AVENTURA HOSPITAL E.D. DESIGN



SITE AND BUILDING ANALYSIS



The building is located in between two major roads, Dixie Highway and Biscayne Blvd in Aventura. There are **three parking garages** for both visitors and staff. On the East side of the building, there are **three bus stations** alongside Biscayne BLVD as well as a **gas station**. Most of the noise comes from two main roads, East and West of the building. Also, on the West side of the building, a **railroad** is located which contributes to the noise level.

The **main entrance** to the building is located on the East Side, while the **ambulance entrance** is located on the West side.





North View



South View



East View



West View

PROGRAM DIAGRAM



Walk-In Entry / Waiting - 3,782 Reception/Registration/Triage - 1,466 Emergent/Urgent - 9,667 Administrative / Staff Support - 1,853

SPATIAL DIAGRAM

ZONING DIAGRAM



The interior space can be broken down into **two basic shapes**. These shapes are **not equal in size**, or proportion, though they are **both rectangular**. The thresholds are **defined by** structural elements and there are several windows along the east side of the building. These windows provide clear visibility to the exterior which is also a high foot traffic area. This must be considered when designing and planning for different levels of privacy.

The building can be **divided from public** areas to **private** areas as the user moves inward from the East side of the building to the West. This makes the main entrance a public space, the space in the center a semi-public space, and the space furthest to the back, a private area.

ZONING DIAGRAM



Daylight enters from the East side of the building but does not spread too far into the building because the canopy limits the amount of sunlight. The **stairway and bearing** walls, are defining elements that divide the interior space into geometric sections. This can help the design process by providing ideas on how to arrange programming within these sections.



The bearing walls within the interior help define and divide the space. The columns follow a grid pattern which further outlines the space and aligns with other columns. These columns will ultimately determine the size of rooms and the layout of the design. Understating the relationship of columns within each other is crucial.

USER PROFILE



PATIENTS

Age

All ages

Gender

All genders

Culture/Ethnicity

White Non-Hispanic 57.6% White Hispanic 36.1%

Aventura has a large Jewish and Latino community. Their shared cultural values of family and togetherness is significant understanding their belief systems.



CARE PROVIDERS

Number of occupants

34 Doctors in Emergency Medicine 12 attending physicians 22 residents

Hierarchy in organization

- Emergency physician
- Emergency nurse
- Physician assistant

Age

The average age of actively licensed physicians is now 51

Gender

All genders

Values

- Trust
- Integrity
- Transparency



FAMILY MEMBERS

Age All ages

Gender All genders

Culture/Ethnicity

Aventura has a large Jewish and Latino community. Their shared cultural values of family and togetherness is significant understanding their belief systems.

White Non-Hispanic 57.6% White Hispanic 36.1%

USER NEEDS

PATIENTS



Physiological & psychological design considerations

- Incorporate **adjustable beds** and equipment to accommodate the patients need and comfort
- Consider comfortable lighting for well-being of patients
- Pleasant smell and good **air quality**
- Consider calming and relaxing colors such as blues and greens and soft natural tones
- Incorporate **biophilic elements** such as surface materials and textiles



Security Design Considerations

- Provide opportunity for intimate setting for patients **privacy**
- Incorporate movable partitions
- Provide **acoustical properties** for sound control



Belonging and self esteem needs design considerations

- Create an environment where patient feel welcomed
- Incorporate control within the patient personal environment such as lighting and ergonomic bed
- Consider a **separate area** for **public** or notable figures



Individual needs design considerations

- Clear **wayfinding**
- Flexible space to accommodate solitude, intimacy, or anonymity
- Ensure ADA guidelines for accessibility
- Allocate a space for a family member or visitor

CARE PROVIDERS



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Physiological & psychological design considerations

- Provide ergonomic furniture and equipment
- Consider **aesthetics** for a **homelike** or attractive therapeutic setting such as, bright open public spaces
- Avoid colors/design that might be visually strenuous

Security Design Considerations

- Incorporating a space that provides visual and acoustic privacy from public
- Avoid the placement of care provider stations from high traffic areas
- Consider a layout that provides enough personal space to avoid overcrowding

Belonging and self esteem needs design considerations

- Provide designated work areas that accommodates the needs of different care providers
- Provide lounge areas for care providers to feel the belong in the space
- Provide limited control of their environment

Individual needs design considerations

- Incorporate a quiet area for care providers to focus
- Provide a pleasant environment - Neutral tones, soothing colors
- Provide ergonomic furniture
- Consider accessibility of equipment Provide a space where care provider can decompress and recharge

FAMILY MEMBERS

















Physiological & psychological design considerations

• Comfortable seating in waiting area • Welcoming environment to ease family's stress Provide healthy distractions such as T.V., nice views, and lounge areas

 Avoid harsh overhead lighting that may affect mood or strain visitors' vision over long period of time

Security Design Considerations

• A child-friendly environment to keep children safe Provide access to resources that provide information about the patients health

Provide clean environment with pleasant scent

Belonging and self esteem needs design considerations

 Provide a sense of control of their environment Provide a place for meditation/reflection/faith • Provide a variety of sitting layouts to choose from

Individual needs design considerations

• Provide charging stations so that family can stay connected

• Keeping them comfortable using **ergonomic** furniture • A sleeper sofa or a sleeper chair which ensures **comfort** for overnight stays

DESIGN GUIDANCE



SUPPORT AND PROTECTION

Design a space that supports patients and care providers needs by ensuring functionality and efficiency, as well as incorporating safety measurements for the storage and disposal of hazardous materials which protects all the users.



PRIVACY AND PERSONAL SPACE

• Ensure different levels of privacy for the patients by providing spaces where privacy can be adjusted to their needs, which also provides personal space.



COHERENCE

• Design a space that is consistent, in order, and forms a unified whole which positively impacts the patient's perception of quality of care.



RESTORATION

- Provide restorative opportunities for patients by the incorporation of warm materials and soothing colors, which add a sense of calmness to the patient.
- Provide restorative opportunities for care givers by incorporating lounge area, which allows them to take a moment and decompress.



FLEXIBILITY

Provide flexible furniture and equipment which can adapt, shift function, and modify in response to the evolving needs of patients and employees.



PATHS

the space.



CONTROL

comfortable and work more efficiently.



administration areas.



PUBLIC

allow the visitors to feel comfortable.



SECONDARY

• Ensure a clear circulation that would allow the users to safely navigate

• Design a space where the care givers are afforded a certain level of control over their working environment, which would allowing them to feel

• Incorporate design elements that clearly define patients, care providers and

 Provide a welcoming public space by incorporating a variety of seating arrangements, neutral color palette, and positive distractions, which would

• Incorporate ergonomic furniture and equipment in secondary spaces such as nurse stations and administration work areas to ensure users maximum comfort.

MATERIALITY BOARD

The intention of this materiality board is to guide the design towards an **impactful experience** that demonstrates **subtlety** through **sophistication and refinement**. The base materials being laid out in a structured way are perceived as orderly and intentional. The light tones of the whitewashed oak provides a **sense of warmth**, which is balanced and layered with natural materials and elements to create a **sensation of comfort and calmness**. This compliments the organic nature of the design and intends to create an experience of **retreat** where the luxury of relaxation is not typically afforded.

REFINEMENT	WARMTH
ORDER	CALMNESS
SOOTHING	SUBTLE
SOPHISTICATION	ORGANIC



ADJACENCY DIAGRAMS





Reception Registration / Triage





ORGANIZATIONAL DIAGRAMS



Entry/Waiting 3,782 SF Reception/Triage 1,466 SF Emergent/Urgent 9,667 SF Administrative/Staff Support 1,853 SF



FUNCTIONAL DIAGRAM



FLOOR PLAN



CEILING PLAN

Reception (Ambient and Task)

Provide sufficient lighting to allow visitors to navigate safely and employees to work comfortably.

Fc: 30 CRI: 90 Color Temp: 4000 K

Team Work (Ambient and Task)

Provide uniform lighting to allow for visual clarity for care providers to work comfortably and efficiently.

Fc: 50 CRI: 90 Color Temp: 45000 K

Corridor (Ambient)

Provide bright uniform lighting to create visual clarity for legibility and safety for visitors, patients, and care providers.

Fc: 20 CRI: 90 Color Temp: 4000 K

Exam Room (Ambient, Focused and Task)

Provide uniform lighting throughout the space and adjustable task lighting to allow care providers to examine the patient effectively. Fc: 90 CRI: 90

Color Temp: 4500 K



4" Recessed Downlight Spacing Criteria @ 0 = 1.2 / @ 90 = 1.23



Puck Light Spacing Criteria @ 0 = 1.24 / @ 90 = 1.24



2"x2" Recessed Light Spacing Criteria @ 0 = 1.12 / @ 90 = 1.31



Pendant



Recessed Linear Spacing Criteria @ 0 = 1.22 / @ 90 = 1.22



Pendant

SYMBOL	DESCRIPTION
0	Recessed Downlight
	2"X2" Recessed Light
0	Pendant
0	Pendant
	Pendant
	Recessed Linear
•	Puck Light
8	Wall Mounted Non-directional Exit Sign
₿	Ceiling Mounted Directional Exit Sign
<u>₽</u>	Emergency Lighting



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Aventura Hospital Ceiling Plan Scale: 3/64" - 1'-0" \bigcirc

ENTRANCE/RECEPTION



RESTORATION: Provide restorative opportunities by the incorporation of warm materials and soothing colors, which add a sense of calmness.





Flooring



Oak Veneer



Seating



Flooring



Wall



Wall



ENTRANCE/RECEPTION



COHERENCE: Design a space that is **consistent**, **in order**, **and forms a unified whole**, which positively impacts the patient's perception of quality of care.



Flooring



Oak Veneer



Flooring



Wall





ENTRANCE/RECEPTION



PATHS: Ensure a clear circulation that would allow the users to safely navigate the space.







Wall



RECEPTION DESK



Front Elevation





North Elevation



South Elevation

WAITING AREA



PUBLIC: Provide a welcoming public space by incorporating a variety of seating arrangements, neutral color palette, and positive distractions.





Flooring



Flooring



Oak Veneer



Flooring



Flooring



Seating





SEATING ELEVATION



PRIVACY AND PERSONAL SPACE: Ensure different **levels of privacy** for visitors and patients.

Elevation A

0 8 8

WAITING AREA



PUBLIC: Provide a welcoming public space by incorporating a variety of seating arrangements, neutral color palette, and positive distractions.



Flooring



Flooring



Seating



Flooring



Oak Veneer



Seating





SECTION ELEVATION





12'-6" A.F.F 10'-0" A.F.F

NURSE STATION



HIERARCHY: Incorporate design elements that clearly define patients, care providers and administration areas.



Flooring





Flooring



Wall

47 H

Wall



NURSE STATION ELEVATION





FLEXIBILITY: Provide flexible areas which can adapt in response to the evolving needs of care givers.



Elevation B

EMERGENCY ROOM HALLWAY





PATHS: Ensure a clear circulation that would allow the users to safely navigate the space.

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Wall



Flooring





Flooring





Oak Veneer



Perspective 7

Elevation C

NURSE STATION



COHERENCE: Design a space that is **consistent**, in order, and forms a unified whole which positively impacts the patient's perception of quality of care.



Flooring



Flooring



Oak Veneer



Wall



Wall



EMERGENCY ROOM







SUPPORT AND PROTECTION: Design a space that supports patients and care providers needs by ensuring functionality and efficiency, as well as incorporating safety measurements for the storage and disposal of hazardous materials which protects all the users.



Perspective 9 & 10

EMERGENCY ROOM ELEVATIONS



CONTROL: Design a space where the **care givers** are **afforded a certain level of control over their working environment**, which would allowing them to feel comfortable and work more efficiently.



Oak Veneer



Wall



Seating





STAFF LOUNGE



RESTORATION: Provide restorative opportunities for care givers by incorporating lounge areas, which allows them to decompress.



Flooring





Oak Veneer



Wall



Wall





Seating



Ceiling



STAFF LOUNGE



SUPPORT AND PROTECTION: Design a space that supports care providers needs by ensuring functionality and efficiency.



Flooring



Wall



Wall



Oak Veneer



Wall



Seating



Perspective 12

THANK YOU!

