




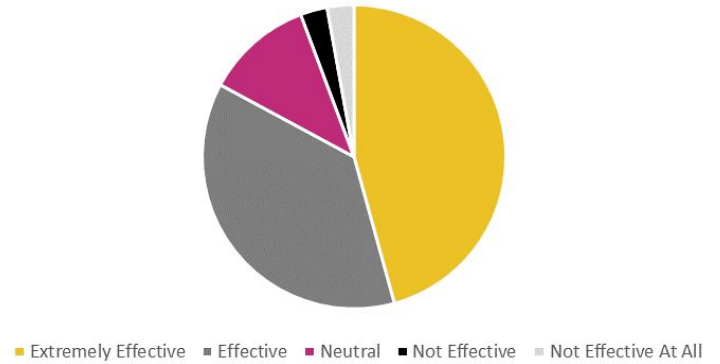
## DATA ANALYSIS

### Lennar Foundation Medical Center

LQ9: How Important was it for your Healing Process to Limit the Amount of Visual Access People Had to You While Receiving Treatment?



LQ10: How Effective was it for Your Healing Process to Limit the Amount of Visual Access People had to you During Treatment?



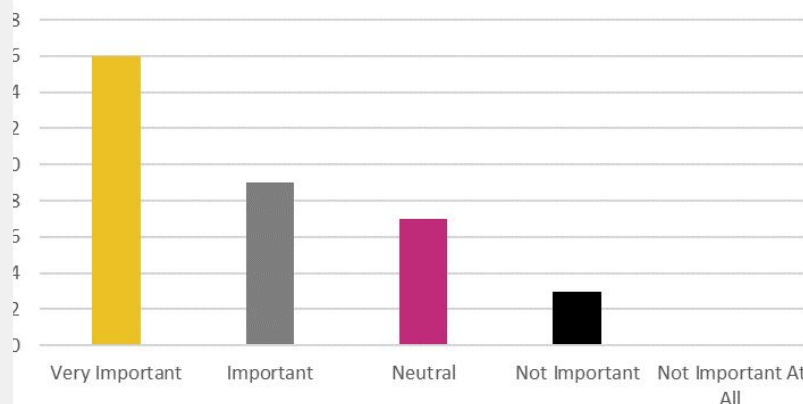
## VISUAL ANALYSIS

Lennar's treatment rooms are personal. They have a glass partition and a curtain which can be drawn when some degree of privacy is desired. The majority of participants believed that visual privacy is extremely important when receiving treatment. Because the curtain can be drawn at the patient's desire then the participants felt that it was very effective for their healing to limit the amount of visual access people had to them while getting treatment.

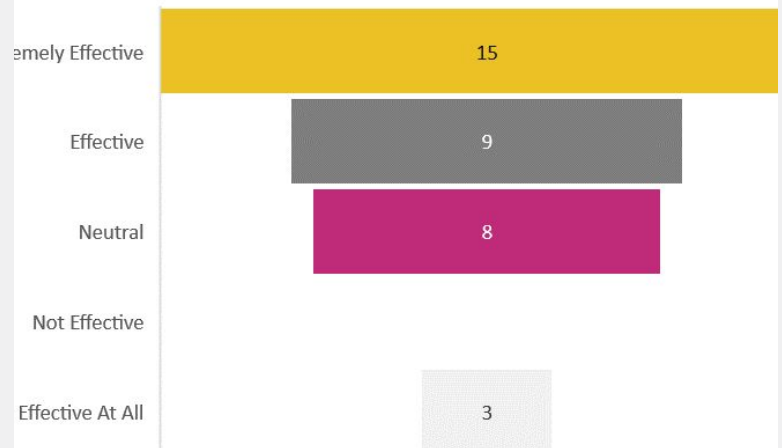
## AUDIO ANALYSIS

The majority of the participants believe that having audio privacy is very important and effective for their healing process. However, a close tie can be seen between those who believe audio privacy to be effective and those who believe audio privacy has no importance in the matter. Since at Lennar the only separation between the outside and the inside of a patient's room is a glass partition and a curtain, then the acoustical attenuation is lacking. This could lead to infer that there was not a high level of audio privacy hence the tie between the effective and the neutral.

LQ11: How Important was it for Your Healing Process to Have Audio Privacy?

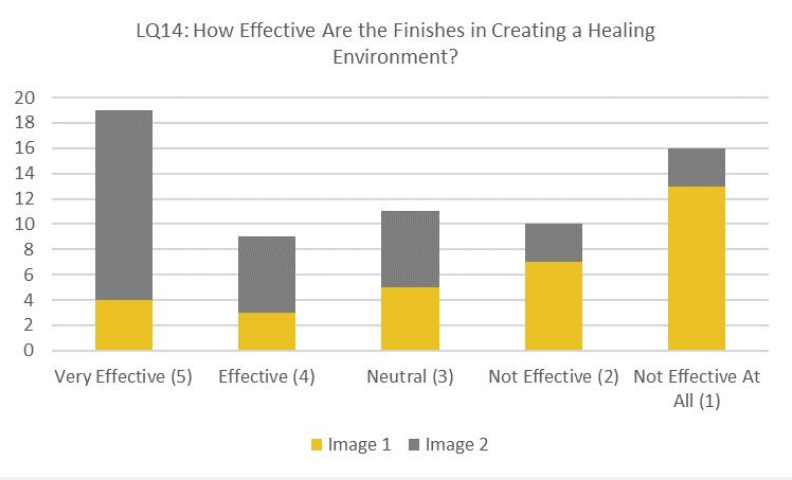
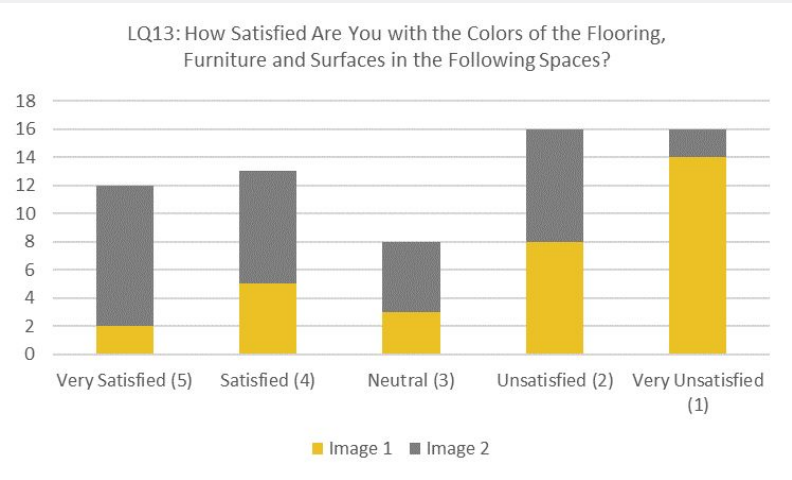


LQ12: How Effective was it for your Healing to Have Audio Privacy?



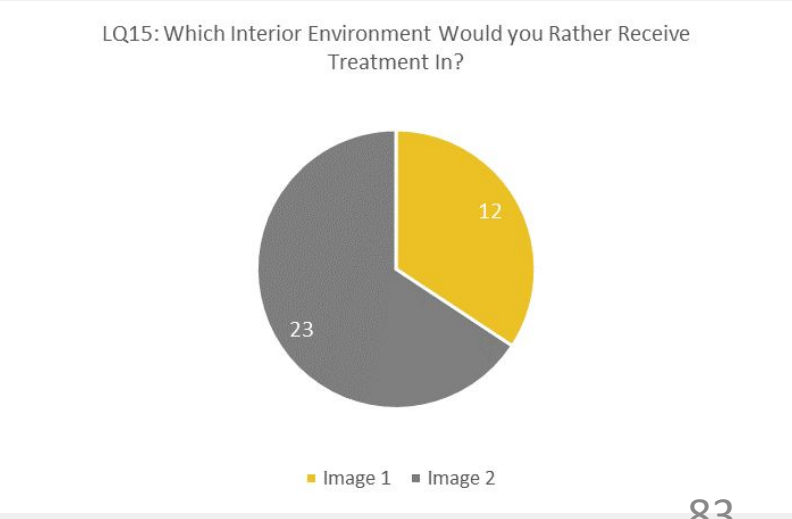
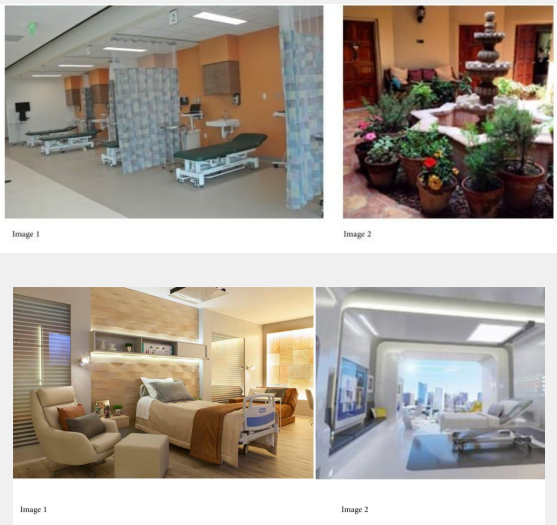
# DATA ANALYSIS

## Lennar Foundation Medical Center



# FINISHES ANALYSIS

Finishes play a key part at Lennar. Their aim when designing the space was to eliminate to the possible extent the cold and sterile feeling of hospitals. However, when analyzing the data it can be observed that the majority of participants show a higher level of satisfaction for Hippocrates' more natural approach (Image 2) than for Lennar's institutionalized look (Image 1). Also, the majority of participants showed a higher preference for the room with the cool lights. Image 1 resembles a home like environment with all the warm/indirect lighting; so the survey results were surprising when participants, overall, would prefer to receive treatment at a place that would resemble Image 2 of question 14.



## FINDINGS

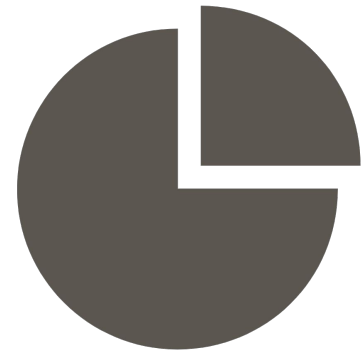
### Lennar Foundation Medical Center

Activities while having treatment plays a crucial role in a patient's healing process at Lennar Foundation Medical Center. Time perception can be detrimental to their mental health, therefore, the activities provided by the facility indicated effectiveness. Through one of the activity mappings it was observed when a patient that was hooked on the medication went on a walk along the curtain wall with a nurse. He then sat in one of the seating arrangements laid out by the window. Taking in all the natural sunlight, produced a restorative effect on the patient. One of the entertainment options Lennar Foundation Medical Center offers is a guitarist playing for the users. This becomes a positive distraction and it allowed the patients that were listening to the music to focus on the melody and distract themselves for awhile, not feeling that they were stuck in a hospital room.

Twenty-seven out of the thirty-five participants said that the community support was important to them. The first limitation was observed, although we have the data indicating community is crucial, it is mentioned that during treatment patients are bound to their chairs so how is the community support being incorporated? Based on the cognitive mapping, the lack of accommodations for the patient's visitors forces them to wait outside. Participant B remarked that the chair where his wife had to spend 4+ hours with him was very small and uncomfortable. Situations like this do not promote the proper environment for community support.

Patients enjoy to walk by the curtain wall and when they're feeling up for it, they can also go upstairs into the roof garden. Through the activity mapping it was observed that patients/ guests often made themselves coffee and would prefer to be seated on the chemotherapy bays by the ribbon window. The data and our observations reinforce the attraction individuals have to nature.

As expected visual privacy is important. Patients do not want to be seen while undergoing treatment. In treatment rooms patients can move the curtain to their desired degree of privacy. Consultation rooms and offices within



the facility are composed of frosted glass, it allows daylight to enter the space without giving up their visual privacy. Participant C in the cognitive mapping assessment, shared his/her feelings in reference to the close proximity the patient had to the doctor in the consult rooms. She/He elaborated on the discomfort of scale of the chair, and its placement, it led to feeling uncomfortable when speaking with the doctor. Audio privacy was highly sought. Twenty-five participants said it was important to have audio privacy and twenty-four said it was effective towards their healing to have privacy.

Regarding materials and finishes, participants presented us with unexpected results. While they preferred the home like-furniture that Hippocrates Health Institute provides they preferred cool lighting. This led to our design guidelines. Patients do not necessarily mind the cool lighting hospitals have, but they do prefer indirect lighting. They can create connections with materials that they are more familiar with and give them the sense of a home.



## CONCLUSION

## COMPARISON OF FINDINGS

### Hippocrates Health Institute

#### Lennar Foundation Medical Center

In both facilities activities play a crucial role for the patients healing process. As a type of entertainment, this helps with time perception, it is a positive distraction, but it also has potential to increase the interaction one patient has with another. The access to activities involve more than one aspect that lead to well-being. For Hippocrates Health Institute (HHI), the activities that involve small groups and communication have the most impact on patients. In the case of Lennar Foundation Medical Center, individual activities are crucial. Patients are often tied to their chairs during their treatment. We believe that a combination of both creates a good balance.

As expected, the support of the community is essential for a patient's well-being whether it is a salutogenic or pathogenic facility. We confirmed this through the mapping assessments and with the collection of data. HHI is highly successful with the sense of community and support they provide. It begins from the moment an individual arrives at the facility. All of the people a patient encounters are willing to share their story or provide any kind of support needed. HHI is focused heavily on the human interaction. For Lennar, the sense of community comes mostly from exterior sources; friends or family. The community support within the facility is mostly through the staff members. We concluded that the community support is essential for mental health, with HHI is very successful. We concluded that options could be incorporated for a traditional facility like Lennar that could lead to a high rate of satisfaction within their patients.

As our research indicated, people are attracted to nature. We were able to confirm it through our data collection and analysis as well as the observations made during field work. Patients attending both facilities sought to be near biophilic elements. HHI revolves around nature. The facility was designed to adapt to the existing landscape as they encourage individuals to be outside. HHI successfully incorporates water fountains, plants within their courtyards and open areas, skylights and views from their windows. At Lennar, they incorporated ribbon windows in their reception areas, a double height ceiling that maximizes the daylight and rooftop gardens that can be utilized by patients even when undergoing treatment. However, if patients are not wheeled out to the rooftop garden, they have no access to natural landscapes.

As stated previously, we obtained unexpected results from HHI in regards to visual privacy. HHI gives treatment a new definition. They consider the support from the community, their diet, their lifestyles it is all a form of treatment. And that is reflected in our data collection and analysis, patients did not consider visual privacy very important, it can be assumed that the degree of privacy depended on the activity being performed. On the other hand, at Lennar, visual privacy was of concern. Patients wanted to be able to control when they were seen. Although they only had a curtain to visually separate them from others passing by, it was effective. In conclusion visual privacy is required regardless of the facility. The degree of privacy depends on the activity.

Based on our findings the facilities are on opposite ends of the spectrum in relation to audio privacy. At HHI the patients do not want the audio privacy. In fact they desire to communicate with others. It is a form of treatment in their journey that positively impacts them. For Lennar, 11 out of the 35 participants said they thought audio privacy was not important or they did not care. The expectation was to see that number be a lot less. Based on the research, we believed we would see a more divided outcome for audio privacy. However, the facility lacks acoustical properties. We believe that the individuals who answered they did not care or that it was not important may have become accustomed or did not know what it was like to not hear the surrounding noises during treatment. In conclusion, audio privacy is also a factor that will depend on the activity being performed. At HHI, we would understand wanting audio privacy during an acupuncture treatment, just like in Lennar patients want audio privacy during chemo sessions.

In reference to finishes and materials the participants at HHI were inclined to like the current aesthetics. It could mean it led them to feel like it was familiar. Materials and finishes that they could make connections to and felt comforting. They also opted for warm lighting which we believe is because that is the type of lighting used in several spaces within the facility. On the other hand, patients at Lennar preferred the images of HHI, which we believe it is for the same reasons. However they opted for cool lighting. It is possible that if the patients at HHI had experienced cool lighting in more spaces they would have preferred it as well.



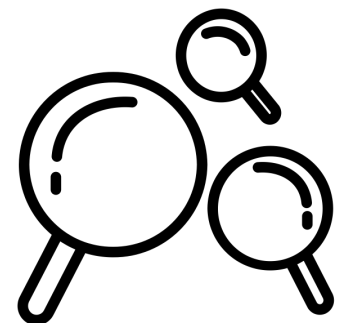


## **RESEARCH METHOD 4: INTERVIEWS**

# INTERVIEW METHOD

## INTRODUCTION

In order to better understand the data collected we further developed questions that could be explored during an interview. Participants were guided in semi-structured interview and allowed to continue speaking in regards to their experiences in an open-ended manner.



# PARTICIPANT OVERVIEW

## Hippocrates Health Institute

### INTERVIEW 1 FOCUS GROUP 1

**PARTICIPANT 1**      **Participant:** Woman, White, aged 41-50  
**Diagnosis:** Stage Three Ovarian Cancer  
**Education:** College Degree

**PARTICIPANT 2**      **Participant:** Woman, Black, aged 51-60  
**Diagnosis:** Breast cancer  
**Education:** Graduate degree

**PARTICIPANT 3**      **Participant:** Woman, White, aged 41-50  
**Diagnosis:** Breast Cancer  
**Education:** College Degree

**PARTICIPANT 4**      **Participant:** Male, White, aged 51-60  
**Diagnosis:** Cancerous Tumor  
**Education:** Graduate Degree

**PARTICIPANT 5**      **Participant:** Male, White, aged 41-50  
**Diagnosis:** Thyroid Cancer  
**Education:** College Degree

**Background:** This interview was conducted for 30 minutes with three women and two men. Four of the patients completed their three weeks at Hippocrates Health Institute and were getting ready to check out. One patient had completed with three weeks and opted to stay for a fourth week. All patients had completed the Comprehensive Cancer Wellness Program.

**INTERVIEW 5**      **Participant:** Woman, White, aged 40-60.  
**Diagnosis:** Breast Cancer  
**Education:** College Degree

**Background:** This interview was conducted for 15 minutes with one woman. The patient completed her three weeks at Hippocrates Health Institute after receiving radiation treatments and had a surgery. She was getting ready to leave the facility. She completed the Comprehensive Cancer Wellness Program.

**INTERVIEW 6**      **Participant:** Man, White, aged 60-70.  
**Diagnosis:** Liver Cancer  
**Education:** Some College

**Background:** This interview was conducted for 15 minutes with one man. He was a returning patient. Who was completing one week of the three week life transformation program at Hippocrates Health Institute. Three years in full remission.



## **INTERVIEW 1 FOCUS GROUP 1**

### **HIPPOCRATES HEALTH INSTITUTE**

# INTERVIEW 1 FOCUS GROUP 1

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

**Interviewer** [00:00](#)

What brought you here to Hippocrates Health Institute?

**Participant 2** [00:10](#)

I am here because I was diagnosed with breast cancer. For the second time and I came here to heal it to avoid a radical mastectomy and bones being removed from my ribs and muscles from my chest wall. Yeah, I didn't want to do that.

**Participant 1:** [00:35](#)

I actually first heard about Hippocrates about 18 months ago when I was first diagnosed, at that time, with stage three ovarian cancer that had already spread onto my liver. I was, I was pretty convinced that the alternative route and the route less followed is, is the one to take. And I decided as a last resort to have some chemotherapy, but because I was so frightened of chemotherapy, I took the advice of a very good integrative doctor, who does a lot of Chinese medicine as well, who suggested Hippocrates. It was almost as though the universe was telling me again Hippocrates and, and it was all of that. I think that made it, made the real difference.

**Participant 4** [01:30](#)

In April of this year, I was diagnosed with a cancerous tumor and doctors wanted to operate immediately but I thought that I would listen to my brother who said you should get on a plane and come on down and I did and you know I spent three weeks here and now I've just done a fourth week because I felt that it was important to get back.

**Participant 3:** [01:57](#)

I came here to Hippocrates in 2015 because I originally had a breast cancer diagnosis and I had a lymph node on my collar bone. It was about the size of an egg and I had a mass in my breast that was nine millimeters and within the three weeks that I was here, the lymph node in my collar bone completely resolved and the mass in my breast sank in half. So I knew that the medicine, the food and the lifestyle changes worked. I unfortunately did not follow through with the protocol with the plan that I had for myself. I wasn't doing everything. I wasn't taking care of myself the same way I wasn't exercising, I wasn't taking supplements, I wasn't juicing, and I was also allowing myself to get overwhelmed with stress. And I find it interesting in the past year and a half how I've started to see that. I hold my stress here, here, which is where I have symptoms right now.

**Participant 3:** [02:57](#)

Much to my surprise, however, I was diagnosed in 2017 May, 2017 with follicular non Hodgkin's lymphoma. I had a mass in my abdomen that was about the size of a grapefruit. I had that surgically removed. If I had known it was lymphoma, I probably wouldn't have had it removed. You know, I came here because I wanted to get a restart or recheck cause I know the lifestyle, I know how to do it. But I needed a break and this provided me with the perfect break.

**Participant 5** [03:46](#)

In February, I had a mass on my thyroid and I had a total thyroid rhotoxicity where they removed my thyroid. I have a rare type of thyroid cancer - only 5% of the population have it and ten weeks later I had a mass on my kidney removed I had retocell carcinoma totally unrelated to the thyroid and they removed 20 percent of my kidney. I had a robotic procedure, so I had two procedures, two major procedures in ten weeks time. Prior to that I was a healthy guy, running five six times a week, exercising and working and I thought I gotta find a different lifestyle I gotta stop this before it goes any place else.

# INTERVIEW 1 FOCUS GROUP 1

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

**Interviewer** [04:36](#)

How would you describe your healing experience here at Hippocrates?

**Participant 5** [04:44](#)

It's a great experience. There's probably nothing like it anywhere else that I've ever known of and I'm very happy that I came. And I think it's going to be very beneficial and it's a lifestyle. It's difficult but it's very doable.

**Participant 1** [05:02](#) The experience has been totally amazing. I knew of Hippocrates but I did not know exactly what Hippocrates does. And one thing that I was, very surprised about was the amount of people here with cancer. And number two, the the amount of people with healing stories from cancer. I had heard it was possible to do through raw foods and nutrition but the fact that they are doing so much work, so much deep work with therapies here, it's been absolutely life changing.

**Participant 2** [05:44](#) Amazing in one word. Its kind of scary to think you're going to go away for three weeks and not know anyone and not know what everybody is going through and to come here to find such lasting, bonding relationships. You learn so much about food and health and to be supported and welcome throughout the whole process even when you are going through the detox blues where you don't want to be bothered with anyone, everybody here is still supportive and understanding.

**Participant 4:** [06:24](#) Oh, absolutely. The real gem that most people will not tell you about is that the people here are on such a good wavelength. The people that you meet who are here for all different reasons are some of the most courageous, brave, intelligent people I have ever met in my entire life so they sort of set the example and the stage for me to follow and you know to be next to somebody who was told six years ago that they had two weeks to live is an amazing experience and then it gives you so much courage to somebody that has just been diagnosed. Wow you can go on and live and enjoy your life. That's the gem behind everything else. For me, it blended so well with my thought process to begin with which is that I never felt comfortable with sort of a lack of compassion that I think I had in eating so much meat and dairy and all these things that were a big part of what I was raised to think were good and nutritious food. and once I came here and learned a different way, a different path it just blended perfectly for me.

**Participant 3:** [07:47](#)

One of the great benefits of Hippocrates was that they put us into these smaller groups for the cancer part of it and people and like minded people coming together to heal from the same diagnosis. It generates an energy healing energy that really aids in our process to get well and my group, it is so powerful. We have a bond and a love that will definitely last our lifetime.

**Participant 2** [08:20](#)

The comprehensive cancer wellness program has been a really, really good experience. We are a Really, really nice group. And we have a trusted each other. So it was possible for us to open up our heart and our feelings. And we were laughing and we were crying and I had been through breast cancer surgery and then chemo and radiation. And I feel much lighter now because I've, through the diet I've detox and all the treatments and all my stomach and that area, it's much lighter. And then when, although when you start to detox and then you can start to taste much better than when you eat, cook food and lot of salt and pepper and spices.



# INTERVIEW 1 FOCUS GROUP 1

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Participant 5: [09:04](#)

Yeah, I agree. The comprehensive cancer wellness program has been a really good experience. I've learned that my thoughts literally contain myself. I was able to feel my body through eating correctly through visualizing my immune system, attacking the cancer cells. I would lay on my bio mat, which is an infrared mat, which I also learned about the power of infrared healing lights here at Hippocrates. But as I lay on that infrared mat, I would visualize my immune system killing the cancer cells, gobbling them up like Pacman, gobbled up the dots on the screen. I also learned about the power of detox, which I never knew before I started detoxing through vitamins.

#### Interviewer [10:02](#)

Can you describe how the environment here at Hippocrates has contributed to your healing experience so far?

#### Participant 2: [10:11](#)

As you get here, you just feel like you have your, you're bathed in this healing energy from so many people that have come here and, and healed themselves. And everyone here has an intent to heal themselves. And by doing that, they're really healing others. So from this, the diet, the staff, which treat everyone with love, the food is the best, the supplements are amazing. The facility is beautiful. It's not often that you're surrounded by, subtropical Floridian, Paradise amidst a concrete jungle, which is West Palm beach. It's really a sanctuary.

#### Participant 3: [10:54](#)

You know, everything about this place is just heavenly, and I call it a temple of healing, and I wish that more, more of these spaces would be set up throughout the United States and all over the world. You get educated. Education is a big part of this thing. Not only the raw food. Raw food is a foundation of your healing process, but you also get educated. There are lectures here with people who are loving and caring. Nobody cares how much you know until they know how much you care. And this place is a caring place.

#### Participant 4: [11:37](#)

The facility here, the staff here, the supplements, everything that it encompasses, this facility is what is making me be successful. I plan to continue to do the program on my own at home, juicing, eating raw and continuing that quest.

#### Participant 5: [12:01](#)

I can't really explain it, but this is a magical place. It happened for me. You know, I lost 10 pounds since I've been here. And, I have a sparkle in my eye, I guess, and I just thought I said, well, you know, I, I changed my life. Hippocrates changed my life.

#### Participant 1: [12:27](#)

The experience here. I don't know how to explain it. It's short of a miracle. I came here and, and I did everything they asked of me. And, my body is healing. I lost weight. I don't know how to explain it then. I don't try to, I just accept that the miracles do happen. And one of them was, happened to me here. I have a smile again. I feel good about myself, you know, and, this place feels like home.

#### Participant 2: [13:03](#)

And I don't think you get to appreciate that spirituality unless you've actually been here. And I think that's a huge part of the whole healing process. I've always believed that you treat the body, the mind and the soul, break that down the mind or the soul, or two thirds of it, two thirds of the healing. The body is only a third of it.

# INTERVIEW 1 FOCUS GROUP 1

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Participant 4: [13:29](#)

So yeah, we can eat all the little sprouts that we like, but if our minds aren't sorted out, then it's not going to make a difference. So I am very fortunate to sort out the mind and, and, and did it, did quite a bit of clearing out here. so meeting all the people and being in an environment where lots of other people are suffering from other challenges, it's, it's an incredibly healing environment and, and it's totally surpassed my expectations because it's an incredibly professional environment. It's based on a huge amount of research. And I think Brian and Ana Clements are absolutely running this place from their hearts.

#### Interviewer [14:13](#)

So how would you describe a healing place?

#### Participant 3 [14:20](#)

Coming back for the second time, I was a little embarrassed. But there's a huge sense of no judgment, and acceptance of everyone. And that's really something special. And something that I truly believe exists in a healing place.

#### Participant 2: [14:38](#)

I think a healing place is one that incorporates healing for the mind, body and soul. It's a relaxing and inviting environment. Stress is the number one thing that kills you. And they've done studies that people that are happy and go lucky, they live longer than everybody, regardless of their diet or their lifestyle otherwise, because they have less stress in their life. So Hippocrates focuses not only on your physical body, but also your mental and spiritual aspect to, to your health.

#### Participant 4: [15:14](#)

I consider Hippocrates to be a healing space. I keep calling it magic, and it kind of is. Even just walking around the campus, it's quiet and you are surrounded by tropical trees I sometimes forget that I'm here for healing and that I'm not actually on vacation. And the people that I'm surrounded by, inspire me all the time so I think that in some sense can be healing.

#### Participant 5: [15:46](#)

You are meeting people that are reversing diseases. You are seeing transformations happen every single day. The best part for my healing was meeting people. Everyone has an interesting story to tell. Everyone is very interesting once you get to know them. And when I started talking to people, I started realizing that this is it. This is my, this is how I'm going to, you know, this is what's making me Me. I'm bringing together all this great knowledge and Hippocrates is such a vibrant place that people come here from all over the world and you never know who you're going to meet.

#### Participant 1: [16:30](#)

I think healing is integrated with hope as well and the hope that coming to Hippocrates has given me is that there is light at the end of the tunnel. Anybody can really address this program. It is lifesaving for many people. It is the life in my food. That's what's healing my body. All of those in the therapies are healing me. This, this place. You walk on this campus and you just feel it. There's, there's, there's a, there's a caring here. Everyone here wants to see you succeed and it's because of all of them that we succeed. And to have someplace like this for people is just, it's a, it's a, it's a godsend. It's, it's really for many people and myself included, it's the answer to our prayers.

# INTERVIEW 1 FOCUS GROUP 1

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

**Interviewer** [17:34](#)

You've all mentioned the food. Do you feel this was an important aspect of your healing?

**Participant 3:** [17:45](#)

Absolutely. Let food be thy medicine and medicine be thy food. When I first got here, the food tasted like cardboard because I was sick, you know, everything was not right in my body. But now, I can taste the food again. The thought of wheat grass juice used to make me shiver and now I find that the thought lights me up. It's amazing how powerful diet is in healing.

**Participant 2:** [18:14](#)

I've come to realize when this, these whole foods, this is what, this is what's really normal. You know, it's, it's food that's alive and it's, it makes complete sense that when you, when you eat live food and you know, you've got no other option but to live. There is a sense of spirituality here.

**Participant 4:** [18:43](#)

it's a holistic approach. The food is amazing, you have to get used to it, but it is your body enjoys it. That's what I experienced. My body really wanted. this food is so full of nutrition that it, it's, it's longing for more, even though you think, well, it's all boring, but still it, you'll eat heat.

**Participant 1:** [19:12](#)

You just can't imagine how good you feel after three weeks of, of just, giving yourself personal attention, making it all about you, which is not, it's not ego, it's just loving yourself. And if you love yourself, you can, you can change the world. I can do this through diet and lifestyle change by getting stress out of my life. And so Hippocrates, they've made all of that more than possible. They've made it a reality. I'm so alive. I feel healthy inside and out and I am ever so grateful to everyone here.

**Participant 5:** [20:01](#)

And I just think if you can understand the intelligent design of the universe and everything that is a part of that, did, you have to realize that God designed the body and he designed food for the body. And so if you let food be your medicine and your medicine be your food, you've got the best chance with the other part of that is if you have a toxic relationship with God or yourself or anybody else, that is the root cause of disease.

**Participant 1:** [20:39](#)

I know that all three are connected mind, body, spirit. I know they're all connected, but for me, I was so busy, I kept myself busy so I wouldn't have to look at that. It wouldn't have to look inside and see if there were changes that I needed to make because it was easier to look out there and maybe even provide help for other people. Be busy for other people so that I could, I could ignore it. I have to say, I think mostly the therapies were really helpful for me. I had a Hora massage, which is an abdominal massage, and I cannot even describe the amount of release for that provided for me because I hold my stress here and my scar was so tight I couldn't, I couldn't stretch my arms. I, I didn't want to touch it because it made it real for me. And the colon hydrotherapist actually made me realize that. So when I went to the [inaudible] therapy, the doctor said, you know, that scar looks a lot newer than 18 months. And I said, yeah, I've been afraid to touch it because I was afraid to heal. So he released a lot for me. And in that process I was able to release emotionally as well. It's amazing the connection. I, I can't even describe it, but the freedom that I feel now is indescribable.

# INTERVIEW 1 FOCUS GROUP 1

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Participant 3: [23:03](#)

The education that you get here has been amazing that you start understanding what you're actually doing to your body and I had no idea that I was so sugar addicted. I could just see by myself that I have actually become much more aware of who I am. I can think clearer even though I had so much chemo so and also see my body like being joy, like it's healthy, developing muscles by training and I feel like going and do exercises and I just by eating a lot of green stuff, a lot of sprouts, a lot of things.

#### Participant 2: [23:57](#)

But here you can say it's the real food. It's a big salad buffet with a lot of sprouts. You get this huge plate, your you'll take what you want yourself and when you eat raw. It's such a good flavor in the food because I'm a chef at home so, so I know how things have to taste and I know when it's not good, but here it's good. I really, I really enjoy the food and I'm sure will continue it when I come and go. Dr Janet, she is really 100% into it. She really wants to give us everything. What, what she knows that what can help us, things we could try and we tried them different, the treatments and the supplements and physically things, but also the mental part. She gave us hope and trust in yourself. I found myself, my anger in myself inside my heart.

#### Participant 4: [24:38](#)

What's been, most, interesting to me or most exciting is the how, Hippocrates focuses not only on your physical body, but also your mental and spiritual aspect. Also, apart from that, the therapies that you can find mentally and spiritually and physically, obviously, make me realize that to be healthy, you don't only consider, your physical aspect where you have to consider all the other aspects which make you be healthy in each of the classes.

#### Participant 5 [25:45](#)

I think that I, I'm really excited about the gardening and the kitchen, the Raw kitchen. That's been really, that will put really helpful for me going back home and just applying that and teaching other people how organic garden is essential, learning from other people.

Hippocrates Health Institute:  
Interview 1 Wort Count

Word	Count
healing	26
people	26
food	23
can	20
body	18
hippocrates	18
cancer	13
place	12
feel	10
good	10
amazing	8
experience	8
life	8

Hippocrates Health Institute gives patients tools that they believe will help them overcome their current challenge. Those tools include physical and nonphysical elements, telling patients they “can” sharing with other “people” leads to a healing process and positive experiences. Whether it’s a journey to healthier habits or a battle against an illness.

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## **INTERVIEW 5**

# **HIPPOCRATES HEALTH INSTITUTE**



# INTERVIEW 5

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Interviewer

With your permission I will begin the recording now. Okay, so one quick question about demographics. What ethnicity do you consider yourself?

#### Participant 1

Okay, white.

#### Interviewer

And what is the highest level of education?

#### Participant 1

I have a bachelor's degree.

#### Interviewer

Great, how did you hear about Hippocrates? What brought you here?

#### Participant 1

I found Hippocrates because I was looking for something. I was diagnosed with cancer last year. And I was completely flabbergasted because I thought I was living in a really healthy lifestyle. My friends, my family, everyone, we were all in shock.

#### Interviewer

I'm sorry to hear that. You mentioned that you thought you were living a healthy lifestyle, could you describe that?

#### Participant 1

Um, you know, I workout regularly, I eat pretty clean five days a week. Not as healthy over the weekends, but um, you know, I was doing a pretty good job comparing myself to a lot of other people. So when I found out I had cancer. I was looking and searching for answers. I was like, there's gotta be something, like I needed help.

#### Interviewer

I see. (participant continued speaking)

#### Participant 1

I was searching for more than Western medicine. I actually came here after my surgery and radiation treatments. I was really sick, like really sick. I was days out of radiation. I was really burned. I was sore, I was exhausted. I was just beat up.

#### Interviewer

Can you describe how the environment here contributed to your healing?

#### Participant 1

The support, everyone is so amazing here. They're so open. Like we talked about anything over dinner. I mean we talked about some pretty interesting things, colonics and so on. It felt so real and authentic.

# INTERVIEW 5

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Interviewer

Was there anything in particular that helped you feel like you found what you were searching for?

#### Participant 1

The program, the treatments, the diet, it was just amazing. Within days of being here, the burns were gone. After the first week I was back in the gym. I used to go to the gym every day and since the surgery, I hadn't been to the gym at all. I just couldn't do anything, I was just so exhausted. But the therapies helped me get stronger and I have been to the gym every day since.

#### Interviewer

How would you describe your healing space?

#### Participant 1

Soothing, energizing. The atmosphere was so calming. I can't believe I felt this good after such a short amount of time.

#### Interviewer

Was there anything that made you feel stressed?

#### Participant 1

No, from the moment I arrived I felt a difference. I didn't feel like I was in an institution anymore. I just want to thank the Institute and all the beautiful people that work so hard to make a difference and help us.

#### Interviewer

That's great. Was there anything else that helped take your mind off your physical pain?

#### Participant 1

I learned about meditation and shamanic healing. It was full of positive energy. But I've always enjoyed being active. So once I began going to the gym, I also began walking around the campus.

#### Interviewer

Is there anything else you would like to share?

#### Participant 1

This program made a difference, it's my first time here, but it won't be my last.

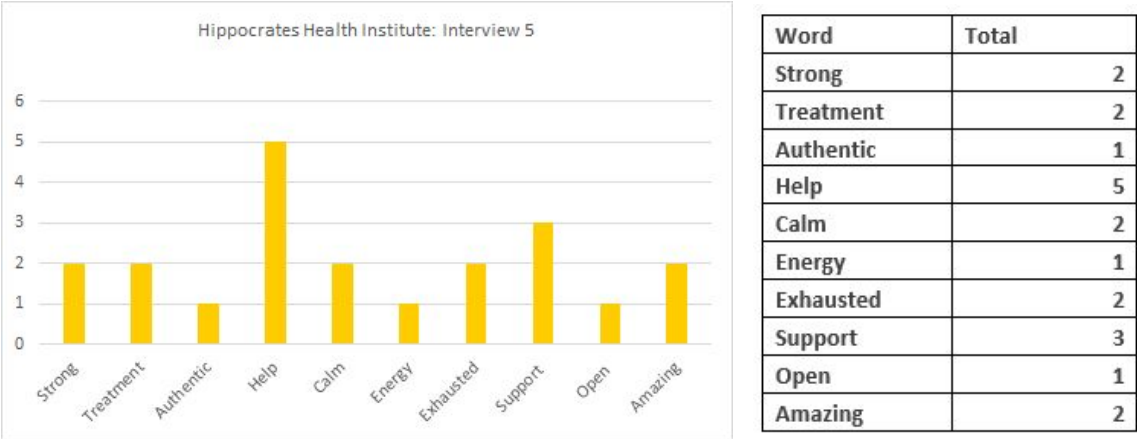
# INTERVIEW 5

Hippocrates Health Institute

## Inductive Analysis Word-Cloud



## Inductive Analysis Word Frequency



This was a patient that sook alternative medicine yet she went through traditional path and closed her journey with Hippocrates. These words indicate what Hippocrates offered her. Upon finding out her diagnosis she looked for the help/support that made her feel/ gave her the strength and energy she once had.

## Conclusion

“When I found out I had cancer. I was looking and searching for answers. I was like, there’s gotta be something, like I needed help. I was searching for more than Western medicine.” We believe she understood that beside the physical changes she was about to endure she knew that it would impact her as a whole. This was a patient who believed she carried a healthy lifestyle prior to the diagnosis. She also spoke about feeling exhausted and feeling sick, her body language and the way she emphasized how inactive she had been led us to believe it was not only physical exhaustion, she did not have the motivation to do what she was used to. “The support, everyone is so amazing here. They’re so open. Like we talked about anything over dinner.” The participant was thankful for the community support she received, we believe it was a positive impact because it was not something she had at the facility where she received radiation or had the surgery performed. What we derived from this interview was that the environment made her feel comfortable, it helped her healing process because she was able to speak with others individuals over dinner. Possibly as she could at home. The supportive environment led to progress at a faster rate than she expected it was healing between her mind, spirit and physical state.



## **INTERVIEW 6**

# **HIPPOCRATES HEALTH INSTITUTE**

# INTERVIEW 6

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Interviewer

Great, I will begin the recording now. Briefly touching on demographics. May I ask what your ethnicity is?

#### Participant 1

Sure, I'm white.

#### Interviewer

And your highest level of education?

#### Participant 1

I didn't finish college.

#### Interviewer

Okay, and how did you hear about Hippocrates? What brought you here?

#### Participant 1

Well you see, I was diagnosed with liver cancer. Unfortunately, the tumor was too big to operate so, the only really good option, the best option was a liver transplant. They told me the good news was they felt that they could get me a liver in about a year to a year and a half. The bad news was that as I got closer to getting a new liver, the closer I was to dying.

#### Interviewer

I'm sorry to hear that. Did you look for Hippocrates while you waited for the transplant?

#### Participant 1

Yes, well it's more complicated than that. They anticipated that it was a rapid growing cancer. The tumor would grow rapidly, so to hold it in balance they wanted to give me chemotherapy and radiation. I knew I wasn't a really big advocate of mainstream medicine and taking drugs, so I wasn't really excited about pumping chemotherapy and radiation etc into my body.

#### Interviewer

Did you receive any chemotherapy or radiation?

#### Participant 1

No, I was scared. Actually, I was petrified inside. I watched my sister die a terrible death due to traditional treatment of cancer. I decided I wasn't going to die and used the fear to motivate me. That's when I found Hippocrates.

#### Interviewer

I'm sorry. But it's great to hear you turned fear into motivation. Would you be able to describe how the environment at Hippocrates contributed to your healing process?

#### Participant 1

This is a little paradise of happiness, health and well-being and spirituality and emotional support.

# INTERVIEW 6

## Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Interviewer

Did anything in particular help you?

#### Participant 1

I made it fun, I did everything that I was instructed to do and I took it serious from aspect of doing it, but I kept it really light and fun, I turned it into a game. I'm the type of person, I can't do anything unless I'm having fun at it and I just made it a good time.

#### Interviewer

Was there anything that helped you feel calm or at peace?

#### Participant 1

Meditating in the saunas, I focused on my breathing. I also enjoyed being able to spend time with my family. They came down to visit and we had lunch by the lake.

#### Interviewer

Great, did you do anything to take your mind off of your current state of health?

#### Participant 1

I mean the program kept us pretty busy. The exercises, we did some in groups in the pool, in the gym, even the yoga we learned things individually but we weren't alone. I had a lot of fun. I took on a whole new lifestyle and stuck with it.

#### Interviewer

Did you use any technology during your stay, such as a TV, iPod, cell phone, Wifi?

#### Participant 1

Just my cellphone to communicate with my family.

#### Interviewer

Is there anything else you would like to share?

#### Participant 1

And I can't say it enough, it's amazing. I followed the program diligently, did wheat grass, the green juice food, the exercise, psychological. At home I also turned it into a game. I set up my kitchen. I did wheat grass every day. I did green juice, I ate sprouts after sprouts, I lived on sprouts and hippocrates dressing. It really does work. If you work for it. After two years the doctors told me, they thought the cancer was gone and I was in full remission. But I keep going back every three months to six months and getting checkups.



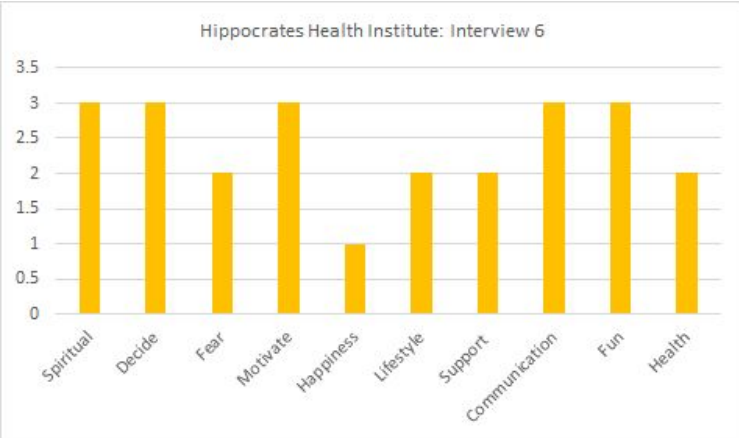
# INTERVIEW 6

Hippocrates Health Institute

## Inductive Analysis Word-Cloud



## Inductive Analysis Word Frequency



Word	Total
Spiritual	3
Decide	3
Fear	2
Motivate	3
Happiness	1
Lifestyle	2
Support	2
Communication	3
Fun	3
Health	2

For this patient it was a matter of deciding, fear made him decide he wanted to live and wanted to be better than he was. These words reinforce that he could do as he set himself to do, Hippocrates supported him by teaching him about healing as a whole; mind, spirit and body.

## Conclusion

The overarching theme for this interview was mind over matter. “I decided I wasn’t going to die and used the fear to motivate me.” The environment Hippocrates created for this participant was a place where he could learn, but also allowed him to be himself and incorporate pieces of what makes him, him that helped in the healing journey. He mentions “I can’t do anything unless I’m having fun at it and I just made it a good time.” The participant was focused on what he did with people in groups and with the surrounding him but also what those exercises meant on an individual basis. Although this patient might credit his recovery process solely to Hippocrates he still received the liver transplant. His mindset was positive, he changed his diet and incorporated new exercises and techniques to help his healing process. We believe that what made this particular case successful was the combination of approaches. The patient knew that he needed the transplant, so he followed through with this part but while he waited he worked on aspects he could control at the moment, the bottom line was autonomy.



# **CONCLUSIONS**

## **HIPPOCRATES HEALTH INSTITUTE**

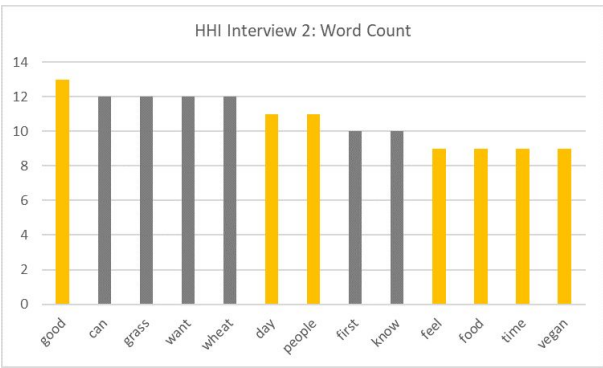
# ALL INTERVIEWS

Hippocrates Health Institute

## Inductive Analysis Word-Cloud



## Inductive Analysis Word Frequency



Word	Total
Spiritual	3
Decide	3
Fear	2
Motivate	3
Happiness	1
Lifestyle	2
Support	5
Communication	3
Fun	3
Health	2
Strong	2
Treatment	4
Help	5

Calm	2
Amazing	2
Know	37
People	36
Participant	35
Food	32
Healing	32
Speaker	29
Can	27
Get	26
Hippocrates	24
Good	23

Much	23
Body	20
Feel	19
Think	19
Going	16
Want	16
Cancer	15
Experience	15
Raw	14
Grass	13
Come	12
Day	12
Eat	12

## Conclusive Analysis

Initially, we focused our research on specific internal environment aspects such as lighting, color and privacy as measures of healing, but what we found through the Hippocrates Health Institute interviews was a much broader idea of what constitutes to a healing environment. As the interviews were held, body language correlated to their experience, the people surrounding them, the food they were introduced to. Many of these words are adjectives describing how they felt. “What’s been, most, interesting to me or most exciting is the how, Hippocrates focuses not only on your physical body, but also your mental and spiritual aspect.” In the eyes of these patients, in order for them to experience healing, they wanted to feel supported. This meant having staff that not only empathized with them but also taught them the necessary skills to take control of their own treatment, healing journey. By creating an environment that fostered those interactions, such as home-like furnishings, creating their own schedules and comforting/positive distractions, patients felt powerful instead of powerless. They used language such as “I can” and other forms of positive/empowering language (good, feel, want,) which creates an overall positive energy. Patients also attributed healing to interactions with other guests who were on the same journey. This showed that privacy was not an important factor in their healing and well-being.



## **INTERVIEW 3**

# **LENNAR FOUNDATION MEDICAL CENTER**

# INTERVIEW 3

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 1:** So, first, I'm going to ask you some demographic questions to get some general data. What ethnicity are you?

**Speaker 2:** Latin.

**Speaker 1:** Okay. Next What is the highest level of education you've received?

**Speaker 2:** Associate's degree.

**Speaker 1:** Okay. The first question I would like to ask you is related to control in the environment where you were receiving treatment. How important was it for you to control lighting in the treatment room where you stayed during treatment?

**Speaker 2:** It was nice when I had the ability to ask the nurses to turn on and off the lighting, but that was basically the only thing that I had. However, I didn't have any control myself. I had to ask others to do it and it was just turning on and off the lights.

**Speaker 1:** And in terms of importance, do you feel it would have made a change to your healing journey if you had the ability to control the lighting?

**Speaker 2:** It would be good, I think. After a while it becomes uncomfortable to ask people all the time for help. I wish I could change things depending on my mood at the time. Sometimes I would ask for the lights to be turned off but after a while I would want to do something else so then I needed the lights on again so I would have to ask the nurse again or just use my phone's flashlight to not bother her.

**Speaker 1:** What factors do you think contributed to your satisfaction or dissatisfaction with your abilities to control the artificial light?

**Speaker 2:** Well when you do chemo the light really affects you because you get super sensitive. The light was very, very bright and very white. I would say it was right in my eyes. So, having the ability to turn it off whenever I want, it helped me.

**Speaker 1:** So, the next question would relate to activities that you had in the treatment room. We know that in Lennar you guys have puzzles and activities. So how important were these interactive or solo activities during your treatment?

**Speaker 2:** Well, I didn't have any interactive activities because I had to stay in my Bay for further treatment. Whenever I was getting the treatment, the drugs would get me so dizzy and so tired. So, I just wanted to sleep honestly. But one of the activities that they had in the CTU was always people singing. So, it was really nice to watch and see people enjoying their time and having a good time. There was also a girl that used to come with a cart of arts to draw, but personally I didn't want to do it because it reminded me that I was sick.

**Speaker 1:** So maybe you didn't feel that it had an impact on your personal healing journey because you would never took those activities?

# INTERVIEW 3

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 2:** I don't think it was that efficient because of this thing that would remind me that I was in the hospital and they were doing those kind of boring activities for you to pass time.

**Speaker 1:** Okay, so the next question is related to community support. Community support can be from your family, from your friends, and also even spiritual support. How important do you think that the community support was in your healing journey?

**Speaker 2:** Well, my family was everything for me. When I used to go to the hospital all the time, my family would come with me. Either my mom, my dad or both. And it was really important for me for them to also have a really comfortable space to sit and wait for me because it was a long treatment. I would stay in the hospital for about six hours. So that helped me a lot to have them with me all the time. And also for example, I met some friends before starting the treatment that had the same issue as I did and they helped me a lot cause they told me all about their journey and how fairly easy it was, you know, because I was hoping it would be the worst time of my life and actually it ended up not being.

**Speaker 1:** Do you think it brought you comfort to talk to other people who had the same condition as you?

**Speaker 2:** For sure. But that was me, I did it myself. The hospital itself did not help me to build this community.

**Speaker 1:** Do you have anything else to add in regard to community support that we haven't covered?

**Speaker 2:** Community support? Well after I left the hospital and I was not doing the treatment anymore, I found out about a bunch of things that they offer and I wish they would have emphasized that to me when I was having the treatment done because I didn't know of multiple activities that they really offer. And I wish I had done that when I was receiving the treatment. But they were mostly solo activities, so I wish there was more of group activities to get engagement and to know new people that are in the same situation as you are.

**Speaker 1:** So, the next question is related to nature and I wanted to know how important it was for you to have a visual connection to nature. For example, if you had water features in the room or if you had access to daylight?

**Speaker 2:** Not to nature, but I did have a view of the window and my parents, as I said before, they would sit right next to it. I had curtains in my bay, so I had the ability to close in and open it whenever I wanted, but my parents on the outside they didn't. I felt that sometimes it was so hard for them to stay by the window because it was bright that they wanted to sit in the room with me even though it wasn't that comfortable because there was just one chair. The space overall was super tiny. The nurses would come in all the time and it was just not possible for them to stay in the Bay with me for the lack of space. But I felt that outside it was also not comfortable for them even though they had a huge access to the window but is not like they had a nice view or anything.

**Speaker 1:** What could you see from the window?

**Speaker 2:** The street of Gables. No trees or nature views.

**Speaker 1:** Do you feel it would have been better for your healing to see a nature scenery?

**Speaker 2:** Yeah, I would love to see a Lake or nature, anything but traffic. I remember that I would see also a train station from my room. It would be preferable to have a natural view.



# INTERVIEW 3

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 1:** The next set of questions that I'm going to ask you right now relate to privacy and there's two types of privacy that we are analyzing, visual and audial. The first question is: How important was it for your healing process to limit the amount of visual access people had to you while getting treatment? For example, the people who walked by, outside of your bay, if there were able to see inside.

**Speaker 2:** Well, I felt very uncomfortable when other people were walking by the Bay and they could see me, I'm am not talking about the nurses or the staff, but other people such as families and patients. I didn't want them to see me. I had a curtain that I could draw but I had to make sure it was closed all the time.

**Speaker 1:** How about audio privacy?

**Speaker 2:** Audio privacy. It was a little loud because I was right next to the nursing station. they were all chatting and talking and that was not nice because sometimes as I said before, the medication leaves me really very drowsy and sick. sometimes I just wanted to have my own space and no lights, be silent, you know have my own silent moment and just relax or try to sleep. I felt that sometimes that was not possible because of the noise.

**Speaker 1:** Could you hear other patients as well?

**Speaker 2:** Yes. There's one day specifically that I remember there was a lady, who was in a lot of pain and she was screaming so everybody could see and hear her. She was basically throwing herself on the floor and screaming. It was crazy. I don't know what she was having, but it was very scary to see that, you know? These types of things remind me that I'm in the hospital and that I had the cancer. That was not good for my healing, I guess.

**Speaker 1:** Right, that you could also see people with far worse conditions.

**Speaker 2:** Yeah. Yeah. And there was another example where there was this old guy that was in the end of his life. And I used to see him all the time. Every time I used to go, he was there, and we used to sit together. Then all of the sudden he stopped going. So, I figured, oh my God, did he finish the treatment, or did he die? it's really also hard to connect with people that have the same condition because some people have way worse than you. And that could be hard sometimes to take in.

**Speaker 1:** Yeah, I can only imagine. The last and final question is regarding to the space overall. For example, materials or organizational layout. How did this space make you feel overall?

**Speaker 2:** Well, Lennar it's an amazing building. It's new. I think it has about two years. The space itself looks very neutral and it looks very, very clean and well maintained. The staff is amazing. Everybody gave me the impression that they loved working there. that kind of translates in the way they treat the patients. And I think that's really important. In regard to my Bay, the chair was not the most comfortable thing. And also, one thing that bothered me is that whenever you wanted to raise your legs or lower your backseat, you'd have to ask someone else to do it because it was very hard for me because I didn't have the strength to pull the bar. I wish it was automatic or something.

**Speaker 1:** How about the layout of the Bay?

# INTERVIEW 3

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 1:** Before we finish, would you like to add some comments in regard to what you feel Lennar could benefit from adding?

**Speaker 2:** Well, the views as I've mentioned before, I had a view of the train station, so that was not nice. Even though I had the natural light coming in, which was great, but I wish I had more elements related to nature inside as well, and not only a view. I really appreciate the fact that Lennar thought of making the space not look so much like a hospital, I thought I was going to have this bad experience but instead I got really close to my nurses so I would ask to get them all the time, the same ones. So, they made the process really, really good for me because they would encourage me, they would let me know what exactly what was happening and comforted me. Lennar cures the physical illness, but I would have appreciated that after maybe the treatments I could have had some sort of relaxation treatments, something that would help me just shake off the side effects. I found out that they do offer some things while you're a patient and while you are doing chemo. But also, I felt that every time that I was doing chemo, I didn't want to do anything else. So, I was not interested in doing anything else but just going to my house to sleep, but after two days of the treatment I was already feeling better so I wish I would have done more of the activities that they provided. Overall it was a full experience because you know, it's a change of lifestyle. You have to eat better; you have to take care of yourself more. In my opinion it would be better if they had follow up relaxation sessions before the next treatment started. But overall, I believe Lennar wasn't so bad.

**Speaker 1:** Okay, so that ends our interview. Thank you so much for your time and participation.

**Speaker 2:** No problem, anytime.

# INTERVIEW 3

## Lennar Foundation Medical Center

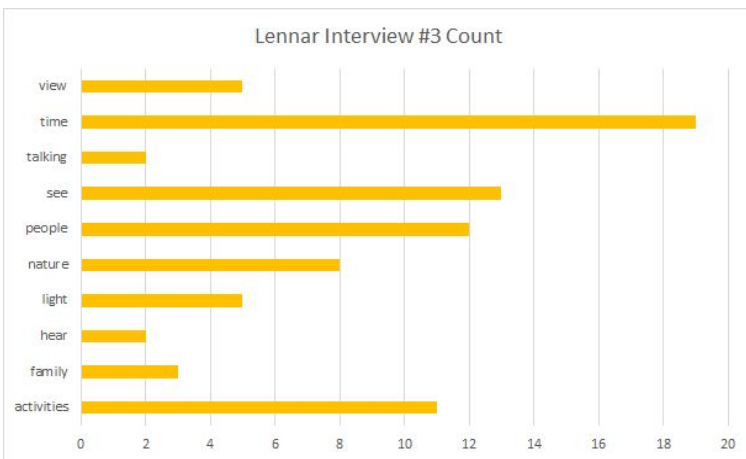
### Inductive Analysis Word-Cloud



### ANALYSIS

The word cloud and the word frequency show a similar pattern. Words such as activities, people and see are the most repeated and show in bigger scale. However, the word treatment does not show in the Word Frequency yet it is present on the word cloud. These patterns of repetition always draw back and relate to the indicators on the Operationalization Table. For example the word “see” is repeated 13 times and each of these times the participant is talking about the things she sees or how she is seen which relates to Visual Privacy.

### Inductive Analysis Word Frequency



LENNAR INTERVIEW # 3	
Word	Count
activities	11
family	3
hear	2
light	5
nature	8
people	12
see	13
talking	2
time	19
view	5

## Conclusion

For this participant, the most important aspect of treatment is the community support. In her case, it came from many sources including an online community, friends and staff, but the most important for her was the one that came from her family. It brought her great discomfort to see her family being uncomfortable during her treatments in their assigned waiting areas. “It was really important for me for them to also have a really comfortable space to sit and wait for me because it was a long treatment. I would stay in the hospital for about six hours” Her main points were to bring in more visual connection as well as access to nature, to create a comfortable space for the people that were in the treatment with her and to have more controllability over her environment depending on her mood. When analyzing the data from the word count, although she claims that family was the most important aspect to her recovery, time perception was just as important for her even if she did not realize it. During the interview, the most repeated words were activities and time. She always pointed out how slow treatment went by so time perception was another key factor to her healing journey at Lennar.



## **INTERVIEW 4**

### **LENNAR FOUNDATION MEDICAL CENTER**

# INTERVIEW 4

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 1:** So, first, I'm going to ask you some demographic questions to get some general data. What ethnicity are you?

**Speaker 2:** Latin.

**Speaker 1:** Okay. Next What is the highest level of education you've received?

**Speaker 2:** High School Diploma

**Speaker 1:** Ok so let's begin with the first question. How effective was it for you to control lighting in the treatment room where you stayed during treatment?

**Speaker 2:** Everything was ok. I never felt uncomfortable at any moment with my ability to control the lights.

**Speaker 1:** But were you able to control the lighting from where you were or would anyone else assist you?

**Speaker 2:** There was no need for me to ever change the lighting. There was plenty of natural light which enabled me to do my activities without any issues. Even the artificial light wasn't overpowering or anything to the point where I had to ask for it to be changed. I never bothered the nurses with things like that.

**Speaker 1:** okay, and do you believe it is important for the patient's healing process to be able to control the lighting depending on their needs?

**Speaker 2:** I believe so, because sometimes there are people who prefer the room to be dark or things like that. This treatment is very strong so there are many side effects and when you add the long hours, maybe other people may get headaches, but I never felt the need to change the lighting conditions of the room.

**Speaker 1:** okay, then the next question. We know that in Lennar you have puzzles and access to activities. How important were these interactive or solo activities during your treatment?

**Speaker 2:** I remember a guy that would go and sing for you, a lady that would go offering snacks and another one selling hats for those of us who had already lost the hair, but I never took part on anything that they offered. I found more comfort in doing my own things and spending a quiet time alone or just with family.

**Speaker 1:** So, what kind of thing would you do to help time go by faster during the treatment?

**Speaker 2:** Well, you have the computer, the Tv. I also took books and knitting. Things I felt would help to entertain me and help time pass by faster during the 6-hour treatments. Also, as the treatments go, it gets easier, I think. You now know what to expect and you just sit and get through with it.

**Speaker 1:** In your opinion, even if you never took part on this activities, do you think having these activities helps at all with the treatment process?

**Speaker 2:** Of course, I chose not to take part, but I believe that a busy mind helps to make time go by faster and the treatment seem easy. This is such a hard and emotionally draining process that having some entertainment or even someone to sit with you and talk you through it helps tremendously.

# INTERVIEW 4

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 1:** That actually relates to my next question regarding to community support. Community support can be from your family, from your friends, and also even spiritual support. How important do you think that the community support was in your healing journey?

**Speaker 2:** Oh, so important. To be honest, in my case my mother is 88 years old, so it was impossible for her to keep me company during those long hours and my son has special needs, so he wasn't even aware of what was going on. Sometimes one of my siblings would go and visit but I never had that full family support. The staff at the facility was amazing they would keep you company as much as they could, but you know they have a job to do and so there is only so much time they could stay.

**Speaker 1:** Thank you for sharing this information with me.

**Speaker 2:** Not a problem. Regardless, I believe that emotional support is very important so whoever has access to it should definitely take advantage of it.

**Speaker 1:** Yes, I agree. I would like to ask you about the room. Did you have access to a window?

**Speaker 2:** Direct access no, but since the room were facing the big windows, I could see street outside, and a lot of light would come in.

**Speaker 1:** Do you believe it would have been more effective for your healing process to have a visual connection with nature as opposed to the street?

**Speaker 2:** Definitely, and not just because of the street view which wasn't so relaxing but having to see the nurses with the medication walking by or other patients hooked to a machine with no hair wasn't so desirable either. It just depresses me more. Yeah, nature would have been nice.

**Speaker 1:** Yeah, I can imagine. The next set of questions relate to privacy and we are trying to understand two types of privacy: Visual and Audio Privacy. The first question is: How important was it for your healing process to limit the amount of visual access people had to you while getting treatment? For example, the people who walked by, outside of your bay, if there were able to see inside.

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# INTERVIEW 4

## Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

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**Speaker 2:** I had a curtain on my room that I always tried to keep closed but you know the nurses had to pass by to check that everything was ok and so there never was a complete level of privacy. Sometimes, they would walk out and leave some space open and since I couldn't move it had to stay like that until I called them or whenever they would come back to the room.

**Speaker 1:** What about in terms of audio privacy? Were you able to have a private conversation without the fear of being overheard?

**Speaker 2:** I think so. I could hear the nurses faintly from outside. They always were very respectful towards us in the sense of being as quiet as possible. I never felt like whatever I said would be overheard, plus everyone's on their own world. We all had a common battle to fight so the least of my concerns is what the next-door neighbor was saying but anyway is not like I could hear them either. The most I could hear was the guy playing the guitar but then that was very soothing and entertaining. I was always able to talk and sleep comfortably.

**Speaker 1:** That's good. I am glad that wasn't an issue. How about in terms of seeing someone else with the same condition as you. Do you think this affected your healing journey positively or negatively?

**Speaker 2:** Well, in my case both, positively and negatively. Positively because it makes me feel like I am not the only one going through this hardship and negatively because you see a lot of people suffering and with very little life expectancy and in some way all of this affects you emotionally and sometimes it changes your levels of hope. It was very hard. You never expect this to happen to you.

**Speaker 1:** I can only imagine. Do you need to take a minute?

## INTERVIEW 4

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Speaker 2:** No, I am fine, thank you for your concern.

**Speaker 1:** Not a problem. This is actually the last question. Would you still like to proceed?

**Speaker 2:** Yes of course! All the questions you need.

**Speaker 1:** So, in general, how did the overall space make you feel? For example, the materials, the colors and even the smell of the space.

**Speaker 2:** Lennar is very clean which I think is so important when you have a disease that lowers your immune system so much. It always smelled freshly cleaned and very organized. I like the colors because they are very natural and nothing too scandalous which I greatly appreciate. My only complain was the chair where I sat, it feel very hard after 6 hours of seating in it. It wasn't the most comfortable chair, I think. But the rest of the space very agreeable.

**Speaker 1:** Would you like to add anything else before we conclude the interview?

**Speaker 2:** Not really but if you have any other questions don't hesitate on asking me. Even if you need photos of me while I was getting treatment. You can always call and ask.

**Speaker 1:** That is very nice of you. Thank you for your help and time and for also being so honest and open with me. I greatly appreciate it.

**Speaker 2:** Not a problem!

## A word cloud of factors influencing patient adherence. The words are arranged in a circular pattern, with 'CONTROL' and 'FAMILY' at the top, 'privacy' and 'support' on the right, 'COMMUNITY' at the bottom, and 'patients' and 'important' on the left. Other words include 'able', 'need', 'treatment', 'time', 'light', 'activities', and 'lighting'. The words are in various colors (green, blue, orange, red, brown) and orientations.

### LENNAR INTERVIEW #4 Count

Word	Count
support	6
see	4
privacy	5
nature	3
light	3
hours	3
hear	4
family	3
activities	5

In this particular interview the words most used were support, activities, privacy and hear. They all tie back to two variables on the operationalization table: Positive Distraction and Privacy. This shows that for this participant these two variables were key to her healing process. Other words less used include hours, nature and family which still tie back to Positive Distraction and Presence of Nature. Lennar had little to no access to nature so it was a frequent topic of conversation on the interview where the participant believed that access to nature would have been more favorable to her healing.

LENNAR INTERVIEW # 4	
Word	Count
activities	5
family	3
hear	4
hours	3
light	3
nature	3
privacy	5
see	4
support	6

Participant from Interview 4 described two factors which were key in her healing journey: Community Support, Activities and visual privacy. These reflect on the word count by being the words most used throughout the interview. She did not have as much access to community support as she had wished. Her son has special needs and her mother is too old to keep her company during the long treatment hours. She describe talking to staff for as long as she could since they had tasks of their own. Sometimes one of her siblings accompanied her and in these occasions, she described her mood to be better as well as her recovery improved. She believes that, “**emotional support** is very important so whoever has access to it should definitely **take advantage of it.**” The other key factor, which contributed positively, were activities and their effect on her time perception. Since she had no one accompanying her most of the time, then she resorted to the activities to help her time pass by faster. Although she would not participate on the activities that Lennar offered, she still brought some of her own. She expressed, “I chose not to take part, but I believe that **a busy mind helps** to make **time go by faster** and the treatment seem easy. Finally, she felt very strong about privacy and having control over how much access others have to her and vice versa. When asked about the effect it had on her to see other people with the same condition as her, she expressed that it was a sword with double edge. “**Positively** because it makes me feel like I am not the only one going through this hardship and **negatively** because **you see a lot of people suffering** and with very little life expectancy and in some way all of this affects you emotionally and sometimes **it changes your levels of hope.**” She describe that this scenario was very frequent in her case therefore LFMC should offer its users better opportunities for privacy, controlled privacy.



# **CONCLUSIONS**

## **LENNAR FOUNDATION MEDICAL CENTER**





## **CONCLUSIONS AND RECOMMENDATIONS**



## PURPOSE OF STUDY

The purpose of this study was to understand how the physical interior environment affects, either positively or negatively, a cancer patients ability to heal. This study focused on the patients perspective of specific elements they experienced during the course of their treatment, such as lighting, entertainment, biophilic design, privacy and finishes and the role each element played in contributing to their well-being.

Based on an initial literature review, we identified a connection between psychological and physical well-being. Preceding studies have proposed that negative beliefs about cancer may harm patients' psychological well-being, but only a scarce amount of these studies focused on detailed psychological symptoms that the environment and factors such as, biophilia, privacy, entertainment and material selections, impacts the overall well-being of patients (Cunha, 201).

Thus far we have learned that the human senses do not work in isolation. Therefore an element to one sense-modality may also trigger a response in another. As a result of our research we encountered two different approaches; salutogenic vs pathogenic. Salutogenic design focuses on working towards health and patient wellbeing, establishing a balance between mind, body, and spirit (Mazuch, 2017). Where the pathogenic approach is what we know as traditional medicine, focusing solely on the physical aspect.

To further develop this concept and in order to better understand patients healing during the course of treatment, two healthcare facilities were selected, each with distinct approaches to treatment. The most common approach to cancer treatment is through traditional medicine. Lennar Foundation Medical Center (LFMC) in Coral Gables, Florida was selected in order to study how patients perceived healing in a traditional healthcare environment. To ensure a

complete study, a second facility was chosen that treats patients through alternative therapies. This facility was Hippocrates Health Institute (HHI) in West Palm Beach, Florida.

# VALIDITY AND RELIABILITY OF RESEARCH METHODS

## VALIDITY

The research was designed with a mixed methods approach, using both quantitative and qualitative methods to ensure validity of the results. The quantitative approach began with behavior mapping of patients in both facilities. In order to evaluate which interior elements played a role in patient healing, we observed patients using the interior spaces and recorded the data through activity mapping. Patients were then asked to draw the interior spaces, which was recorded through the cognitive mapping. Architectural drawings and photographs of the interior spaces were further evaluated by the researchers to determine which elements could potentially contribute to patients well-being.

The second research instrument used for the quantitative data was a survey. Through the use of an operationalization table, we determined the indicators that would be tested. Each concept was further broken down to understand which variables existed and how they could be measured through indicators. The survey questions were then written, each tying back to the overarching concepts of color, entertainment, biophilic design elements, privacy and finishes.

A pilot study was conducted with a group of 10 participants to ensure clarity of the questions. Based on the feedback from the pilot study, the questions were refined and the official surveys were distributed. An average of 40 participants from each facility were surveyed. The surveys were analyzed and gaps were identified where additional data was needed to answer the overall research questions.

These identified areas became the basis for the patient interviews, the third research instrument in which we collected qualitative data. The patient interviews were conducted in different formats. Two group surveys were used for Hippocrates Health Institute and individual phone surveys were used for Lennar Foundation Medical Center. The surveys conducted allowed patients to give their unaided views on each facility. The interviews were transcribed using Temi software and each survey was then hand-coded according to the variables on the operationalization chart. During the hand-coding process, additional themes emerged

outside of our original variables. . Once the new themes were identified, the operationalization chart was revised to include the new concepts. We then used Atlas.ti software to see if patterns in language could be established, which resulted in word frequency for each facility.

The findings do represent what we were trying to measure, for example one of our findings was that the community is essential for patients. Designing spaces in which they could collaborate is crucial. The data collected in reference to privacy and its effects on patients well-being also helped answer our concerns. The methodology used in the research focused on the interior spaces. The information gathered based on this research is useful information in designing a facility that successfully cares for patients and their families.

## RELIABILITY

Through the measures taken to ensure validity of the research, we expect the reliability of the methods to be very high based on each facility. The results seen from both HHI and LFMC can be replicated in other facilities. However, results from HHI can not be replicated at a traditional medical facility like LFMC due to the different approaches to cancer patient healing.

A concern that arose in reference to reliability was the length on time given to conduct the research. The data collected was sufficient enough for researchers to come up with conclusions, however to get a more reliable basis we believe the study should be conducted over the span of a year. Environmental changes could affect how patients perceive their surroundings, and emotional connections to months/ seasons could also guide their healing journey.

Based on the data collected in both facilities, it was difficult to measure some elements. For example, lighting, it would've been interesting to conduct the study in two facilities that had the traditional approach and provided different levels of autonomy regarding lighting. This could provide essential information.

### 3. ANSWERS TO RESEARCH QUESTIONS

#### 1. How does **lighting** affect the healing process?

There are fundamental factors in the achievement of the theory of well being of which lighting is a part. Successful lighting resembles a familiar environment and gives users a sense of a home. At LFMC, since the patients are bound to the chair, they are unable to the lighting conditions in the treatment rooms on their own. In consequence, this negatively affects their feelings of comfort and healing improvement, making the process unsuccessful. By comparing the two cases, the research proves through the cognitive mapping that users preferred places that have access to daylight to sit, restore or receive treatment. On the other hand it was also found that patients at HHI have more controllability than LFMC. By analyzing the quantitative and qualitative data, it was found access to daylight was extremely useful to the healing of HHI users therefore creating a direct link between daylight and well-being

#### 2. What types of **entertainment** foster positive and sustained interactions?

Entertainment plays a crucial role in the patients healing process. The HHI campus acts as therapy and can improve time perception and the experience the patient has upon receiving the treatment affects the healing process while also engaging the community. As seen on HHI entertainment activities such as music playing, yoga, meditation and aromatherapy increase the patient's well-being and promote relaxation, making the process more successful and less stressful.

#### How will implementing **biophilic design features** in the built environment affect patients?

Features that attributed to biophilic design within the built environment were: light, spatial permeability, sensory engagement, forms, and circulation. Based on the cognitive mapping, participants react to open plan areas, as they feel encouraged to familiarize themselves with other patients. It was observed that patients/ guests often walked towards seating by windows. This data reinforces the attraction individuals have to nature. The impact of reducing color within the built environment promoted the adjacent exterior spaces, natural features, and building connections to nature therefore reducing stress and anxiety. Visual privacy was an important factor for patients, especially while undergoing treatment, one of the solutions was frosted glass, allowing daylight to enter the space without giving up their privacy which led to soothing environments. Particularly one of the facilities strategically designed a terrace adjacent to a canal. Activity of individuals making use of the space was recorded, reducing their anxiety. A meditation garden was an option for patients, if desired they were wheeled there during their treatment. In one of the therapy centers, there was a center atrium with a water feature and a rock garden, it attracted patients to sit around on curved wooden benches. The atrium was designed to have a direct experience of nature with natural light, water, plants and weather coming into the area. We collected data indicating that Individuals were drawn to areas that were near bodies of water. Another factor that attracted them were the natural audio in the surroundings. Patients correlate the access to nature in their healing process.

### 3. ANSWERS TO RESEARCH QUESTIONS

#### 4. How does **audio and visual privacy** affect the patients?

In order to answer how does audio and visual privacy affected patients during treatment we must first note that according to the research, treatment carries a different meaning for the patients of each facility, therefore, the levels of desired privacy varied. At Hippocrates Health Institute treatment can range from changing their everyday diet at group workshops to solo spa treatments. On the other hand, at Lennar Foundation Medical Center, treatments included radiation as well as chemotherapy and since these types of procedure tend to be more invasive, they were carried out at the private bays.

At the time the surveys were conducted patients from Hippocrates Health Institute answered that limiting the amount of visual and audio access other had to them while getting treatment was important. Hippocrates Health Institute is a facility that encourages interaction amongst its patients as a way of treatment. Interview participants described being separated into small groups where interaction was encouraged amongst its members for the 3 week treatment period. Yet they did not always feel like socializing with other people so the facility offered them the opportunity to retrieve into solitude to a prospect and refuge like space in the vast greenery that surrounded the complex. This type of scenarios where they were able to control how much visual access people had to them when desired proved to be not only important but effective for their healing journey.

In contrast, the survey results from Lennar Foundation Medical Center showed that participants were very satisfied with the degrees of audio and visual privacy the facility offered. However the interview participants revealed that privacy was lacking at all times.

Their only means of privacy came from a glass partition and a curtain. Since these elements provide little to no acoustical attenuation, staff and other patients could be heard from their bay which they categorized as noise and disruptive not allowing them to sleep and recover. One of the interview participants described how, in many occasions, the curtain was not closed all the way by the staff so by walkers could peek inside making her feel vulnerable and exposed. Unable to control which made her long hours of treatment feel uncomfortable and in the long run it affected her negatively.

#### 5. How do **interior finishes and materials** contribute to patient well-being?

Interior finishes and materials played a role in creating what patients considered a supported environment. Through a supported environment, patients were able to experience healing, a necessary component for overall well-being. Several elements were identified as creating a supported environment: home-like furnishings, soothing colors and comfortable furniture all contributed to reducing stress and supporting social relationships. The cognitive mapping at both facilities revealed that patients tended to draw elements that evoked feelings of comfort as larger in scale compared to something that evoked feelings stress. At HHI, elements such as ponds, the Oasis Spa and Wigmore Hall were drawn larger. These were areas in which patients received treatments and had much of their social interactions. At LPMC, furniture arrangement was depicted with club chairs facing each other and a large comfy couch. These were out of scale to the rest of the room, demonstrating the effect comfort of furnishings has on patient well-being.

## 4. CONCLUSIONS

When designing the interior environment of a cancer healthcare setting, it is important to understand the patients perspective as to what they believe contributes to their ability to heal. Another defining factor is understanding what treatment means to the patient. It could be defined differently based on the medical approach taken.

The research indicated that patients at both facilities believe autonomy was a major contributing factor in healing. Patients at LPMC viewed autonomy through lighting controls and HHI patients felt that being given the power to control treatments contributed to their overall well-being. Having some form of control reduces their stress.

Patient's wellbeing and the success of the treatment process based on the data collected from the patients during the research through interviews and cognitive maps illustrate that they painted places that would be accessible to daylight as favorite places to sit or receive treatment. However, this proves that the presence of daylight and the ability to control lighting plays an essential role in the patient's sense of comfort during the process of treatment.

According to patients that were interviewed and participated on the questionnaire that was applied to cancer patients that attended Lennar, activities such as arts and crafts and volunteers singing and playing instruments for them were highly effective in their healing process. Through one of the activity mappings the research indicated how important was for the patients to have companion meanwhile they were having the treatment. Also, the patients were worried if their visitors were accommodated in a comfortable way and next to them. Music playing, conversation with their loved ones, with the staff, access to technology such as tablets and TVs were also highly effective. It becomes a positive distraction and allows patients to focus on good things instead of the hospital and treatment they are undergoing.

The attraction to biophilic elements was confirmed through our data collection. Patient's correlated natural features to their healing process. The benefits included an enhanced experience

while undergoing treatments, positive distraction, sense of calmness and reduced stressed and anxiety. However, these elements need to be considered the specific type of treatment. Patients will have a degree of restrictions and will require tailored solutions.

The data collected from the research methods showed that visual and audio privacy was only effective for the patient's healing and recovery when the facility offered them the ability to control the degrees of privacy desired at certain stages of their treatment. This is observed at Hippocrates Health Institute when the treatments that require an obvious level of privacy (massages, spa etc) have assigned rooms but also for those aspects of treatment (e.g. contemplation, meditation etc.) that are not defined by specific spaces. The facility offered the patients the opportunity to find adequate spaces within the facility with varying levels of privacy that adapted to their needs. Unlike at Lennar, where even though each patient is assigned a private bay, they never achieved the desired levels of privacy for only visual privacy is achieved to a certain degree and audio privacy is non existent causing stress and aggravation during treatment, negatively affecting their recovery in the long run.

Patients credited a supported environment as a major contributing factor to their healing and overall well-being. A supported environment was created through spaces that evoked feelings of calmness and relaxation, which were often attributed to a home-like environment. Patients also only really noticed finishes and furniture only if they were a detractor to healing, such as uncomfortable furniture.

An extensive body of evidence-based design knowledge exists as it relates to a cancer facility. Numerous studies have focused on specific interior environment elements such as color, entertainment, biophilic design, privacy and finishes. However, very few studies exist that focus on a patients perspective of their healing as it relates to the interior environment elements. This study helps to close the gap between this missing information



## 5. DESIGN RECOMMENDATIONS

HHI's treatment structure fosters the theories of well being. The facility meets the criteria and shows high rates of patient's optimism and recovery. When comparing and contrasting both facilities it was found that design guidelines could be drawn from HHI in order to aid LFMC to achieve a faster recovery in cancer patients undergoing treatment

**1. Provide the tools for autonomy:** Patients feel empowered when given control over certain aspects of their treatment. Autonomy can be provided several ways. Control over spaces, such as lighting control, moveable furniture and controlling sunlight through window treatments. Tools that allow patients to book classes of interest and providing self-service food options allow patients to feel in control of their healing process. Incorporating spaces that have different levels of privacy are also key in creating a healing space.

**2. Access to natural views and more natural elements to be included indoors:** Findings showed that patients who had enjoyable nature views, water features or even an indoor plant upon receiving the treatments showed reduced stress levels, improving the patients recovery.

**3. Create spaces that adapt to community support:** An important design consideration would be comfortable guest furnishings such as lounge chairs or sofas for long sitting periods.

However, designers have to take in consideration that the location has to be strategically chosen in order not to conflict with the nurses circulation zone.

**4. Implement cool/indirect lighting in the rooms:** Through the participant's answers to the surveys it was found that patients prefer cool indirect lighting in the treatment rooms. Indirect light helps with keeping the light away from their eyes while creating a bright and healing environment.

**5. Implement ergonomics on furniture and pick better materials/finishes which enhance comfort and well-being:** Furniture that will be used on long treatments should be comfortable and adjustable. Finishes should create a home-like environment of relaxation and restoration.

**6. Create spaces that adapt to varying levels of privacy depending on the user's needs:** Spaces that allows users to find audio and visual privacy. Retrieve away from disruptive noise, meditate and contemplate when needed.

## 6. RESEARCH RECOMMENDATIONS

At Hippocrates Health Institute "treatment" is refined for the patients. The topic became very broad and results became uncertain. However, their dietary supplements were viewed as a form of treatment. It is recommended that if further research is done and tailored to the medical approach and the type of treatment.

Through the data analysis we saw how heavily weighted the support of a community it is in reference to a patients healing process. It is recommended that if future research is performed it is explored in reference to designing for it. How could a designer design for "the support of the community" in an effect way?





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## ANNEX

## ANNEX 2





# PILOT QUESTIONNAIRE



## ANNEX 2

# PILOT QUESTIONNAIRE

## Hippocrates Health Institute

1. In this room what would you prefer to do? (Circle all that apply)
- Sleep
  - Read
  - Write
  - Color
  - Watch TV
  - Be on your phone
  - Talk
  - Rest
  - None of the above. Other \_\_\_\_\_
- 
2. How do the following images make you feel? (Circle all that apply)
- Calm
  - Tired
  - Energized
  - Inspired
  - Welcomed
  - Anxious
  - Stressed
  - Happy
  - Sad
  - None of the above. Other \_\_\_\_\_
- 
3. In the room, you have a window. During any treatment do you prefer to have the blinds?
- Completely opened
  - Slightly opened
  - Half-way opened
  - Completely closed
  - It does not matter.
  - None of the above. Other \_\_\_\_\_
4. During any treatment, do you prefer to have access to daylight?
- Yes
  - Depends on my mood
  - Depends on the weather
  - No
  - It doesn't matter
  - None of the above. Other \_\_\_\_\_
5. During your treatment what activities would you be most interested in? (Circle all that apply)
- Yoga with instructor
  - Working on a puzzle
  - Arts and craft workshops
  - Listening to music
  - Sleeping
  - Be alone
  - Read a book
  - Watch TV
  - None of the above. Other \_\_\_\_\_
6. During your treatment what do you find the most meaningful? (Circle all that apply)
- Connecting with other patients
  - A sense of community
  - Being isolated
  - Speaking with counselors
  - Spending time with family
  - Being able to rest/sleep
  - Help or assist other patients
  - Personalized the space where you receive treatment
  - Documenting your journey
  - None of the above. other \_\_\_\_\_
7. What brings you the most optimism during treatment? (Circle all that apply)
- A spiritual connection
  - Interaction with different staff members
  - Specific staff members who you feel comfortable with
  - Group activities, classes, workshops, games
  - Connecting/ sharing with existing patients
  - Connecting/ sharing with previous patients
  - Being informed throughout the treatment
  - Access to internet/phone services to connect with others not in the facility
  - Accommodations for family and friends
  - None of the above. Other \_\_\_\_\_
8. During treatment what would you rather have in the room? (Circle all that apply)
- Access to a window
  - No window
  - Art with natural landscapes
  - Abstract art
  - Animal related sculptures
  - Colorful decor
  - Listen to music
  - Listen to natural sounds (water stream, leaves swaying)
  - Having plants in the room
  - None of the above. Other \_\_\_\_\_
9. During treatment what are you most sensitive to? (Circle all that apply)
- Specific smells such as flowers
  - Amount of light in your room
  - Hearing equipment
  - Heat
  - Dark rooms
  - Hearing other patients
  - Feeling alone/isolated
  - Visual access to your surroundings
  - Nothing
  - None of the above. other \_\_\_\_\_

## ANNEX 2

# PILOT QUESTIONNAIRE

## Hippocrates Health Institute

10. How do the following images make you feel? (Circle all that apply)

- Calm/relaxed
- Energized/inspired
- Happy
- Welcomed
- Exposed
- Uncomfortable
- Vulnerable
- Anxious
- Stressed
- None of the above. other



-----

11. What is the level of visual privacy you desire while receiving treatments?  
(Circle best choice)

- Complete privacy/ private room/ alone
- Complete privacy/ private room/ space for family/friends
- Share room with one additional patient divided by half wall
- Share room with one additional patient divided by curtain
- Share room with one additional patient no visual privacy
- Share room with small group(4) of people
- Large room where only patients are allowed
- Large room where anyone is allowed
- Does not make a difference to me.
- None of the above.

Other-----

12. How does hearing the surrounding sounds (cars, chatter, equipment) make you feel? (Circle all that apply)

- Doesn't matter
- Stressed
- Uncomfortable
- Invading their privacy
- Nervous
- Relaxed
- Positive
- Happy
- Doesn't bother me.
- None of the above. other

-----

13. During treatment, you can hear your neighbor and they can hear you.  
How does that make you feel? (Circle all that apply)

- Doesn't bother me
- I love hearing my neighbor
- Uncomfortable when speaking with staff/ over the phone
- Happy, it means I'm not alone
- Sad, they're not doing well
- Embarrassed, I had a bad day
- Excited to talk to them
- Vulnerable
- Comforting, we share experiences
- None of the above. other

-----

14. How do the size of the buildings compared to your height make you feel? (Circle all that apply)

- Welcomed
- Important
- Enclosed
- Claustrophobic
- Impressive, leave you in awe
- Interested
- Uncomfortable
- Insignificant
- Does not matter/I don't care
- None of the above.

Other-----

15. How comfortable do you feel when you are in the following spaces?  
(1 not comfortable at all - 5 very comfortable)



1 2 3 4 5



1 2 3 4 5



1 2 3 4 5

Not Comfortable



1 2 3 4 5

Very Comfortable

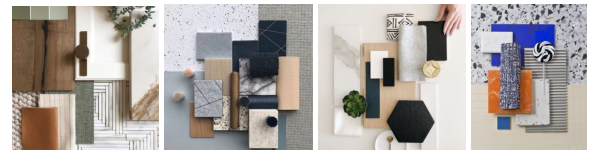
16. Rate the following material samples in order of preference for rooms where you receive treatment.

1 (Most Preferred)

2(Preferred)

3(Somewhat Preferred)

4 (Not Preferred)



**End of Pilot Questionnaire:**  
**Hippocrates Health Institute**

## ANNEX 2

# PILOT QUESTIONNAIRE

## Lennar Foundation Medical Center

1. In this room what would you prefer to do? (Circle all that apply)
  - a. Sleep
  - b. Read
  - c. Write
  - d. Color
  - e. Watch TV
  - f. Be on your phone
  - g. Talk
  - h. Rest
  - i. None of the above. Other \_\_\_\_\_
2. How do the following images make you feel? (Circle all that apply)
  - b. Calm
  - c. Tired
  - d. Energized
  - e. Inspired
  - f. Welcomed
  - g. Anxious
  - h. Stressed
  - i. Happy
  - j. Sad
  - k. None of the above. Other \_\_\_\_\_
3. In the room, you have a window. During any treatment do you prefer to have the blinds?
  - b. Completely opened
  - c. Slightly opened
  - d. Half-way opened
  - e. Completely closed
  - f. It does not matter.
  - g. None of the above.
  - Other \_\_\_\_\_
4. During any treatment, do you prefer to have access to daylight?
  - b. Yes
  - c. Depends on my mood
  - d. Depends on the weather
  - e. No
  - f. It doesn't matter
  - g. None of the above.
  - Other \_\_\_\_\_
5. During your treatment what activities would you be most interested in? (Circle all that apply)
  - a. Yoga with instructor
  - b. Working on a puzzle
  - c. Arts and craft workshops
  - d. Listening to music
  - e. Sleeping
  - f. Be alone
  - g. Read a book
  - h. Watch TV
  - i. None of the above.
  - Other \_\_\_\_\_
6. During your treatment what do you find the most meaningful? (Circle all that apply)
  - a. Connecting with other patients
  - b. A sense of community
  - c. Being isolated
  - d. Speaking with counselors
  - e. Spending time with family
  - f. Being able to rest/sleep
  - g. Help or assist other patients
  - h. Personalized the space where you receive treatment
  - i. Documenting your journey
  - j. None of the above. other \_\_\_\_\_
7. What brings you the most optimism during treatment? (Circle all that apply)
  - a. A spiritual connection
  - b. Interaction with different staff members
  - c. Specific staff members who you feel comfortable with
  - d. Group activities, classes, workshops, games
  - e. Connecting/ sharing with existing patients
  - f. Connecting/ sharing with previous patients
  - g. Being informed throughout the treatment
  - h. Access to internet/phone services to connect with others not in the facility
  - i. Accommodations for family and friends
  - j. None of the above. Other \_\_\_\_\_
  - k. \_\_\_\_\_
8. During treatment what would you rather have in the room? (Circle all that apply)
  - a. Access to a window
  - b. No window
  - c. Art with natural landscapes
  - d. Abstract art
  - e. Animal related sculptures
  - f. Colorful decor
  - g. Listen to music
  - h. Listen to natural sounds (water stream, leaves swaying)
  - i. Having plants in the room
  - j. None of the above.
  - Other \_\_\_\_\_
9. During treatment what are you most sensitive to? (Circle all that apply)
  - a. Specific smells such as flowers
  - b. Amount of light in your room
  - c. Hearing equipment
  - d. Heat indoors
  - e. Dark rooms
  - f. Hearing other patients
  - g. Feeling alone/isolated
  - h. Visual access to your surroundings
  - i. Nothing
  - j. None of the above. other \_\_\_\_\_

## ANNEX 2

# PILOT QUESTIONNAIRE

## Lennar Foundation Medical Center

10. How do the following images make you feel? (Circle all that apply)

- a. Calm/relaxed
- b. Energized/inspired
- c. Happy
- d. Welcomed
- e. Exposed
- f. Uncomfortable
- g. Vulnerable
- h. Anxious
- i. Stressed
- j. None of the above. other

-----

11. What is the level of visual privacy you desire while receiving treatments? (Circle best choice)

- a. Complete privacy/ private room/ alone
- b. Complete privacy/ private room/ space for family/friends
- c. Share room with one additional patient divided by half wall
- d. Share room with one additional patient divided by curtain
- e. Share room with one additional patient no visual privacy
- f. Share room with small group(4) of people
- g. Large room where only patients are allowed
- h. Large room where anyone is allowed
- i. Does not make a difference to me.
- j. None of the above.

Other-----

12. How does hearing the surrounding sounds (cars, chatter, equipment) make you feel? (Circle all that apply)

- a. Doesn't matter
- b. Stressed
- c. Uncomfortable
- d. Invading their privacy
- e. Nervous
- f. Relaxed
- g. Positive
- h. Happy
- i. Doesn't bother me.
- j. None of the above. other

-----

13. During treatment, you can hear your neighbor and they can hear you. How does that make you feel? (Circle all that apply)

- a. Doesn't bother me
- b. I love hearing my neighbor
- c. Uncomfortable when speaking with staff/ over the phone
- d. Happy, it means I'm not alone
- e. Sad, they're not doing well
- f. Embarrassed, I had a bad day
- g. Excited to talk to them
- h. Vulnerable
- i. Comforting, we share experiences
- j. None of the above. other

-----

14. How do the size of the buildings compared to your height make you feel? (Circle all that apply)

- a. Welcomed
- b. Important
- c. Enclosed
- d. Claustrophobic
- e. Impressive, leave you in awe
- f. Interested
- g. Uncomfortable
- h. Insignificant
- i. Does not matter/I don't care
- j. None of the above.

Other-----

15. Based on these images, on a scale from 1 to 5. How comfortable do you feel? (1 not comfortable at all - 5 very comfortable)



1 2 3 4 5



1 2 3 4 5



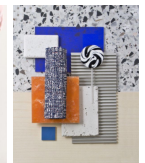
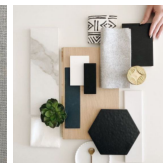
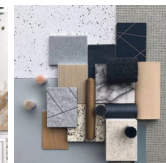
1 2 3 4 5



1 2 3 4 5

16. Rate the following material samples in order of preference for rooms where you receive treatment.

- 1 (Most Preferred)
- 2(Preferred)
- 3(Somewhat Preferred)
- 4 (Not Preferred)



**End of Pilot Questionnaire:**  
**Lennar Foundation Medical Center**

**ANNEX 2****PILOT QUESTIONNAIRE DISCUSSION****Hippocrates Health Institute**

The first thing that was observed was that individuals felt the questionnaire was too long. Although the questionnaire only consisted of 16 questions, the answers were relatively extensive. We reduced the wording to simpler forms and shortened answers that were equivalent to the existing responses. Several questions and responses targeted very similar areas, therefore the questions were combined. Some of the images presented in the questionnaire did not trigger the same emotion, therefore some responses were contradicting and not clear. We resolved this issue by separating the images to get a better understanding of the feeling that each image triggered. In order to get a more accurate representation in regards to the scale of spaces, images are now provided as most individuals answered they did not care. We were unsure if they genuinely did not care or if they did not realize the scale in buildings. Lastly the participants had a higher interest in questions that included images, therefore those questions are going to be moved to create a more balance questionnaire and maintain their interest.

**Lennar Foundation Medical Center**

We experience the same first reaction, individuals seemed to take a step back when noticing the questionnaire was four pages long. We also reduced the wording, and shortened answers. We also combined questions to reduce repetition and reduce the lack of interest from the participants. Questions were once again combined. We experienced the same confusion when presenting more than one image of different spaces. The responses were unclear, we also separated those images in order to get a more accurate representation. Regarding the scale of spaces, for the Lennar Foundation Medical Center the same question seemed to trigger more accurate responses, individuals noticed the scale a lot more than the individuals in Hippocrates Health Institute. This could mean that the bigger scale did have an impact in the users experience. Just like in the first survey, questions with images were moved around to create a more balanced questionnaire and maintain the participants interest.

## ANNEX 3



# FINAL QUESTIONNAIRE



## ANNEX 3



# FINAL QUESTIONNAIRE

## Hippocrates Health Institute

1. How important was it for you to control lighting in the treatment room?
  - a. Very Important
  - b. Important
  - c. Neutral
  - d. Not Important
  - e. Not Important At All
2. How effective on your healing was having the ability to control lighting in the treatment room?
  - b. Very Important
  - c. Important
  - d. Neutral
  - e. Not Important
  - f. Not Important At All
3. How important is access to interactive or solo activities during your treatment?
  - a. Very Important
  - b. Important
  - c. Neutral
  - d. Not Important
  - e. Not Important At All
4. During your stay, you had access to various activities. (Yoga, Swimming, Workshops, Massages, etc). How effective were these activities in contributing with your healing?
  - a. Extremely Effective
  - b. Effective
  - c. Neutral
  - d. Not Effective
  - e. Not Effective At All
5. How important was the community support in your healing journey?
  - a. Very Important
  - b. Important
  - c. Neutral
  - d. Not Important
  - e. Not Important At All
6. How effective was the community support in your healing journey?
  - a. Very Effective
  - b. Effective
  - c. Neutral
  - d. Not Effective
  - e. Not Effective At All
7. Does having access to nature during your treatment affect your experience?
 

Yes

No
8. How important is it for you to have a visual connection to nature? For example (water features, gardens, daylight, etc)
  - a. Very Important
  - b. Important
  - c. Neutral
  - d. Not Important
  - e. Not Important At All
9. How important was it for your healing process to limit the amount of visual access people had to you when getting treatment?
  - a. Very Important
  - b. Important
  - c. Neutral
  - d. Not Important
  - e. Not Important At All
10. How effective was it for your healing process to limit the amount of visual access people had to you when getting treatment?
  - a. Very Effective
  - b. Effective
  - c. Neutral
  - d. Not Effective
  - e. Not Effective At All
11. How important was it for your healing process to have audio privacy?
  - a. Very Important
  - b. Important
  - c. Neutral
  - d. Not Important
  - e. Not Important At All
12. How effective was it for your healing process to have audio privacy?
  - b. Very Important
  - c. Important
  - d. Neutral
  - e. Not Important
  - f. Not Important At All
13. How satisfied are you with the colors of the flooring, furniture and surfaces in the following spaces?
 

Not effective at all

1 2 3 4 5

Image 1



Image 2

Extremely Effective

1 2 3 4 5

Image 1

Image 2
14. How effective are the finishes in creating a healing environment?
 

Not effective at all

1 2 3 4 5

Image 1

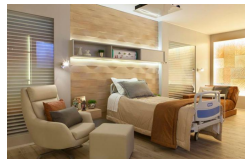

Image 2

Extremely Effective

1 2 3 4 5

Image 1

Image 2
15. Which interior environment would you prefer to receive treatment in?
 

Not effective at all

1 2 3 4 5

Image 1

Extremely Effective

1 2 3 4 5

Image 2

## ANNEX 3

# FINAL QUESTIONNAIRE

## Lennar Foundation Medical Center

1. How important was it for you to control the lighting in the treatment room?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
2. In regards to your healing, how effective was having lighting control in your room?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
3. How important is access to interactive and solo activities during your treatment?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
4. During your stay, you had access to various activities while getting treatment. (Crafts, puzzles, listening to music, watching tv, massages, etc). How effective were these activities in contributing to your healing?
  - a. Very effective
  - b. Effective
  - c. Neutral
  - d. Not effective
  - e. Not effective at all
5. How important was the community support in your healing journey?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
6. How important was the community support in your healing journey?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
6. How effective was the community support in your healing journey?
  - a. Very effective
  - b. Effective
  - c. Neutral
  - d. Not effective
  - e. Not effective at all
7. How important is it for you to have a visual connection to nature? For example water features, gardens, daylight, etc
  - a. Very effective
  - b. Effective
  - c. Neutral
  - d. Not effective
  - e. Not effective at all
8. How important is it for you to have visual connection to nature? For example water features, gardens, daylight, etc?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
9. Does having access to nature during your treatment affect your experience?
 

Yes

No
10. How important was it for your healing process to limit the amount of visual access people had to you when getting treatment?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
11. How important was it for your healing process to have audio privacy?
  - a. Very important
  - b. Important
  - c. Neutral
  - d. Not important
  - e. Not important at all
12. How effective was it for your healing process to have audio privacy?
  - a. Very effective
  - b. Effective
  - c. Neutral
  - d. Not effective
  - e. Not effective at all
13. How satisfied are you with the colors of the flooring, furniture, and surfaces in the following spaces?
 






Image 1      Image 2

	1	2	3	4	5
Image 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Image 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Not effective at all      Extremely Effective
14. How effective are the finishes in creating a healing environment?
 






Image 1      Image 2

	1	2	3	4	5
Image 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Image 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Not effective at all      Extremely Effective
15. Which interior environment would you prefer to receive treatment in?
 

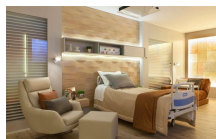




Image 1      Image 2

**ANNEX 4****INTERVIEW PROTOCOLS**

Interview #\_\_\_\_\_

Date\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

**Interview Protocol***Script*

Welcome and thank you for your participation today. My name is \_\_\_\_\_and I am a graduate student at Florida International University conducting research for my Master of Interior Architecture. Today's interview will take approximately 15-30 minutes and will include some questions regarding your experiences during your stay here at Hippocrates Health Institute. My goal is to understand how design elements in the interior environment affect well-being. I would like your permission to tape record this interview, so I accurately document the information you convey. If at any time during the interview you wish to discontinue the use of the recorder or the interview itself, please feel free to let me know. All of your responses are confidential. Your responses will remain confidential and will be used to develop a better understanding of how patients respond to the interior environment and how we, as designers, can better improve treatment spaces for you.

At this time, I would like to remind you of your written consent to participate in this study. Holistic Cancer Retreat: What role does design play in fostering recovery and well-being in cancer patients and which interior design elements create the occurrence of nature to further meet the psychological and physical wants and needs of these patients? You and I have both signed and dated each copy, certifying that we agree to continue this interview. You will receive one copy and I will keep the other under lock and key, separate from your reported responses. Thank you.

Your participation in this interview is completely voluntary. If at any time you need to stop or take a break, please let me know. You may also withdraw your participation at any time without consequence. Do you have any questions or concerns before we begin? Then with your permission, we will begin the interview.

## ANNEX 4

### INTERVIEW QUESTIONS

#### Demographic questions

1. What ethnicity are you?
  - a. White
  - b. Black
  - c. Latin
  - d. Asian
  - e. Native American
  - f. Multi
  - g. Other
  
1. What is the highest level of education you received?
  - b. Some High school
  - c. High School Degree
  - d. Some College
  - e. College Graduate
  - f. Master's Degree
  - g. Doctorate Degree

#### Strategic Questions

1. Can you describe how the environment here at Hippocrates has contributed to your healing experience so far?
2. How would you describe a healing space?
3. Was there anything in particular that helped you feel calm and peaceful?
4. Was there anything that made you feel stressed or agitated?
5. Did you do anything to take your mind off of your current state of health?
6. Did you use any technology while you have been here, such as a TV, iPod, cell phone, Wifi?
  - a. Did it affect your mood in any way? (positively or negatively?)
1. Is there anything else you would like to share?

**ANNEX 4****INTERVIEW CHECKLIST**

<b>WELL-BEING</b>		
<b>CONCEPT</b>	<b>VARIABLE</b>	<b>INDICATORS</b>
LIGHTING	Autonomy	Control Lighting Conditions
ENTERTAINMENT	Positive Distraction	Entertainment Activity Sense of Community
BIOPHILIC ELEMENTS	Presence of Nature	Attraction to Nature
	Spiritual Connection	Wholeness: Mind, Body and Spirit Connection
PRIVACY	Visual Privacy	Comfort Degree of Privacy
	Audial Privacy	Noise Level
INTERIOR FINISHED AND MATERIALS	Architectural Finishes	Home-like Environment
	Supportive Environment	Supported Design
AUTONOMY	TREATMENT	HEALING

**Were the following addressed?**

## Interview Checklist

- Access to daylight
- Appropriate Lighting
- Activities
- Community
- Access to Nature
- Visual Privacy
- Audial Privacy
- Comfort (Finishes/Furniture)

## ANNEX 4

# PARTICIPANT OVERVIEW

Hippocrates Health Institute

## INTERVIEW 2 FOCUS GROUP 2

**PARTICIPANT 1**     **Participant:** Woman, Latin, aged 31-40  
**Diagnosis:** non-Hodgkin's Lymphoma  
**Education:** College Degree

**PARTICIPANT 2**     **Participant:** Woman, White, aged 31-40  
**Diagnosis:** Breast cancer  
**Education:** High School Diploma

**Background:** This interview was conducted for 30 minutes with two women who had become friends during their stay at Hippocrates Health Institute. Both had entered the facility at the same time and completed two weeks at the time. Both were preparing to begin the Comprehensive Cancer Wellness Program.

**INTERVIEW 3**     **Participant:** Woman, White, aged 50-60.  
**Diagnosis:** Cerebral Edema; Brain cancer  
**Education:** College Degree  
**Background:** This interview was conducted for 10 minutes with one woman. The patient completed her three weeks at Hippocrates Health Institute and was getting ready to check out. She is a returning patient, and was completing the Comprehensive Cancer Wellness Program.

**INTERVIEW 4**     **Participant:** Woman, Latin, aged 50-60  
**Diagnosis:** Breast cancer  
**Education:** College degree, pursuing additional education  
**Background:** This interview was conducted for 15 minutes with one woman. The patient was in the process of completing three weeks at Hippocrates Health Institute. She originally completed the Comprehensive Cancer Wellness Program a few years ago and returned to complete the life transformation program.



## ANNEX 4



# **INTERVIEW 2 FOCUS GROUP 2** **HIPPOCRATES HEALTH INSTITUTE**

## ANNEX 4

## INTERVIEW 2 FOCUS GROUP 2

## Hippocrates Health Institute

## Deductive Analysis Hand-Coding

## Interviewer:

How would you describe your healing experience here at Hippocrates?

Speaker 1: [00:05](#)

Hippocrates it feels like a healing property. I can say that. The first day, you get checked in. They give you a tour, you do orientation, you have your meal. So what can I say about these things? I, okay, so you eat mostly raw. Vegan. You eat vegan. It's 100% mostly raw vegan and half of your plate that they give. You should be sprouts and they sprout a bunch of different stuff here. And some flower sprouts actually have all nine essential amino acids, so they pack that in twice a day.

Speaker 1: [01:46](#)

They have celery, cucumbers, bean sprouts, sunflower sprouts. You can eat as much as you want. And then there's a wheat grass building where you can go in and make wheat grass. you can juice wheat grass and they recommend twice a day, two ounces. So lots of nutrients coming into your body. what else to note, no salt, no fruits except for three times a week through the meals a week you get fruit. no breakfast unless the doctor orders it. you're just juice and do lemon water. what else about food? Saturday night they have raw banana ice cream and dates drizzle.

Speaker 2: [02:12](#)

In the beginning, when I first ate lunch, the food and the sprouts and the vegan living began, they call it because it's all plant based was really refreshing and amazing. And then dinner was like, yeah, I still like this. And then lunch again and then dinner. So it definitely took getting used to. Never been vegan, let alone raw vegan, let alone like a hundred percent plant based. Literally like we're not talking bread vegan, we're talking plant vegan and that's, it definitely takes getting used to that.

Speaker 2: [03:07](#)

I like the food. I mean it's good in the sprouts. You want half of your plate is sprouts. It took a while to not constantly think, man, a good piece of grilled salmon on top or on the side or like some nice roasted potatoes. Uh, the sugar detox was the hardest. Oh my gosh, put we're also putting so much in our bodies or like green stuff like green juices, blue, green algae, wheat grass shots twice a day. And then you do the enemas. And then you do a wheat grass implant, where you shoot wheat grass up your bum and it takes it, you know, into the colon obviously, and then up into your liver.

Speaker 1: [04:30](#)

haha - yeah. Definitely new experiences here. Lots of new experiences and I'm grateful. I am grateful. And in the beginning, I was feeling sorry for myself and totally not in the right mindset, I knew like, wow, this is truly about self-discipline. This is about just letting go and doing hard things that you don't necessarily want to do and don't know best.

## ANNEX 4

## INTERVIEW 2 FOCUS GROUP 2

## Hippocrates Health Institute

## Deductive Analysis Hand-Coding

Speaker 1: [05:02](#)

I skipped a few classes in the beginning just so that I could just kind of eat longer and slower or just to read, et cetera. I've noticed that dinner time, **come dinner time is kind of my low points** I have figured out. Part of that is because I'm not excited about the food because it's the same both meals every day. They have little side dishes. It's not my favorite time, **but then I started having dinner with my friends and we'd talk and hear each other's stories.** And we're very similar in a lot of ways. some of our relationship pasts, **we've gone through similar experiences or feelings. it's nice to connect, we just sit and talk** and **then we'll go to the Sauna and the salt mineral pool.**

Speaker 1: [06:17](#)

so we do that and **we just talk more and connect,** that's a real thing for me. I, I like it. I mean that. And so that was really nice. **It turned what was going into kind of a lonely woe is me dinner into like a really good night.** It really was. So we're kind of on this journey together and it's nice to just talk and laugh about different aspects.

Speaker 2: [06:30](#)

Yes, I remember my first full day, second day at Hippocrates and **we had appointments with the doctor, we had more orientation and a few classes.** It was hard trying to get used to the schedule and like booking stuff that you do every week. You have to do that. And in the beginning, on top of a new diet and learning so much at once, you also feel like you don't have a lot of downtime. **But it's really because it's just the first day of like administrative stuff** but you really just want **to relax and be in the sun, workout, yoga,** all of that. I had a hard time sleeping in the beginning too, mostly because you have a detox headache and you are constantly going to the bathroom. Your body is detoxing. **You start getting into your feelings and so its easy to feel a bit removed when you first come.**

Speaker 2: [08:45](#)

But then you are surrounded with this amazing group of people on the same journey, going through the same experience. And somehow you get through it. **And our group, we have some great people and we're really having a good time together. The relationships you create with everyone really helps you get through that first week.**

Interviewer [09:25](#)

Can you describe how the environment here at Hippocrates has contributed to your healing experience so far?

Speaker 2: [09:30](#)

The property itself has so many things. **pools, a hot tub and then a cold tub to do the, alternating therapy, cold hot therapy. They have infrared saunas all over.** you can sit in them. they have this, what's really cool, what stands out, I don't know why to me is, they have this **reflexology little pond. It's not a pond, it's, it's this little path that goes around a gazebo and it's about an inch deep of water.** So you take off your shoes and they have different kinds of rocks and sizes of rocks and you walk barefoot around just pondering and meditating and the different rocks. touch different reflexes in your feet.

## ANNEX 4

### INTERVIEW 2 FOCUS GROUP 2

Hippocrates Health Institute

#### Deductive Analysis Hand-Coding

**Speaker 1:** [09:23](#)

The reflexology pond was one of the first things I tried out! I've never seen one before and it's such a cool experience. There are also a lot of fountains around waterfalls, pools, like swimming pools, gym, paths, walking paths. It's 52 acres. Sometimes I just walk around and think, listen to the quiet, listen to the fountains. There is such an energy here. It's inspiring.

**Speaker 2:** [10:25](#)

Well, apparently the property, they have shields for electromagnetic waves. They have all organic stuff, beddings, towels, wheat grass. And sprout greenhouses with 30% more oxygen in the greenhouse than normal air. And they play classical music to their plants. Parker Davis, the guy who grows the wheatgrass, has so much research about how to grow perfect wheatgrass and there is so much research about how classical music makes plants happy. People too!

**Speaker 1:** [11:47](#)

And there are no TVs anywhere. They do have internet and you can stream stuff from your personal devices if you want, but you just come here and really just get away. I don't have a desire to like be on my phone or check social media. I used to fall asleep to my TV every night and now I find the noise annoying. I'm finding that I would rather walk over to the meditation pond and sit in silence or go over to the Wigmore pond and listen to the fountain. That is so much more relaxing to me now.

**Speaker 1:** [13:01](#)

The entire campus is just beautiful. The other night, we all met up at the pool and the Palm trees with the moon and the stars and the breeze. That was a good moment. I'm grateful for the people that I've met, the connections that I've been really grateful

**Speaker 2:** [13:35](#)

We learned about the power of connection and just by talking to each other about your stories is so important for healing. Cause then you realize like, Oh yeah, I have felt that or I'm not alone. It was really nice. And, the mental part of this has been the hardest. You know, I have my car here and I could at any point take it and drive to any drive through or a grocery store and eat whatever I want but then I start thinking why, why would I be paying to be here then? Or why, how would it be any different or better off or how am I addressing cancer if I do? So that has been the hardest part, truly. and then the mental part of the food, it's so different. It's healthy and I like healthy, but I've never eaten a raw living food 100% all the time.

**Interviewer:** [15:00](#)

How much control did you feel you had over your treatment?

## ANNEX 4

### INTERVIEW 2 FOCUS GROUP 2

#### Hippocrates Health Institute

### Deductive Analysis Hand-Coding

Speaker 1: [15:04](#)

Saturdays you don't have a schedule. This morning we went to the breast lymph class, learning how to drain your lymph and your breasts after trauma or tight bras and the importance of it. That was really good. Linda's been teaching forever, the woman that did it and it was very informative and gave really good take home tools that I'll probably be sharing with women from here on out. I went to that class, did my wheat grass, the majority of the afternoon, we spent in the mineral pool, the dead sea salt mineral pool that they have here, then the sauna, worked out and tonight is ice cream night and they do frozen ice cream through an Omega juicer. I mean a frozen bananas and it comes out like so creamy and all. they also have an almond milk ice cream where they literally just freeze some almond milk but such a treat and it's wonderful.

Speaker 1: [16:28](#)

But during the week, I set an intention for myself everyday. Starting with yoga in the morning. a beautiful yin yoga class. And then exercise class. I do weights, I make sure it get in the enemas, the wheat grass implants, flax water, my saunas, cold plunge, all the things that are supportive. It feels powerful to just kind of make sure that I get all of these things taken care of every day. And my laundry. So that makes a big difference for me when I wake up with a plan and I set out and I honor myself and my time instead of just kind of following someone else's schedule.

Speaker 2: [17:06](#)

Yea, I mean we basically did everything together today. I woke up, went to yoga, I got to work out. I had a really good soul conversation with the trainer here, talking about what the meaning of life is and our perspectives and God and the purpose, our purpose in life. And just a really good, thought provoking conversation. I did my water enemas and wheat grass implants, green juices, drink my wheat grass and laid by the pool. Good sunny day, nice lunch, and good conversation. I did my hot cold pool plunges where you sit in the hot tub for five to 10 minutes, get hot and then you jump in a pool that's 50 degrees for 10 seconds and you do that seven times. It's really good for circulation. took some time to read. I listened into my body, went and did the sauna, meditated. This whole experience so far, it's been quite a journey.

Speaker 2: [18:39](#)

Brian, the guy that is the director of this place, gives a health talk and you really learn so much. He explains what fasting is and how it helps our bodies because we fast on Wednesdays. You fast from Tuesday night until Thursday lunch which is when you have your first real solid meal. We basically drink green juice and lemon juice and wheat grass. And then we have a cold soup, green soup for dinner. So your next meal is actually Thursday afternoon but surprisingly you don't feel that hungry.

Speaker 1: [19:23](#)

Part of the reason why is because there's a lot of protein in this plant food and you won't feel hungry because you feel very sustained. So you really learn a lot about the raw food diet.

## ANNEX 4

### INTERVIEW 2 FOCUS GROUP 2

#### Hippocrates Health Institute

### Deductive Analysis Hand-Coding

**Speaker 1:** [19:30](#)

And Linda, the woman that taught the breast class this morning also teaches a "Taking it Home" class. She teaches how to leave Hippocrates and still implement these things. And I will say that it was like the first moment that I started finding myself thinking I really need to eat more raw, more live food. The ways that she taught the class was amazing with nutrition and just the concepts behind why you would eat this way. And she made the kitchen prep seems so doable. So I will definitely be implementing some of these practices for sure.

**Speaker 2:** [20:15](#)

One of the things they teach you here is, you know, give your body the right tools and see what it does and it can heal. And I don't know what this looks like for cancer itself, but I just believe in that principle so much that it created dis ease within for some reason. So it can heal disease also from within, it's as much mental as it is physical.

**Speaker 2:** [21:01](#)

I guess that if I'm being a hundred percent honest that like I have to be in this situation, you know, like, it's a mindset thing. I totally get it. But it feels like, dang, I have cancer. And some people are just here because they want to lose weight. Some people are here because they want to learn how to do the vegan and raw. And for me, I have an option of chemotherapy, radiation surgery or nothing, which leads to death potentially eventually, I guess, or this. And, so I have a little bit of anger and I'm not an angry person. It's really interesting that I've experienced some anger through this process. or frustration or whatever you want to term it.

**Speaker 2:** [22:17](#)

So I've had really emotional days, and it's mostly been anger. It's ironic that I come to the most beautiful, peaceful, serene place and I discover anger, my feelings of anger. I don't normally admit to feelings of anger or even really have feelings of anger. in fact, I used to tell people and I tell people a lot like, I don't get angry. I get sad or disappointed, but I'm finding anger here. and exploring the stress, disease connection. This is stress as in subconscious patterns that we came with or we inherited from our family or from our parents or the wound or upbringing that, uh, wreak havoc on our nervous system, our endocrine system, our immune that lead to these diseases and the emotional role that goes into that.

**Interviewer:** [23:38](#)

So how has privacy played into your healing journey?

**Speaker 1:** [23:45](#)

I remember when I was calling to sign up for this, these three weeks, there's a big price difference between getting a private room or a shared room. And I really wanted a private room, but I knew that it wasn't going to be my money, that this was going to be the sacrifice of friends and family. And so I didn't just want to be selfish and just, you know, think like, well, what do I want?

## ANNEX 4

### INTERVIEW 2 FOCUS GROUP 2

#### Hippocrates Health Institute

### Deductive Analysis Hand-Coding

**Speaker 1:** [24:30](#)

So I thought, okay, well I can share a room with one other person. And so I signed up to have a shared room with one bathroom. I knew that I would love to have my own space and sure enough, I don't have a roommate. I have a room with two beds, two queen beds, but just me, my own bathroom. And, new people come in on every Sunday. So I'm not sure it'll stay that way, but I absolutely needed it that for that first week and now it's just a bonus.

**Speaker 2:** [25:27](#)

I had a roommate for two days and I'm back by myself again. Turns out she's a big snorer and you actually sign a waiver before you come saying asking if you snore and you sign a waiver saying you don't. Cause there's different price ranges for shared rooms, single rooms and whatnot. So if you snore, you have to get a single room. And either she didn't know it or overlooked it, but she snored. So she is now in her own room somewhere and I wish her all the best. But I will say, there are times when this program gets really hard. And I feel like the privacy in some ways is good. But it can also be bad. In the beginning, I wanted to be by myself, but people are always coming over and engaging you and sometimes I just really didn't want to be bothered, but I'm so grateful that they did. Because I always ended up having such a better day, and I ended up having deeper connections.

**Interviewer:** [27:18](#)

Is there anything else you would like to add?

**Speaker 1:** [27:25](#)

As hard as it has been at times, as hard as it was dealing with some of the emotional aspects, this has been by far the most rewarding experience I've ever had. Hippocrates has really showed me how important it is to be self-aware and to digitally disconnect. That social media is not really social at all and I find that I value these deeper connections far more than getting likes on my Instagram. Before I got here, I kept thinking about how hard it was going to be to disconnect. But that was surprisingly the easiest part. The diet was the hardest. But I feel healthy, I lost 12 pounds, even though that was not my intention. And emotionally, I feel 50 pounds lighter.

**Speaker 2:** [29:12](#)

What's social media? Haha. I'm going to try to not log back on – I don't know how long that will last but let's see. But in all honesty, I never paid attention to how important background noise was. I always thought people who do spa days are self-indulgent but it's really essential for your healing. It's essential for centering yourself again. Taking time for yourself is not selfish and it's so important to recognize the difference. I am forever grateful for the experience I've had here at Hippocrates. And for the friendships I've made.



## Inductive Analysis Word-Cloud



### HHI Interview 2: Word Count

Word	Count
good	13
can	12
grass	12
want	12
wheat	12
day	11
people	11
first	10
know	10
feel	9
food	9
time	9
vegan	9

Word	Total
good	13
can	12
grass	12
want	12
wheat	12
day	11
people	11
first	10
know	10
feel	9
food	9
time	9
vegan	9

1. “All the things that are supportive - It feels **powerful** to just kind of make sure that I **get** all of these things taken care of every day”
2. “We learned about the **power of connection** and just by talking to each other about your stories is so important for **healing**.”
3. “And I feel like the **privacy** in some ways **is good**. **But it can also be bad**. In the beginning, I wanted to be by myself, but people are always **coming over** and **engaging you** and sometimes I just really did not want to be bothered, but I’m so **grateful that they did**. “

The second group interview was again a surprise in terms of expectations. This group focused much more on the food aspect, And control over their schedules. However, many of the same themes emerged regarding overall spiritual connection and connection to other people. They described how good they felt and wheatgrass was a huge part of their association to Hippocrates Health Institute. This group spoke much more about having control of their schedule and learning a lot from the classes. They seemed to be a bit closed off, but it could be due to the fact that these participants had not entered into the Comprehensive Cancer Wellness program yet.

## ANNEX 4



# **INTERVIEW 3**

## **HIPPOCRATES HEALTH INSTITUTE**

## ANNEX 4

### INTERVIEW 3

#### Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Interviewer

I'm going to ask you a few questions regarding demographics. If I may, what ethnicity are you?

#### Participant 1

Yes of course, I'm white.

#### Interviewer

And what is the highest level of education?

#### Participant 1

College degree.

#### Interviewer

Great, thank you. What brought you to Hippocrates Health Institute?

#### Participant 1

Well, I'm a three time brain cancer survivor. I had brain tumor, I couldn't function. I was working and just began getting headaches every day. I never thought about symptoms. Especially because I had been healthy for 12 years. I had it checked out and they found that I had cerebral edema. I had brain cancer. **I was not mentally prepared.**

#### Interviewer

I'm sorry to hear that. I'm sure it must have been scary. So how would you describe your healing experience here at Hippocrates?

#### Participant 1

Truly amazing, that's why I'm back. I wanted to learn new stress techniques. Months ago, **I felt angry, sad, resentment, hurt all at once. These were strong, powerful emotions that were sent to my whole body.** This course **taught me, way beyond the nutrition.** Yes, I had the wheat grass and the green drink and the sprouts but they taught me to cope and turn those negative emotions..

#### Interviewer

Would you be able to elaborate? Could you describe what contributed to your healing process and how..

#### Participant 1

I mean all the therapies that Hippocrates offers are so wonderful. But for instance when you go into the Oasis therapy room, there's the QRS and when you go on QRS machine, it just puts your body in a relaxation state that you feel so rested. **I've also been tapping into this amazing thing called gratitude. And every day I put gratitude in my life. I reflect.**

#### Interviewer

Was there anything in particular that helped you feel calm and peaceful?

#### Participant 1

Yes, **I had never done this shamanic healing before.** And when we completed that session, **all the negative energy that was surrounding me was gone. I felt so light, like I was a butterfly, you know? Or I was like a bird flying.**

## ANNEX 4

### INTERVIEW 3

#### Hippocrates Health Institute

### Deductive Analysis Hand-Coding

#### Interviewer

That sounds amazing, was there anything that made you feel stressed or agitated?

#### Participant 1

No, not really, the environment is very peaceful and soothing.

#### Interviewer

Great, was there anything else that has helped you in your healing process?

#### Participant 1

Yes, I wake up every morning and go outdoors to meditate. You can't put 30 minutes or 10 minutes or two minutes on meditation. You meditate on what you need and God gives you that time.

#### Interviewer

Is there anything else you would like to share?

#### Participant 1

I recommend Hippocrates to everyone. It's a way of relearning how to handle stress and where those stress bombs are in your body.

#### Interviewer

Great, thank you for all of your feedback.

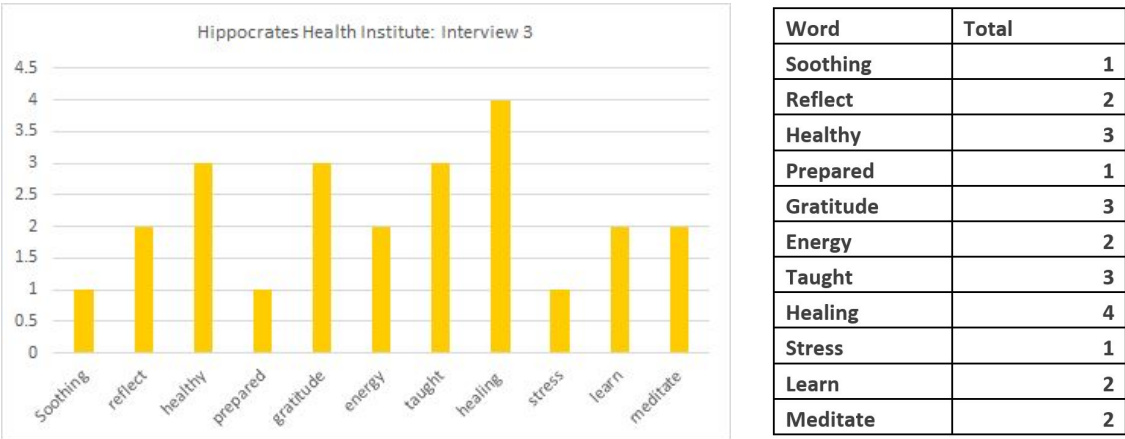
ANNEX 4

INTERVIEW 3  
Hippocrates Health Institute

Inductive Analysis Word-Cloud



Inductive Analysis Word Frequency



The word that's most important for this patient was: healing. The patient was focused on all aspects that for her meant process towards healing. The additional words that are highlighted reinforce healing, treatments such as meditation, learning how to deal with stress, practicing gratitude etc.

**Conclusive Analysis**

At hippocrates health institute patients are taught ways in which they can improve their lifestyle. As this patient mentioned several times, for her it was beyond juicing or eating clean, the treatment that best supported her was learning to manage her anxieties and stress relating to her illness. "Eight months ago, I felt angry, sad, resentment, hurt. These were powerful emotions that were sent to my whole body and that's what this course taught me, way beyond the wheat grass and the green drink and the sprouts they taught me to cope." The natural environment was supportive to her when meditating. Not specifically mentioned but she actually compared herself to a bird. "I had never done this shamanic healing before. And when we completed that session, all the negative energy that was surrounding me was gone. I felt so light, like I was like a butterfly, you know? Or I was like an Eagle flying." During this interview the overarching theme was focused on what she believed was helping her heal. Learned and integrating to those patterns to her daily life, such as meditating, being grateful and to some degree her religious beliefs. What had the most impact on the patient was learning how to manage her emotions and cope with her illness.

## ANNEX 4



# **INTERVIEW 4**

## **HIPPOCRATES HEALTH INSTITUTE**

## ANNEX 4

### INTERVIEW 4

#### Hippocrates Health Institute

#### Deductive Analysis Hand-Coding

##### Interviewer

I'm going to begin the recording, just a quick question about demographics . What ethnicity do you consider yourself?

##### Participant 1

Latin.

##### Interviewer

And what is the highest level of education?

##### Participant 1

Well, um I'm actually back in the university. They have inspired me and I want to spread this more and more. I want to help people be healthy. I love Maria and Brian they are my mentors and they helped me a lot. Now I'm doing eh, nutrition at the university for I can have my degree.

##### Interviewer

Wow that's pretty exciting, congratulations and good luck to you. Piggy backing on what you just mentioned, you said you are inspired, and want to spread this. Could you elaborate on what you want to spread?

##### Participant 1

I want more people to be healthy, I want to spread the message for more people could be healthier like me.

##### Interviewer

What would you say helped you be healthier?

##### Participant 1

Here I learned about nutrition and to have a better lifestyle.

##### Interviewer

Okay, so what made you want a better lifestyle? What brought you to Hippocrates?

##### Participant 1

I came to Hippocrates for the first time because of breast cancer. It changed my life completely.

##### Interviewer

Could you elaborate?

##### Participant 1

One year after I had breast cancer I found Hippocrates, I was afraid. They helped me to change my diet, I changed completely my lifestyle.

##### Interviewer

Was there anything in particular that helped you? Could you describe your healing experience?

##### Participant 1

Yes, this place is my second home. I love Hippocrates. I feel better and better with the people here. I followed their protocols and I did not feel alone or like I was in the hospital again.



## ANNEX 4

### INTERVIEW 4

#### Hippocrates Health Institute

#### Deductive Analysis Hand-Coding

**Interviewer**

Could you describe the environment? What makes it feel like home?

**Participant 1**

It feels peaceful, everyone is happy, I like to hear the birds and walking around the different paths. When Maria and Brian do the lectures in the hut its nice, it was not like the hospital.

**Interviewer**

Okay, thank you. So going back to your education, what made you decide that you wanted to go back to school?

**Participant 1**

I decided that it was time to go more, I wanted to help educate people in my country.

**Interviewer**

Oh okay, so you don't live in the states? So you want to teach about nutrition?

**Participant 1**

No I'm from Colombia. Yes, but also about changing lifestyle to avoid sickness. I want to follow the hippocrates protocol with raw chefs and research.

**Interviewer**

Is there anything else you would like to share?

**Participant 1**

Everybody must come here to learn about being healthy.

**Interviewer**

Thank you so much for your time.

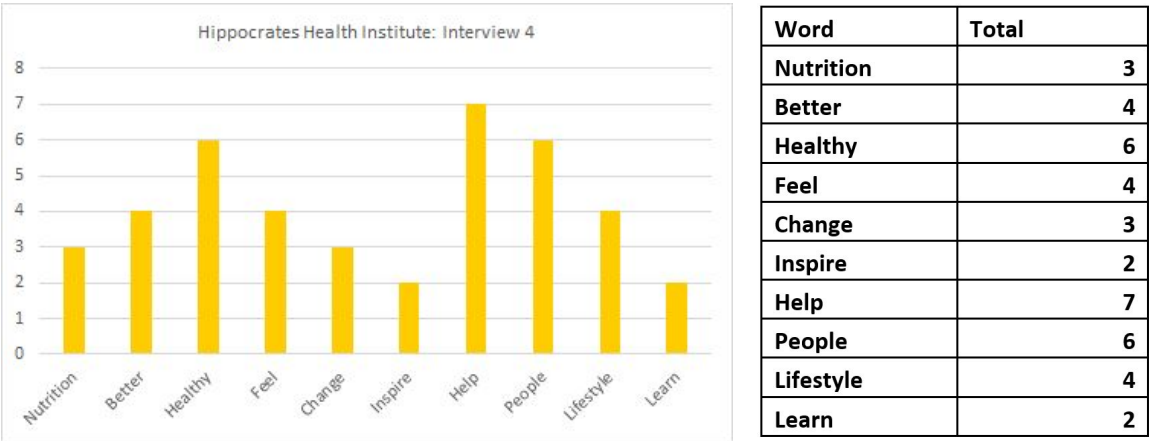
ANNEX 4

INTERVIEW 3  
Hippocrates Health Institute

Inductive Analysis Word-Cloud



Inductive Analysis Word Frequency



The word diagrams for this patient indicate that helping was of her main concern, being helped but also helping others. All of these words summarize what helped the patient in her recovery process but they’re also what she hopes she can do for others. Help other by educating them to live a better, healthier lifestyle.

**Conclusive Analysis**

As we have learned thus far an illness such as cancer takes a toll on the mental state of an individual far beyond their physical health. What can be derived from this interview is that patients who are in remission still need mental healing, possibly as a form of closure to the traumatic experience. This patient was in remission when she found the facility but it helped her in regards to changing the lifestyle she had and learning techniques. It was a bit difficult to get details about her experience within the premises but it was clear that nutrition and the community support was of huge impact. “Here I learned about nutrition and to have a better lifestyle.” It seems as if the patient wants to educate others for more of a preventative manner rather than waiting to be diagnosed and then treated. In fact in inspired her to become more educated in the field, “This place is my second home. I love Hippocrates. I feel better and better with the people here. I followed their protocols and I have never feel healthier.” Hippocrates was the second step into her healing process. However it led her to becoming conscious of her actions and how they could impact her health. Based on the information gathered the impact Hippocrates had on the patient was with consciousness of her actions now and how they would affect her in the future.

## ANNEX 4



# **INTERVIEW 1**

## **LENNAR FOUNDATION MEDICAL CENTER**

## ANNEX 4

### INTERVIEW 1

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

Patient: (03:15)

Well I discovered that I had Leukemia and I was very sad about that. But as soon as I got all the response from the hospital and the treatment, I got of a very hopeful and excited that my chances of success were high. I had a lot of hope, uh, while the treatment.

Interviewer: (03:39)

Okay. Is there any anything negative that you would improve?

Patient: (03:46)

Yeah, no, I don't think so. They encouraged me a lot through the treatment process.

Interviewer: (03:53)

And what about the interior design space?

Patient: (03:56)

I don't think this is not a very important issue about all the treatment and all the things I've passed through.

Interviewer: (04:15)

Would you think that the interior design affected the way that you, you overcame your, your disease?

Patient: (04:28)

I don't think so. I think it's more than that, um, a perspective of leaving and the behavior, uh, against all the things that is worse from our lives.

Interviewer: (04:43)

Okay. Yeah. And what did you do during the treatments ?

Patient: (04:48)

I worked a lot and tried to forget about the disease.

Interviewer: (04:53)

Okay. Did you have, um, emotional support, spiritual connection?

Patient: (05:00)

I have a lot of experience and connection with god, my emotional support is by myself and with Jesus, because I'm a very religious oriented and my family, as well gave me a lot of support.

Interviewer: (05:18)

Can you describe the treatment rooms and how you felt in the space? Did you have private rooms or bays? How was it?

Patient: (05:32)

I had an opportunity to work to be in the collective room and it was pretty good. But when I had the opportunity to go a private room I had the feeling, that i was a very special patient. So when I had the opportunity to be in a private, I felt like a special person. So it was very good for me. It was the best experience I had in a private room.

## ANNEX 4

### INTERVIEW 1

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

Interviewer: (06:17)

Okay. And did you have any, any views for the outdoors? Did you have natural light coming in?

Patient: (06:26)

Uh, no. I think I missed it. It was just a very slightly portion of light coming from doing window. But I wish I had more or natural light.

Interviewer: (06:38)

Okay. And the chairs and beds, were they comfortable?

Patient: (06:43)

Yes. They were pretty comfortable when I felt that I was more comfortable than I get to the bed, that was in a private room.

Interviewer: (06:54)

Okay. Um, how would you describe your experience in modern medicine versus alternative medicine? Are you familiar with, alternative medicine at all?

Patient: (07:08)

No, just like acupuncture and another kind of medicine. Well I tried to, I thought about using the alternative acupuncture or maybe a like, homeopathy, medicine, but they mentioned that it was like very opposite to the concept of the medicine that they used in the hospital so I backed off and I made an option to do hospital to, to do the best they can. They could, in order to move on with the chemotherapy.

Interviewer: (08:01)

What type of control did you have in your personal spaces? Like, would you, were you able to turn on off the lights, like technology? How, how was that?

Patient: (08:17)

Well at that time I didn't think that technology was important for me because I was passing through a very difficult process. So the only thing I need this to get up, get out of there. And uh, for me it didn't mean a lot maybe, or if I could control the music or something like that, by the voice or anything got easier, could be good. But at that time the process was so difficult for me that I would then like to think about anything else and just relax. Yeah.

Interviewer: (08:59)

And um, did you have access two, to use your phone? Like did you use your computer while you were in the treatment or something?

Patient: (09:12)

It was an option, but at that time I was trying to use my computer just for a while and just forget what I was passing through. Uh, yeah, it wasn't very important for me that for me, just, it just a way to relax and get out of that feeling that was very difficult.

Interviewer: (09:31)

Were you in the hospital for how many hours?

## ANNEX 4

### INTERVIEW 1

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

Patient: (09:38)

Yeah, five hours I think. So

Interviewer: (09:42)

And what did you think make the time go by faster?

Patient: (09:48)

Yeah, I tried to use my devices like a laptop and all that. I tried to work on maybe do some research and Google some things that were on interest and try to forget about it.

Interviewer: (10:08)

Okay. And did you have any those, did the hospital offered any entertainment activities?

Patient: (10:18)

Yeah, sometimes they, they went there and now that you offer some spiritual help and another one, they tried to get some food and um, once I had an opportunity to see someone that went through, chemotherapy and then he started to sing and that was very pleasure. The way he, he deal with this disease and try to over, um, well it's too soon to get up. Very good over calm and singing. And there was another girl that had , the good guitar and start just singing and it was a, like a pleasure and, uh, times that we can, uh, heard about music and something that like drift does off all the disease treatments.

Interviewer: (11:27)

I think that'll be it for Today. Thank you so much for your participation.

Patient: (11:38)

Okay. It's my pleasure. Okay. Bye. Thank you.

ANNEX 4

INTERVIEW 1 ANALYSIS  
Lennar Foundation Medical Center

Coding Quotations

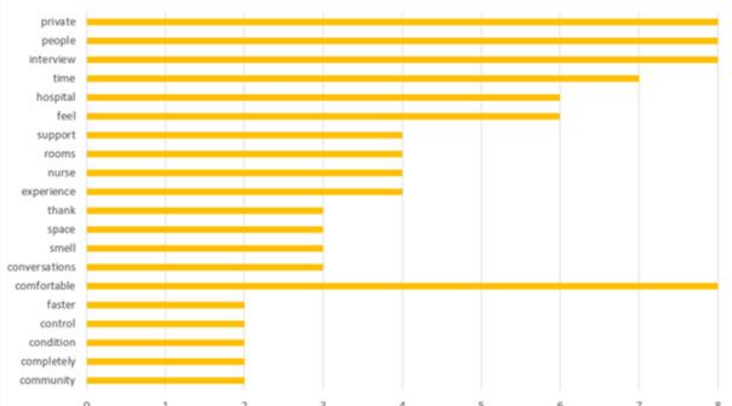
- 1. “It would be preferable to have a natural **view**.”
- 2. “It was a little loud because I was right next to the nursing station. they were all chatting and **talking**.”
- 3. “It’s really also hard to connect with **people** that have the same condition because some **people** have way worse than you.”
- 4. “The **light** was very, very bright and very white.”

Inductive Analysis: Word-Cloud



Inductive Analysis: Word Frequency

Word	Total
community	2
completely	2
condition	2
control	2
faster	2
comfortable	8
conversations	3
smell	3
space	3
thank	3
experience	4
nurse	4
rooms	4
support	4
feel	6
hospital	6
time	7
interview	8
people	8
private	8



Conclusion

Upon interview with female patient, it was concluded that the interior space did not make a difference on her perception of the cure. She was very confident with the treatment itself and lost hope that she would get cured, and she did. Even though the patient said the space had no affect on her emotions and feelings, she mentioned that the environment made her feel calm, relaxed and secure. Trying to forget about the disease was what made her feel strong and focused on something better. She did not stop working and she emphasized that this was a huge advantage her because it helped her to focus in something else.



## ANNEX 4



# **INTERVIEW 2**

## **LENNAR FOUNDATION MEDICAL CENTER**

## ANNEX 4

## INTERVIEW 2

Lennar Foundation Medical Center

## Deductive Analysis Hand-Coding

**Interviewer: (02:30)**

Then with your permission, we will begin the interview. What ethnicity are you?

**Patient: (02:53)**

American

**Interviewer: (02:53)**

What is the highest level of education that you received?

**Patient: (03:00)**

Master's degree

**Interviewer: (03:00)**

Tell me more about your, Initial experience or your experience as a patient. You can talk about positive aspects and negatives aspects?

**Patient: (03:23)**

The experience was good, I have only good memories at Lennar, they cured me and treated me super well. Since the first day I had the consultation with my doctor he was the most comprehensive and calm person and gave me all the support and motivation for me to get through the treatment successfully.

**Interviewer: (04:05)**

What factors contributed to your satisfaction/dissatisfaction with your ability to control the artificial light? Why was it important?

**Patient: (04:29)**

I didn't have control over the lighting, the only thing I could do is turn off the light whenever it was bothering me. The nurse would always ask me if the lighting was comfortable or if I wanted to turn it off. I wish I had something more accessible such as a table lamp right next to it so I could turn it on and off whenever I wanted to.

**Interviewer: (04:49)**

What factors contributed to the importance of interactive and solo activities during your treatment? Did the facility overall helped you not focusing on the disease all the time and forgetting about it?

**Patient: (03:00)**

Master's degree

**Interviewer: (03:00)**

Tell me more about your, Initial experience or your experience as a patient. You can talk about positive aspects and negatives aspects?

**Patient: (03:23)**

The experience was good, I have only good memories at Lennar, they cured me and treated me super well. Since the first day I had the consultation with my doctor he was the most comprehensive and calm person and gave me all the support and motivation for me to get through the treatment successfully.

## ANNEX 4

### INTERVIEW 2

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Interviewer: (04:05)**

What factors contributed to your satisfaction/dissatisfaction with your ability to control the artificial light? Why was it important?

**Patient: (04:29)**

I didn't have control over the lighting, the only thing I could do is turn off the light whenever it was bothering me. The nurse would always ask me if the lighting was comfortable or if I wanted to turn it off. I wish I had something more accessible such as a table lamp right next to it so I could turn it on and off whenever I wanted to.

**Interviewer: (04:49)**

What factors contributed to the importance of interactive and solo activities during your treatment? Did the facility overall helped you not focusing on the disease all the time and forgetting about it?

**Patient: (05:38)**

I had access to plenty of activities, but they were mostly solo and not while I was having the treatment done. There was a lady that would come to bring me food and also a religious lady that would give me something to read but I felt that it was boring in my opinion, it would keep reminding me about my disease and that I was in a hospital.

**Interviewer: (05:59)**

What factors contributed to the impact of community support in your healing journey? Why?

**Patient: (06:18)**

I feel that I didn't have any community support, only with the staff and doctors in the hospital. I wish I had cancer survivors giving lectures and telling other patients about their past successful experiences. Personally I found a lot of videos on YouTube that helped me understand the process and it was nice to see real life experiences of people that had gone through a similar situation and were cured and living their lives normally. My family was also everything for me. All the support I received from friends and my coworkers were essential to make the process easier. Also I am a very religious person and I feel that God were there with me all the time. I would go to the mass every Sundays and that made my week start in a better way, with more calmness and very hopeful to get the treatment successfully done.

**Interviewer: (04:49)**

How did open visual access (anyone could see inside) from your treatment room affect you while getting treatment? Why?

**Patient: (05:38)**

On each treatment I had a random selection of the rooms that I would stay in. Sometimes I would have access to a fully private room when there were no bays left and other times, I would stay in the bay that was very good too but I enjoyed staying in the rooms more because it was very private and there was also a lot more room for my family to stay in too. Also, I had a normal hospital bed, that was very comfortable so I could sleep well but on the other hand, that made me feel that I was sick and hospitalized because the rooms were the same as a regular room when you are admitted to the hospital.

## ANNEX 4

### INTERVIEW 2

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

Interviewer: (05:58)

Did it affect you to see other people with the same condition as you, sometimes more advanced?

How?

**Patient : (06:20)**

Personally it was not that good to see other people with the same conditions as me, because people were in very different situations and different stages of the disease. Some people were scared, anxious, dying. So for me it was not a good experience to see other people. I wish I had access to more people that were completely cured and had a great success story to tell.

**Interviewer : (07:10)**

What factors contributed to your satisfaction/dissatisfaction with your ability to have private conversations in the treatment/sleeping room? Why?

**Patient : (07:54)**

Cancer is such a private topic for me and I didn't wanted to share my condition with anyone back when I was receiving treatment because it was a very sensitive and personal matter for me. Upon having fully private rooms I had the ability to talk to the nurses in a very private matter. There was one situation that was embarrassing for me somehow. Every three months I need to get an injection and the first time the nurse did it in the bay I was seated. The nurse brought and accordion partition that was not private at all and had to inject the medication in my buttocks. I had to lower my pants a little bit and it was very uncomfortable to do that.

**Interviewer : (08:10)**

What else aside from conversations, were you able to hear from the private areas?

**Patient : (08:21)**

I would hear pretty much conversations and the noise from the train station outside.

**Interviewer: (08:51)**

How did the space overall make you feel?

**Patient : (09:26)**

The space overall made me feel very comfortable and secure. They had neutral colors and believe it or not I think that helped me with my anxiety. The smell of the space really bothered be a lot but I guess there is nothing people can do about it, it was the alcohol smell they have in the cleaning products that were very strong. Once I got to the hospital and I was seating in my chair waiting for the nurse to come with my medication and I vomited just because of the smell, that would remind me of the hospital environment and made me associate it again with the cancer.

**Interviewer: (11:07)**

I think that'll be it for Today. Thank you so much for your participation.

## ANNEX 4

### INTERVIEW 2

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

Patient: (11:28)

Okay. It's my pleasure. Okay. Bye. Thank you.

Upon chatting with the patient after the interview, additional information was gathered.

In regard to making the time go by faster, the tv, internet, computer and phone were the things she used the most to distract herself.

## ANNEX 4

# INTERVIEW 2 ANALYSIS

## Lennar Foundation Medical Center

### Coding Quotations

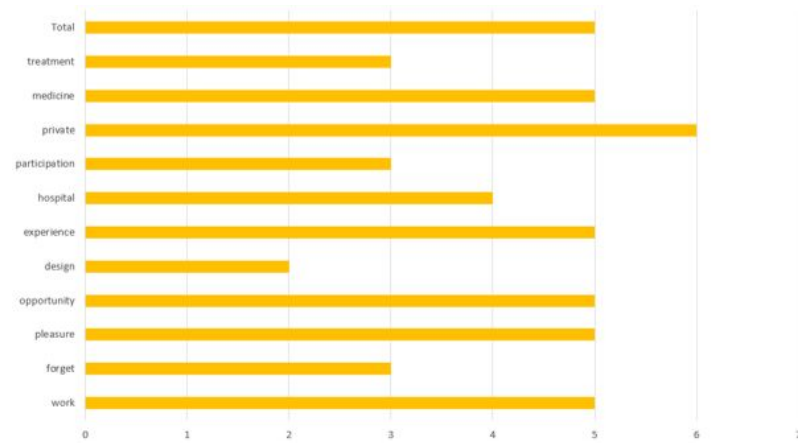
1. “I had a normal hospital bed, that was very comfortable so I could sleep well but on the other hand, that made me feel that I was sick”
2. “Support and motivation for me to get through the treatment successfully”
3. “On each treatment I had a random selection of the rooms that I would stay in. .
4. “Upon having fully private rooms I had the ability to talk to the nurse in a very private matter.”

### Inductive Analysis Word-Cloud



### Inductive Analysis Word Frequency

Word	Total
work	5
forget	3
pleasure	5
opportunity	5
design	2
experience	5
hospital	4
participation	3
private	6
medicine	5
treatment	3
Total	5
	1388



### Conclusion

Patient said multiple times how uncomfortable she felt not having the control over the lighting. She wishes she could turn it on and off whenever she felt like. She had access to plenty of activities however, it was not while she was actually having the treatment done because she used to feel super sick and did not want to do nothing. Upon going to private rooms, she felt very comfortable because she did not have any visual contact with other patients and had her privacy but the private room made her feel that she was admitted to a regular hospital and was sick.

## ANNEX 4



### **INTERVIEW 5** **LENNAR FOUNDATION** **MEDICAL CENTER**



## ANNEX 4

### INTERVIEW 5

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Interviewer: (03:00)**

Tell me more about your, Initial experience or your experience as a patient. You can talk about positive aspects and negatives aspects?

**Patient: (03:23)**

As a patient with cancer there aren't many positive aspects, it's a harsh time to go through but one thing that has given me strength was the support from my family and close friends. The most negative aspect was the hospital environment, I've always hated hospitals and feeling exposed where I could see others and other would see me. The feeling of sickness around me never made me feel comfortable.

**Interviewer: (04:05)**

What factors contributed to your satisfaction/dissatisfaction with your ability to control the artificial light? Why was it important?

**Patient: (04:29)**

I've always been very sensitive to light and not being able to control the brightness has given me great dissatisfaction. I believe being able to control the artificial light is important to help patients feel as comfortable as possible given the circumstances of the treatment.

**Interviewer: (04:49)**

What factors contributed to the importance of interactive and solo activities during your treatment? Did the facility overall helped you not focusing on the disease all the time and forgetting about it?

**Patient: (05:38)**

The facility I went to never tried to focus on activities to clear my mind off chemo. The feeling of being sick was always enhanced by the sad environment.

**Interviewer: (05:59)**

What factors contributed to the impact of community support in your healing journey? Why?

**Patient: (06:18)**

As I said before, my family and close friends were the ones who helped me the most. They would cheer me up and make me forget that I was sick in the most difficult times.

**Interviewer: (04:49)**

How did open visual access (anyone could see inside) from your treatment room affect you while getting treatment? Why?

**Patient: (05:38)**

It was extremely uncomfortable being watched in such vulnerable state. I never came into acceptance of my sickness and having others look into my room while I was receiving the treatment made me feel even more discouraged to continue.

**Interviewer: (05:58)**

Did it affect you to see other people with the same condition as you, sometimes more advanced? How?

## ANNEX 4

### INTERVIEW 5

Lennar Foundation Medical Center

### Deductive Analysis Hand-Coding

**Patient : (06:20)**

It did affect me, sometimes I would think to myself **it could've been much worse**. Seeing others with such difficulty made me feel humble.

**Interviewer : (07:10)**

What factors contributed to your satisfaction/dissatisfaction with your ability to have private conversations in the treatment/sleeping room? Why?

**Patient : (07:54)**

I like privacy but it was never an option during treatment. **The treatment space was very public, everyone could see each other and hear the neighbors, which was rather unpleasant.**

**Interviewer : (08:10)**

What else aside from conversations, were you able to hear from the private areas?

**Patient: (08:21)**

I was able to hear the **nurses talking a lot and that was very disturbing**. There was times that i just wanted to rest and sleep and i had no quiet time by myself.

**Interviewer: (08:51)**

How did the space overall make you feel?

**Patient : (09:26)**

At the end of the day I became humble, but every treatment experience was stressful and not pleasant I couldn't wait to be done with the treatment but at the same time i was very grateful for the medicine to be able to cure me. Also, i **wish there were more nature involved inside the space, it makes us feel alive.**

**Interviewer: (11:07)**

I think that'll be it for Today. Thank you so much for your participation.

**Patient: (11:28)**

Okay. It's my pleasure. Okay. Bye. Thank you.

ANNEX 4

INTERVIEW 5 ANALYSIS  
Lennar Foundation Medical Center

Coding Quotations

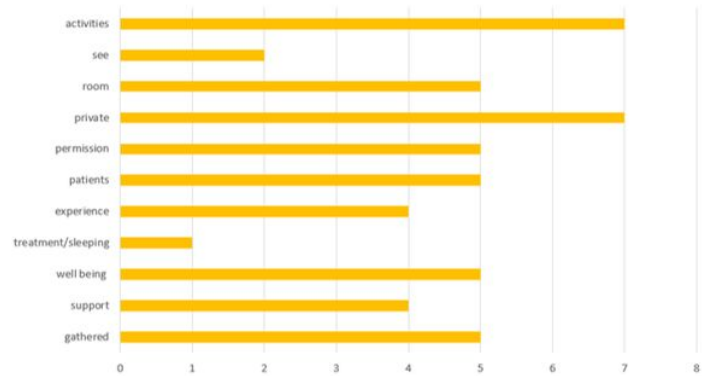
- 1. Yeah, **nature** would have been nice.
- 2. There was plenty of natural **light** which enabled me to do my activities without any issues.
- 3. To be honest, in my case my mother is 88 years old, so it was impossible for her to keep me company during those long **hours** and my son has special needs, so he was not even aware of what was going on.
- 4. I could **hear** the nurses faintly from outside.
- 5. Sometimes one of my siblings would go and visit but I never had that full **family** support.

Inductive Analysis Word-Cloud



Inductive Analysis Word Frequency

Word	Total
gathered	5
support	4
well being	5
treatment/sleeping	1
experience	4
patients	5
permission	5
private	7
room	5
see	2
activities	7



Conclusion

The space where she got the treatment itself could be more comfortable since they spend over 6 hours seated. The views she mentioned it was great, good to see nature and natural light coming in. In regards to privacy, she found herself in a bay with curtains, but she could hear a lot of noises from the outside. She wishes she had control over the environment such as a remote control that would control light, tv, temperature and maybe windows too.

## ANNEX 4



# **INTERVIEW 6**

## **LENNAR FOUNDATION MEDICAL CENTER**

## ANNEX 4

## INTERVIEW 6

Lennar Foundation Medical Center  
Deductive Analysis Hand-Coding

**Speaker 1:** Do you have any questions or concerns before we begin?

**Speaker 2:** No

**Speaker 1:** What ethnicity are you?

**Speaker 2:** Black

**Speaker 1:** What is the highest level of education you have received ?

**Speaker 2:** Bachelor's Degree.

**Speaker 1:** The first question is related to lighting control and I need to know how important it was for you to control lighting in the treatment room?

**Speaker 2:** In my opinion, the control of lighting in treatment rooms is very important, especially in cases of cancer patients like me because it depends on the change of mood and this change depends on my health chemotherapy and how does that affect you and your mood. It is difficult and makes you embarrassed to call the nurse to turn off or turn on the lighting.

**Speaker 1:** The next question is regarding to activities. Well, you get treatment. Um, we know that Lennar offers some arts and crafts and puzzles, what people get treatment. So, I wanted to know if this was important during your treatment, this solo activities or interactive activities.

**Speaker 2:** The person I love movement I grew up in an environment full of vitality and I feel that activity during the treatment is fun and was helping me at some time to forget the disease for a period of time, But cancer is a debilitating disease, especially when you receive chemotherapy in the first period you feel helpless and unable to move. I sleep all the time. so do any activity it was depend on my health conditions as a patient and my mood as well

**Speaker 1:** The other question is about community support and this can be related to spiritual, it can be related to friends, family, social media. I wanted to know how effective it was community support in your healing journey.

**Speaker 2:** The most important thing or the most effective thing was my family support for me. On the other hand I had looking to people that had the same disease was helpful, especially after knowing the results of the diagnosis, I was always trying to find someone suffering from the same degree and type of disease and this helped me in my lack of loneliness with it But what helped me resist the disease are my family

**Speaker 1:** So the next question is related to visual connection to nature. So for example, you could have water features or gardens, daylight. Did you experience any of these in Lennar?

## ANNEX 4

## INTERVIEW 6

Lennar Foundation Medical Center

## Deductive Analysis Hand-Coding

**Speaker 2:** Of course, the nature of the landscape significantly affect the change in the sense of the place and effect the wellbeing process where the favorite part of my theRoof top where I always go half an hour before the treatment to had my coffee with some people at the roof top It is nice to see what surrounds you where he was so relaxed before the session I wish that the treatment rooms have a better view of the street from the train station because sometimes it is a noise issue not a view you like to look at and listen to because I could not move I wish that window was overlooking the sea or garden

**Speaker 1:** We are aware that while you're getting treatment you can go up to the rooftop. That they will wheel you over there. But do you feel like you would've wanted more nature in your room or you're okay with just going upstairs?

**Speaker 2:** Basically this depends on the case because when you get the chemotherapy probably I can not move. So, I prefer to bring something into the.

**Speaker 1:** The following questions are about the privacy. So how important was it for your healing process to limit the amount of visual access people had to you? For example, people that walk by you, they could look inside your Bay.

**Speaker 2:** I think that it is especially important in the during the chemotherapy to be in the private room or your own place because I did not like to see others and I am suffering and I did not like to see the conditions of others patients, as there are some patients in bad situations and that makes you feel some anxiety and frustration and not Confidence in recovery and wellbeing

**Speaker 1:** The other question is related to privacy and audio privacy. For example, how important was it for you to be able to have a conversation in your room without being overheard by others or, and how important it was for you to not hear what was going on outside?

**Speaker 2:** Like I mentioned previously privacy is important to me in the treatment part as I prefer to talk to my doctor about a certain pain in a particular area It would be embarrassing for the other patient or people around you to hear you and the lack of privacy in the also voice may lead to some kind of undesirable discomfort.

**Speaker 1:** The last and final question is about the overall space. How did the overall space make you feel?

**Speaker 2:** Okay. So, thank you for your participation. Anything else you would like to add before we conclude the they interview?

**Speaker 1:** I wish there was a therapeutic center that combined chemotherapy with other more enjoyable activities and not just a place for treatment

## ANNEX 4

## INTERVIEW 6 ANALYSIS

## Lennar Foundation Medical Center

## Coding Quotations

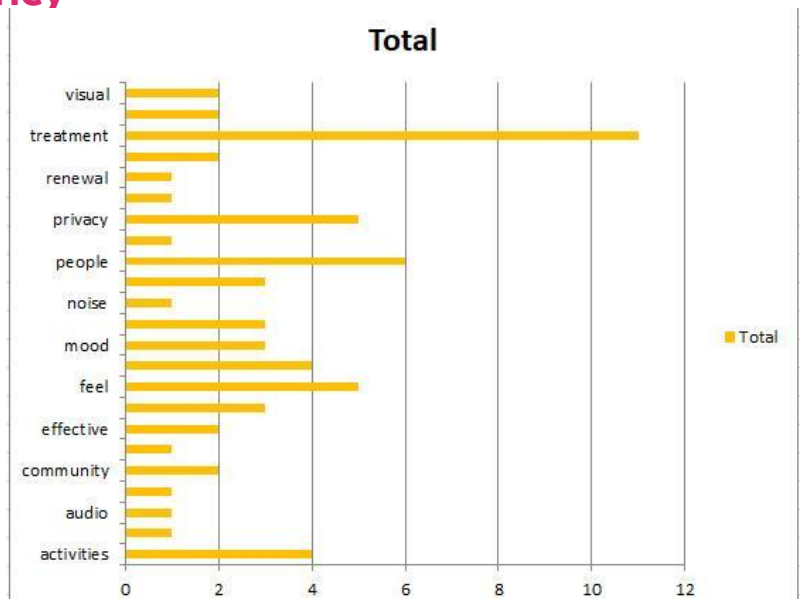
1. “ this change depends on my health chemotherapy and how does that affect you and **your mood**.”
2. “ **family support** for me. On the other hand I had looking to people that had the same disease was helpful,”
3. “ before the treatment to had my coffee with some **people at the rooftop** ”
4. “ It would be embarrassing for the other patient or **people around** you to hear you .”
5. “ **patients** in bad situations and that makes you feel some anxiety and frustration and not Confidence **in recovery and wellbeing** ”

## Inductive Analysis Word-Cloud



## Inductive Analysis Word Frequency

Word	Total
activities	4
anxiety	1
audio	1
comfortable	1
community	2
daylight	1
effective	2
family	3
feel	5
lighting	4
mood	3
nature	3
noise	1
patients	3
people	6
previously	1
privacy	5
relaxed	1
renewal	1
space	2
treatment	11
view	2
visual	2
	65



## Conclusion

The patient mentions multiple issues such as the privacy of the place, the inability to control lighting, which could be affecting her healing process and make it sometimes uncomfortable. Also, she wished if she had access to plenty of activities for her space and added some colors and patterns in the area to make it a renewed place.



## ANNEX 4



### **INTERVIEW 7** **LENNAR FOUNDATION** **MEDICAL CENTER**

## ANNEX 4

## INTERVIEW 7

Lennar Foundation Medical Center

## Deductive Analysis Hand-Coding

**Speaker 1:** Do you have any questions or concerns before we begin?

**Speaker 2:** No

**Speaker 1:** What ethnicity are you?

**Speaker 2:** Others

**Speaker 1:** What is the highest level of education you have received ?

**Speaker 2:** Bachelor's Degree.

**Speaker 1:** The first question is related to lighting control and I need to know how important it was for you to control lighting in the treatment room?

**Speaker 2:** I think it's very important and effective because after you get the treatment or even after the surgery you want to be in a dark place or just not under direct light at least because you feel unconscious and dizzy.

**Speaker 1:** So what factors do you think contributed to your satisfaction or dissatisfaction with lighting control? why do you think it was important for you to control the light?

**Speaker 2:** Because some patients feel very sensitive for the light especially for me after the surgery, I was very sensitive after I woke up. I just want to be in a closed dark the space, it makes me feel more comfortable because usually cancer patients, they feel sensitive to the light.

**Speaker 1:** So you feel it's good because you can control light depending on your mood?

**Speaker 2:** Yes, exactly it is about mood.

**Speaker 1:** The next question is regarding to activities. Well, you get treatment. Um, we know that Lennar offers some arts and crafts and puzzles, what people get treatment. So, I wanted to know if this was important during your treatment, this solo activities or interactive activities.

**Speaker 2:** I prefer the solo activities more than to be interactive with other people in this space because you spend eight or six hours in the hospital testing & getting treatments, so the last thing you feel like doing is socializing. I felt that I wanted to be by myself or with my family at least on the space. For me it's important to help the time move on but I prefer the solo more than the communal one.

**Speaker 1:** The other question is about community support and this can be related to spiritual, it can be related to friends, family, social media. I wanted to know how effective it was community support in your healing journey.

**Speaker 2:** The most important thing or the most effective thing was my family support for me and also the spiritual connection but Lennar doesn't have space to practice your religion.

**Speaker 1:** So you feel like it didn't have the appropriate space for you to practice your religion?

## ANNEX 4

## INTERVIEW 7

Lennar Foundation Medical Center

## Deductive Analysis Hand-Coding

**Speaker 2:** No, there is no space there for me to have my **personal space to pray**. That's a big thing in my religion, when you are feeling sick is good to pray, **it comforts me**.

**Speaker 1:** Did you receive any support from community outside from your family? Maybe some friends that you found that had the same issues?

**Speaker 2:** I'm not a social media person, but I have **close friends supporting me**, but I don't prefer to talk with **people about what is going on with me**. I don't know. I'm **like more private or more reserved**.

**Speaker 1:** So the next question is related to visual connection to nature. So for example, you could have water features or gardens, daylight. Did you experience any of these in Lennar?

**Speaker 2:** Actually in Lennar we have an access to some things. There's **the daylight and the visual connection that we have through the window**. Oh **and the rooftop**, which has **communal seating and you can have your drink coffee and things like that**. From up there you can see **coral Gables street and a train station, also UM which is kind of noise and that's it**. However, the rooftop is more for **people who are not getting the treatment**. Since you have to be hooked all the time is very hard for them to take you up there, I mean I could, but the hassle is not worth it.

**Speaker 1:** We are aware that while you're getting treatment you can go up to the rooftop. That they will wheel you over there. But do you feel like you would've wanted more nature in your room or you're okay with just going upstairs?

**Speaker 2:** Basically this **depends on the case** because when you get the chemotherapy or you get surgery, you are not going to be **moved from your bay** and even if you did I doubt you **would be in the mood** for it. So, I prefer to bring something into the room **because not everyone can move during the treatment**, especially after chemo you feel dizzy and anxious.

**Speaker 1:** What effects do you feel nature have on you? For example, imagine you could look out the window and you had access to a Lake and a beautiful scenery. What effect do you think that would have had while getting treatment?

**Speaker 2:** That would have been very good because **seeing cars and street is just noise**. I don't think that **beneficial to my healing process Positively**.

**Speaker 1:** The following questions are about the privacy. So how important was it for your healing process to limit the amount of visual access people had to you? For example, people that walk by you, they could look inside your Bay.

**Speaker 2:** It's very important. Especially when you have a such a sensitive illness like cancer, and not everyone gets it in the same part of the body so the way they look is very different. So, it's very sensitive, to be seen by other **people who are walking in or out**. So, I feel like it's very important to be in your space and have an enclosed bay to keep **your privacy and feel more confident with it**.

**Speaker 1:** How do you think you would've felt if you could see other people with the same condition?

## ANNEX 4

## INTERVIEW 7

Lennar Foundation Medical Center

## Deductive Analysis Hand-Coding

**Speaker 2:** I feel it's good in a way and it's bad in another way because when you see people that the treatment is not being effective with them because they are in a far stage of cancer. So, I think that is going to be disappointing and it just doesn't make you feel hopeful. But seeing people suffering from the same disease as you can also be a good thing because it makes you feel like you are not the only one. It's equally good and bad so I almost wish you could control when to see it and when not to.

**Speaker 1:** The other question is related to privacy and audio privacy. For example, how important was it for you to be able to have a conversation in your room without being overheard by others or, and how important it was for you to not hear what was going on outside?

**Speaker 2:** Well, I think it's very important and very effective because you don't want people to know about your condition or if you have side effects from the cancer or from the surgery. On the other hand, you don't want to know about the other person's condition either so yes, I feel it's very important for healing process of the patient. We had a curtain that you could keep closed but you know once the nurses come in then you kind of lose some of that privacy and if they leave and don't close it then you have to wait because you can't move.

**Speaker 1:** The last and final question is about the overall space. How did the overall space make you feel?

**Speaker 2:** Lennar has that clean line, clean edges, looks very modern and spacious. The color is very natural, not too on your face. Sometimes the materials are hard, especially the chair that you take the treatment on it is not that much comfortable. It's a leather where you can feel like it's like kind of like plastic or something. the furniture is not controllable in movement because you have to call somebody to move it for you, your family or the nurses.

**Speaker 1:** Was there a space in the facility for your family to be with you or did they have to be outside?

**Speaker 2:** They had a small space inside the room but the space that they have is against to the window. The weather sometimes makes it very hard to stay next to the window so most of the time they stay out outside because inside with me is very tight.

**Speaker 1:** So, thank you for your participation. Anything else you would like to add before we conclude the they interview?

**Speaker 2:** No thank you

## ANNEX 4

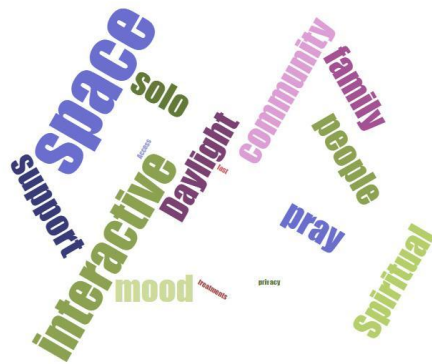
## INTERVIEW 7 ANALYSIS

## Lennar Foundation Medical Center

## Coding Quotations

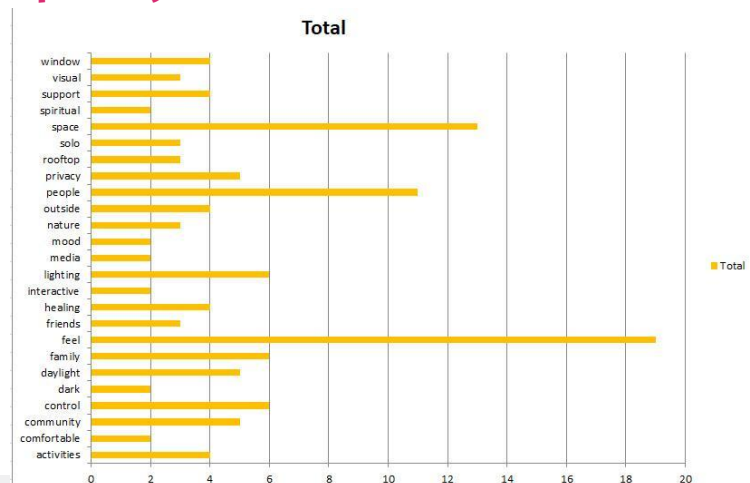
1. “feel very sensitive **for the light** , especially for me after the surgery, I was very sensitive after I woke up.”
2. “ it is about **mood.**”
3. “ **Solo activities** more than to be interactive with other **people in this space** ”
4. “ The most important thing or the most effective thing was my **family support** for me.”
5. “There is no space there for me to have my **personal space to pray**”
6. “coral Gables street and a train station, also UM which is kind of noise and that’s it”

## Inductive Analysis Word-Cloud



## Inductive Analysis Word Frequency

Word	Total
activities	4
comfortable	2
community	5
control	6
dark	2
daylight	5
family	6
feel	19
friends	3
healing	4
interactive	2
lighting	6
media	2
mood	2
nature	3
outside	4
people	11
privacy	5
rooftop	3
solo	3
space	13
spiritual	2
support	4
visual	3
window	4
	123



## Conclusion

The space where She spent 6 to 8 hours under that treatment was comfortable for her, but she wishes if she can have a more private area that solo activity. Also controllability to the light and the furniture. She found herself hooked all the time is tough for her to move, so if she can have a nicer visual connection or visual access to the For nature rather than the inconvenience of the train station and the road.

