

In acknowledgement of Sandy Dilts, the executive director of the Muncie Eye Center for her time, consideration, and guidance through this design.

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## AHN MISSION STATEMENT

American Health Network eye specialists are a group of dedicated professionals working together to provide the highest level of care to enhance your quality of life. We take pride in placing great value on our patient's overall health and wellbeing. We have established a solid foundation within our eye care professional community and by working in conjunction with primary care physicians. This allows us to provide our patients with comprehensive medical eye care while still maintaining a focus on your entire systemic health.

## **OVERVIEW**

American Health Network is a health care system of physician and medical practices in both Indiana and Ohio. Within their many specialties, eye care is the focus of the center. American Heath Network eye specialists offer three convenient locations in Muncie, Marion, and Kokomo, Indiana. Sandy Dilts is the executive director that heads each one of the three American Health Network eye care centers. 200 North Tillotson Muncie, IN is the eye care center in which was chosen to be reevaluated and retrofitted to benefit its current users. These clients are served by a number of different doctors, specialists, and nurses. To the right are the eye care physicians. The importance of evaluating and supplying a eye center that meets the community needs and citizens that will use the center.

## DESIGN MISSION STATEMENT

My vision as lead designer is to redesign the Muncie location Eye center inexpensively through sustainable design solutions. Providing a clean and comfortable place for both clients and staff to work effectively and efficiently through flexible spaces that are navigated through proper way finding to satisfy the needs and safety of the end users. The aesthetic design will be updated to reflect a clear contemporary vision that will not hinder the patients' current visual condition.

### **DOCTORS**

### Dr. Thomas J. Chowattukunnel

SPECIALTY: Cataract Surgery, General Ophthalmology LOCATION: Marion

### Dr. Michael J. Hodkin

SPECIALTY: Cataract, Cornea, and Refractive Surgery

LOCATION Kokomo, Muncie

### Dr. Michael J. Scanameo

SPEICALTY: Cataract, Glaucoma and Refractive Surgery,

Refractive Cataract Surgery

LOCATION: Kokomo, Marion, Muncie

### Dr. Rita K. Singh

SPECIALTY: Retina, Macula and Vitreous Diseases & Surgery, Macular Degeneration, Diabetic Retinopathy,

Retinal Surgery

LOCATION: Kokomo, Marion, Muncie

### Dr. Karen S. Skurner

SPECIALTY: Glaucoma, Eye Diseases, Pre- and Post-op

Care, Elderly Patient Care LOCATION: Kokomo, Marion

### Dr. James B. Stewart

SPECIALTY: Ocular Disease, Glaucoma, Medical

Glaucoma Management LOCATION: Muncie

### Dr. Sewit Amde

SPECIALTY: Breast Reconstruction, Reduction, Augmentation; Microsurgery. Hand and lower extremity reconstruction; carpal tunnel and other basic hand surgery, Facial reconstructive and aesthetic surgery. Facial reconstructive and aesthetic surgery. Facial reconstructive and aesthetic surgery; Abdominoplasty, liposuction, body contouring; Skin cancer; complex wound coverage

LOCATION: Kokomo, Marion, Muncie

# **METHODOLOGY**

There are several different types of people that use the Muncie Eye center from week to week. Each one of these users must be shown as a client having separate needs for this space. It is hard to say who is the most important end user of the facility therefore all of them need to be evaluated and accounted for. Surveys shown in the appendices were given out to each one of the three end users to evaluated their opinions on the issues and needs of the new facility. Information provided in Appendix 1. The most important need that was translated to us by Sandy Dilts was speeding up the amount of time clients spend in the eye center. The fast the clients get in and out of the eye center, the sooner their doctors and nurses can attend to another patient. Inefficiency of the facility and also way finding makes this an issue in the upcoming design process. September 2012 was the first time in which we visited the Muncie location in order to access the building layout. A second trip in September was made to the Marion location which was more recently designed in order to access their functions and aesthetic value in comparison to the Muncie location. It has been expressed that they want the center to look aesthetically like the Marion location. Two observational studies in October were conducted to watch the interaction between the staff and patients as well as their role in the center. Below is the three types of end users that have been researched and observed to adapt to their needs within the space to better design an adaptable space for all three.

# **END USERS**

Doctors are an important aspect of this center because without them, there would be no patients or need for people to enter the Eye care Center. There are two types of **COCTORS**, ones who work specifically to the Muncie location, and those who work at several AHN locations. These two types of doctor end users spend a different amount of time in the Muncie facility and will have different needs of the space. NUISES also fall into the category of end users and some work more hours then others. Differentiating the needs that doctors versus nurses will have is something that needs to be researched to make a space where both coincide.

The administrative staff also play a significant role as another end user of this space. From the reception desk, to accounting, and secretarial position all fall under this category. And even though these workers are not always meeting with the clients the efficiency of everyone's stay at the eye center relies on their ability to do their job correctly and in a timely manner. Therefore organization and easy access is important to these users.

The ultimate end users are the AHN clients that come to the Muncie location for eye care treatment. This includes first time Clients and revisiting or active clients. This age range and demographics of this client base is wide and will serve a number of wants and needs that the Muncie Eye Center must meet to keep their sales client base at the same rate or efficiently higher. Clients and their friends and family must have a place that is welcoming to enter and easy to navigate through making their experience not only beneficial but also enjoyable.

### ADMINISTRATIVE STAFF

According to Appendix C surveys, it seems that all the recipients agreed that privacy is the main issue within the center and during their scheduled hours. Computer screen visibility is open for many to view and should be private patient information. Phone conversations tend to be heard or disrupted by the lack of acoustics within their areas of work. However, all of the answers were general and there were some issues that they do not realize what designers can do such as evaluate adequate lighting levels.

I propose different layouts of work stations to ensure that there is no visual availablity to anyone other than the staff at their computer desik. Also, acoustical paneling systems and other forms need to be researched to muffle sounds of conversation between staff and patients in person and also over the phone to provide efficiency.

# **DOCTORS/NURSES**

Due to the fact that only one doctor/nurse staff replied to the survey doesn't give a proper and adequate means of evaluation. Most of the answers were left unanswered on the surveys in Appendix D. However, carpeting and lighting issues were two things that were stated as current design issues. The idea of an updated dilating room as well as a purpose for the centerpiece structure was mentioned as needed area that I have already decided to achieve with this project, so the reassurance is good feedback.

Lighting levels and the type of lighting must be changed within all parts of the center. Dimmers can be incorporated with more white light used for reading and work areas for the staff. I have kept in mind that the patients eyes will be extremely sensitives to the lighting levels. I plan to convert the centerpiece in the waiting room into a coffe/vending machine area to bring in more revenue for the eye center as well as privade interaction which the customers are waiting.

### PATIENTS

There was a great range of answers from the patients which made the survey worthwhile but in also more difficult to evaluate due to the fact that some of the answers were contradictory. Television and magazine material was not adequate according to the clients, which does not apply to my position as a designer. The lighting levels, and interior design was shown as adequate as well as being less than adequate. Privacy seems to be an issue for patients as well staff voiced through Appendix E, stated that the waiting chairs were too close to other patients.

Some of their issues do not relate to interior design, or problems that I can fix, however lighting levels, and updated design asthetic, and color scheme can and will be implemented. Privacy is a clear issue throughout the space and will be taken care of to fit the comfortability and need of admin. staff and patients. Seating needs to be rearranged in another layout for traveling and wayfinding as well as accessible areas for patients in wheelchairs to make them feel comfortable among the other patients waiting.

# **SURVEY ANALYSIS**

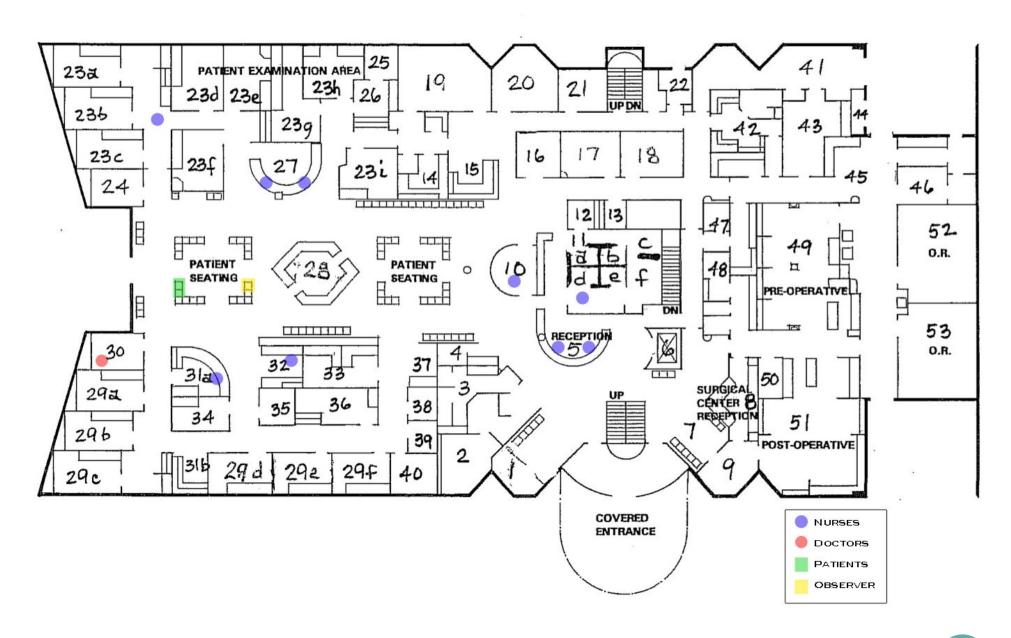


ISSUE	GOAL	PERFORMANCE REQUIREMENT
		time efficency wil improve with wayfinding,
	Time within the center needs to be cut down for patients and	orientation of layout, and multi-functional
EFFICIENCY	doctorswhich can be achieved by reaching efficiency within the center	spaces
	With the clients disadvantge with seeing, wayfinding must be easily	
	deteremined in traffic flow to allow for a stress-free and enjoyable	wayfinding and clear traffic flow, as well as
CIRCULATION	enviornment	carpet distinction and signage
	Providing a comforatable waiting area will allow the clients to feel at	the new image will be comfortable modern
COMFORT	home and enjoy their time spent in the center	and clean. Furniture and aesthetic features
	It is important to keep the clients safe for legal reasons and to make	
	them feel secure in their surrounding especially while they are at a	Minimizing obstructions in walkways, meeting
SAFETY	disadvantge with their eyesite.	ADA and IBC codes
		multi-functional desk systems as well as
	Allowing spaces and rooms to be flexible for several doctors and nurses	storage and location of equipment. Find a use
FLEXIBILITY	to use	for the center structure in the waiting area.
	Allowing for an open floor plan while keeping the staff and patients	Partition walls, layout of desk space in relation
PRIVACY	personal information private from other cleints.	to travel paths
	Making sure the clients are able to read the signage as well as hear the	
	nurses when their name is called will benefit efficiency within the	
	center. With the lack of sight, the other four senses will be heightened,	
	conscious awareness of making them comfortable and not	lighting levels minimum, wayfinding through
SENSORY	overwhelmed.	signage, speaker system for name calling
DURABILITY/	allowing the materials used within the space to hold up in quality and	
SUSTAINABILITY	durability for many years to come	using long lasting materials, life cycle cost
	Enhancing the outdated image of the eye center will draw new	Eliminate 80's color scheme and
IMAGE	customers and provide a new aesthetic	furniture,eliminate some glass block,
ECONOMY	Minimal construction and material cost	Reuse

Historical Observation was found through literature reviews and internet sources through the study of Eye Centers and building codes that will meet the requirements of the future design. Observations were made through visiting the site on several occasions to watch the users of the space interact between each other and wayfind through the interior. This was done twice through observational notes and behavioral mapping. Surveys were given out to the three groups of end users; doctors/nurses, administrative staff, and patients. This information was also considered by indirect observation of open ended survey questions to a random selection of users.

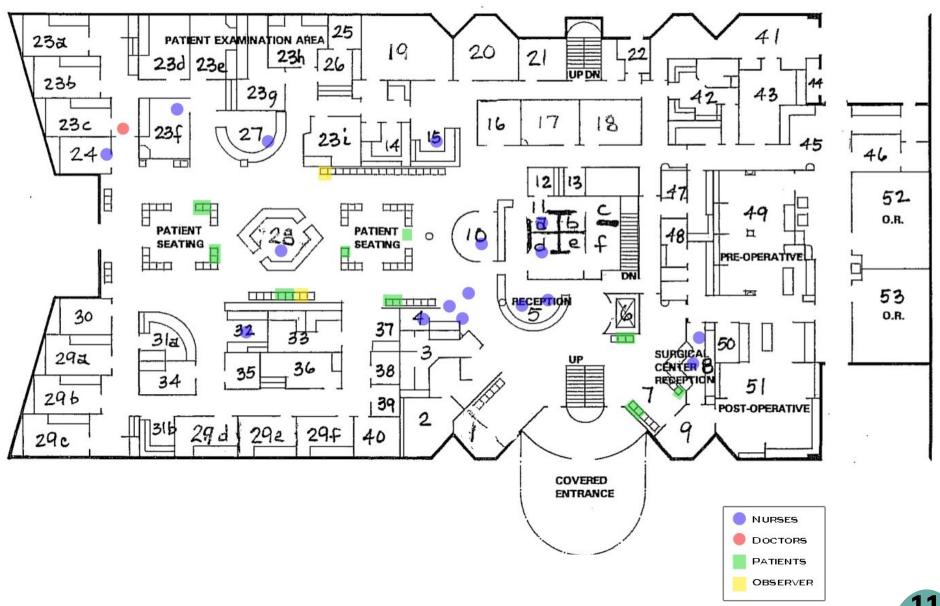
# SEPTEMBER 25TH: 4 PM- 5PM

	CRITERIA	OBSERVATION	SUGGESTED CHANGES	REASON FOR CHANGE
			partitions need to be	
		doctors office was open, his work and computer screen was	constructed throughout the	
		facing the waiting room, due to the bad lighting inside the	space to close off private to	
		office. Also gloomy evening made for adequate everyday	public zones. Lighting fixtures	
		lighting. Lighting was yellow/orange tint in offices. Small 8	must be replaces with clearn	
		1/2 x 11 piece of paper with 14pt font to direct customers	white lighting with high	inefficent lighting
1	SIGHT	upstairs for dermotology does not show good wayfinding	efficency bulbs	levels, privacy invaded
		the space is very open therefore you can hear people in the		
		pods, on the phone, and in the checkout area. Also heard	accoustical properties need to	
		conversations of the patients and the nurses gossiping in	be installed in finishes and	privacy invaded,
2	SOUND	between lanes.	structural elements	distraction occurs
			natural cleaning products and	
		Couldn't tell if smell was bad or good, however it wasn't	examine toxin levels, add green	enhance indoor air
3	SMELL	smelling fresh or clean which I had hoped for	wall	quality
		waiting chairs material is sufficient, bench seating was		
		slouching structure, chairs in lanes were more comfortable to		
		touch. When leaving the doors are hard to open but then are		
4	TOUCH	on an automatic open, which is confusing.	update textures/materials	outdated
		chairs, color of skylights has the appearance of dirty and		
		unclean. Temperature was warm, fans were not on. The		
	COMFORT	bland colors are not welcoming nor having a sense of	buy new chairs, provide	
5	ISSUE	cleaniness	ergonomic lumbar support	uncomfortable
		nurses were walking straight through patient waiting areas to	redesign layout of lobby and	bad
6	CIRCULATION	cross pods, no direct path of travel	provide signage	wayfinding/circulation
	AVAILABLE		elimate seating and rearrange	
7	SEATING	Since the center was near closing, plenty of seating was open.	layout	too many seats
			provide a café station that is	
	AVAILABLE		more accessible and distinct for	
8	WATER	Water jug as well as coffee counter was available.	use of clients.	
		Not ADA compliant. Clean and fresh smelling. Soap	remove a stall to expland one	
9	RESTROOMS	dispensers- one automatic, one push?	into ADA stall	ADA code



# SEPTEMBER 26TH: I2AM-IPM

	CRITERIA	OBSERVATION TWO	SUGGESTED CHANGES	REASON FOR CHANGE
		1. small outdoor signage! 2.random placement of brochures	place a larger sign for the facility	to allow for easy
		that are used by nurses spread throughout the lobby. 3.	outside, put all brochures in a	wayfinding, control of
		Dilated patient was walking around the lobby. 4. Lobby was	single area, provide a dilating	patients, and
		overly lit. 5.centers of the two lobby areas were virtually	room, change the material of	sensitivity to their
1	SIGHT	untouched	the glass wall.	eyes.
		1. could potentially be very loud for the dilated patients. 2.	provide a dilating room, use of	
2	SOUND	Could hear sales rep talking to the doctor in the open lanes	conference room	privacy
3	SMELL	n/a		
4	TOUCH	n/a		
	COMFORT			
5	ISSUE	1. door entrance difficulty with entering patients.	fully automatic sensors	to eliminate confusion
		1. Patient was walking around the lobby for 10 minutes lost,		
		nurse had to come out of one of the lanes to see what she		
6	CIRCULATION	needed	provide distinct lobby areas	to eliminate confusion
	AVAILABLE	1. Morning session still had plent of available seating for		to provide more space
7	SEATING	patients and their guests.	eliminate some lobby seating	in other areas
	AVAILABLE	1. small sign on the coffe/water station that pateitnts	seclude this section, or have	
8	WATER	preparing for surgery are not allowed to have liquids	someone monitor it	safety of patients
9	RESTROOMS	n/a		



# literature reviews

### Cama, R. (2009). Evidence-based healthcare design. Hoboken, N.J.: John Wiley & Sons.

Understanding the shift toward evidence-based design in healthcare -- Step 1: gather qualitative and quantitative intelligence -- Step 2: mapping strategic, cultural, and research goals -- Step 3: hypothesize outcomes, innovate, and implement translational design -- Step 4: measure and share outcomes -- Evidence-based design in practice -- Growth opportunities for the design professional. I hope to use these steps to support my design decisions by referencing how to support my evidence to the client to fit her needs in the best way.

Kachur, M., Bruck, D., & Hesedahi, J. (2010). Acoustical materials for a green world: The sustainable design transformation of the architectural acoustics industry. Journal of the Acoustical Society of America, 127(3), 1723-1723. Retrieved September 23, 2012, from http://asadl.org/jasa/resource/1/jasman/v127/i3/p1723\_s1?bypassSSO=1 The focus on sustainable and healthy building materials has intensified over the last few years. This is true particularly in healthcare, educational, and environmentally friendly or "green," facilities, where an increasing awareness of acoustics has resulted in a higher demand for innovative products. As the healthcare industry pushes for greater patient comfort, increased speech privacy, and green design, new acoustical products must satisfy multiple requirements. In educational facilities, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) for Schools rating system promotes the use of green products, which extends to acoustical materials. Additionally, some educational facility owners are hesitant to allow traditional types of sound absorbers such as fiberglass duct liner for fear of health issues. Consequently, acoustical materials manufacturers have responded with new and repurposed materials to suit these needs. Because many of these materials have been recently introduced, a significant amount of project time can be expended on research to select an appropriate material to suit the new requirements. In an attempt to streamline the selection process, this overview will identify a number of these new and repurposed materials and provide feedback on their use from architects, engineers, and owners.

ADA Home Page - ada.gov - Information and Technical Assistance on the Americans with Disabilities Act. (n.d.). ADA Home Page - ada.gov - Information and Technical Assistance on the Americans with Disabilities Act. Retrieved September 25, 2012, from http://www.ada.gov/

Updated American Disability Act rules and regulations related to users within the space.

Susan, S. (2011, May 10). Point of View. Metropolis, --, --. Retrieved September 25, 2012, from http://www.metropolismag.com/pov/tag/healthcare

Questions and Answers about several Healthcare facilities

### Sweets catalog file 2010: architects, engineers & contractors.. (2010). New York: McGraw-Hill.

v. 1. General requirements, Concrete, Masonry, Metals, Wood, Plastics, and composites, Thermal and moisture protection --v. 2. Thermal and moisture protection, Openings --v. 3. Finishes, Specialties --v. 4. Equipment, Furnishings, Special construction, Conveying equpment, Plumbing, Heating, ventilating and air conditionsing (HVAC), Electrical, Communications, Electronic safety and security, Exterior improvements --v.5 Directory --v. 6. Desktop index.

# Harmon, S. K., & Kennon, K. E. (2011). Study guide for The codes guidebook for interiors, fifth edition. Hoboken, N.J.: Wiley.

The Codes Guidebook for Interiors, Fifth Edition features jargon-free explanations of all the codes and standards of concern to designers and architects, including performance codes, fire codes, building and finish standards, energy codes, and Americans with Disabilities standards

Healthcare Design Magazine: Architecture and Interior Design Trends for Healthcare Facilities . Designing for More then Meets the Eye. Healthcare Design Magazine: Architecture and Interior Design Trends for Healthcare Facilities . Retrieved September 25, 2012, from http://www.healthcaredesignmagazine.com/article/designing-more-meets-eye Atlanta-based LeVino Jones Medical Interiors, Inc., was commissioned by separate clients to design three new eye centers within the last year. While each client was expectedly unique in their program and services, these established practices all shared three of the same reasons for building new centers: expansion of services and product, advanced technology/equipment integration, and an interest in exceeding patient experience expectations. This article studies the impact of these drivers in three different clinics and the resulting design

Lockton, D. (2008). Making the user more efficient: Design for sustainable behavior. Academia Education, Thesis, 1-9. User behavior is a significant determinant of a product's environmental impact; while engineering advances permit increased efficiency of product operation, the user's decisions and habits ultimately have a major effect on the energy or other resources used by the product. There is thus a need to change users' behavior. Arrange of design techniques developed in diverse contexts suggest opportunities for engineers, designers and other stakeholders working in the field of sustainable innovation to affect users' behavior at the point of interaction with the product or system, in effect 'making the user more efficient'. Approaches to changing users' behavior from a number of fields are reviewed and discussed, including: strategic design of affordances and behavior-shaping constraints to control or affect energy-or other resource-using interactions; the use of different kinds of feedback and persuasive technology techniques to encourage or guide users to reduce their environmental impact; and context-based systems which use feedback to adjust their behavior to run at optimum efficiency and reduce the opportunity for user-affected inefficiency. Ex: Sustainable engineering and Eco design field.

### No, A. (2012). --. British Journal of Aesthetics, 52(4), 1000.

Founded in 1960, the British Journal of Aesthetics is highly regarded as an international forum for debate in philosophical aesthetics and the philosophy of art. The Journal is published to promote the study and discussion of philosophical questions about aesthetic experience and the arts.

Zachs, S. (2007, June 20). A Healthy Obsession. Metropolis, --, --. Retrieved September 24, 2012, from http://www.metropolismag.com/story/20070620/a-healthy-obsession

With its focus on the patient experience and fierce dedication to green materials, Guenther 5 looks to remake the hospital paradigm.

Susan, S. (2011, May 10). Point of View. Metropolis, --, --. Retrieved September 25, 2012, from http://www.metropolismag.com/pov/tag/healthcare

Questions and Answers about several Healthcare facilities

Carol, T. (2008, March 1). Advances in Healthcare Design, Interiors & Sources. Retrieved September 24, 2012, from http://www.interiorsandsources.com/tabid/3339/ArticleID/5725/Default.aspx

The Scottish Rite and Egleston campuses of Children's Healthcare of Atlanta offer prominent examples of another healthcare institution realizing the benefits of evidence-based design.

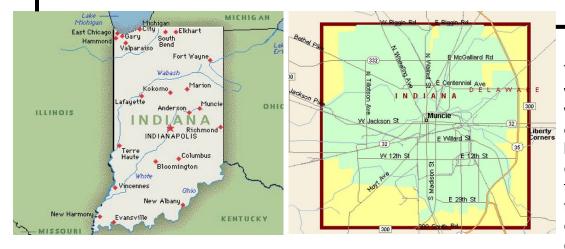
Rebecca, D. (May/June 2012). Demographically correct design. Medical Construction and Design Magazine. Retrieved September 25, 2012, Healthcare Interiors, from http://modmag.com

Creating the right ambiance is more than what meets the eye. Catering to all age group within a Healthcare facility, and the importance directly related to Fairfax Surgery Center as well as competition among Healthcare. Culture, Age, experience and lifestyle demographics also effect the experience of the patient.

# state

# muncie, indiana

As of 2011 more the 6,516,922 live within the Midwest city of Indiana, with the majority of the residents living in urban communities. Land area of the state stretching of 92 counties, is 45,867 square miles. The capital is Indianapolis, which is approximately 65 miles away from the design site of the Muncie Eye Center. Indiana's 41 mile Lake Michigan waterfront and means of iron, steel, oil, and agriculture was what made this state a booming area starting in the 19 century. The state is the leader in agriculture with outputs in hogs, soybeans, wheat, oats, rye, tomatoes, onions, and poultry. Most buildings limestone was quarried in Indiana. Indiana is recognized as the 19th state, 38th largest state by area, and the 15th most populous of the 50 states. The state has a maximum dimension north to south of 250 miles and a maximum east to west dimension of 145 miles. Located between Michigan by the north, Ohio on the east, Illinois in the west, and the Ohio River separates Kentucky on the south. The typography of the land is flat due to the effects of the glaciers. Lowland, and low plateau are the names of the two regions Indiana qualifies under. Indiana falls under the eastern time zone. Climate here is humid continental with cold winters, and hot summers. The southern most part of the start is within the humid subtropical climate resulting in more rainfall then the rest, however droughts do occur within the state. The majority of the state's racial diversity is white with about 85%, followed by 10% African American. The median age of Hoosiers is 37 years old. The largest ancestry reported within the state is German reported through the U.S. National census



city

The estimated population of Muncie, Indiana in 2011 was 70,080 people. Most of the staff was female which correlated with the ratio of male to female citizens within the city limits. Muncie is in the 10 largest cities within the state, set in Delaware county on the White River, around 1854. The city is in a fertile agricultural area with dairying and soybean, fruit, corn, oat, and vegetable crops. Machinery, electronic equipment, plastics, glass, motor vehicle equipment, and metal goods are among the many

manufactures. Industrialization came after the discovery of natural gas 1886. 27 square miles makes up this city, while remaining the same averages in demographics as the state. In the past years the local economy has struggled, however the connection of growth is made through the relationship of hospitals, and the university, as well as the closeness to major cities within the state.

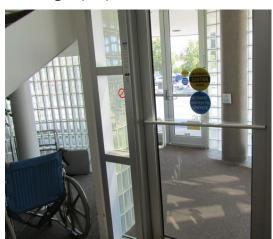


# site orientation

The location of The Muncie Eye Center is 200 North Tillotson Muncie, Indiana. The center is facing a very busy road that gets lots of attention. The other benefit to this location is the relationship to IU Health/Ball Memorial hospitals which also draws attention to its facility. Within close distance is the hospital, a university, banks, grocery stores and many restaurants used frequently by Muncie residents. There are a number of eye centers in the city, so the importance of location is a good strategy to draw in customers

# exterior building

The front entrance to the center is south facing with easy access to the parking lot, staff parks in the rear of the building with a separated north entrance. On the west side of the structure these was the intended entrance facing Tilliton Ave which has no pathway up to the doors, and has never been used as intended by the architect. Entrances are not clearly marked for the three different areas that this center employs, lacking a large storefront sign that clearly marks the building's purpose and brand.





relationship to interior

The exterior finishes on the building are assumed to be glass, limestone, and metal grid. The large amount of glass replicates within the interior through glass block while providing natural light to move through the space. Vestibule is places at the north entrance to prevent harsh elements from entering the space. The interior and exterior design together create a outdated 1980s feel, however with modern updates to the interior will make the center advance with design and replicate the simplicity of the exterior facade to a contemporary feel.

# space allocation

The eye center consists of one main patient entrance that splits up into three separate needs areas, including the surgical eye portion, the eye clinic, and recently a new leased out dermatology area. There is currently one large waiting room and a smaller waiting from designated for the surgical side. One checkout counter, one centrally located public bathroom are commonly shared between all patients. Signage and way finding between each space is poor and confusing for new visitors and possibly returning customers of an older age. Within the clinicals there are nurse stations, exam rooms, and four 'pods' or clinic lanes which are shared amongst the nurses and doctors. All of these spaces are open or semi-public allowing for a easy transfer of audio and visual senses to the patients eliminating privacy therefore compromising comfortability.

# analysis of the site and space





As an overview of my findings on diversity, demographics, site orientation and space allocation there are several determinants to take into consideration with the new redesign of the Muncie Eye Center. Muncie is not a booming major city so the importance for the clients to make a space to draw in customers is key. Advertisement through design can be a way that interior design can help increase sales. Appropriate signage needs to be made and placed in a large scale font on the exterior of the building starting the basis of wayfinding inside the given structure. Once inside, signage should be visible and professionally made to help direct new customers, flooring materials and contrast in color can also provide clear wayfinding. Currently the majority of the patients are older individuals, however with the university near, a future will sure to be getting younger which is important to make the space universally designed for all patients of all ages and abilities. This design needs to provide a sustainable design that last many years to come and promotes growth within the company. A redesigned entrance is the first concern of the space when dividing up the three practices. A proposition of two or three separate door could be enforced or signage and clear distinction once entered through the main doors could help with the ease of direction. Natural elements are a big factor in the design of the space because of the large scale exterior windows existing in the space. Shades, or frosted glass can be applied to the existing windows during specific day times to prevent eye stain in workers, as well as damaging effects of the eye patients. This is prevalent especially on the west wall of the building which is 75% windows, which can cause issues of heat control as well as visual disturbance during sunny, clear days between one p.m. to close. Connectedness between spaces in the clinics needs to be relocated to meet efficiency and minimize travel time for both staff and patients. Acoustical properties must be implemented within the spaces to minimize sound travel that has been bouncing off the large amount of glass, inside due to windows, and glass block.

PRECEDENT STUDIES

# AHN Eye Center Marion, Indiana

The American Health Network owns both the Marion office and the Muncie office, so this visit to the Marion eye center was very informative in information as well as visual presence between the two





spaces. Overall the workers seem to like this newly renovated office more then the outdated Muncie interior. However he space is much smaller, but efficiency works well within the center. The waiting room is well lit, and waiting areas between surgery and clinicals are split evenly and there is hardly confusion. Volume of space is shown with bulkheads and ceiling height differences. Colors are cohesive from one space to the next. Some of the waiting room chairs' busy pattern mocks the carpeting in the dilating room. The dilating room seems to be useful and a great addition to the expansion of the building. Custom blinds are made in order to eliminate the glare and brightness from the exterior windows within this space. Lighting is also placed on a dimmer for these patients comfortability. Blue cabinets remain in some areas due to cost cuts. However this demonstrated the idea of reuse and sustainability for the environment. New dark wood furniture such as cabinets and desking units looks expensive and refined. The spacious break room for the staff was a great addition of space with daylighting and views outside. Lighting throughout the eye center is modern and looks expensive through cans, pendants, up lit sconces. Not all counters are ADA accessible for wheel chair users, and hallways are narrow for passing patients through lanes. However nurse stations are placed in alcoves within the wall to make for a fast and easy accessible area for all nurses to share within lanes. There are many great aspects of this eye center that can be integrated into the redesign of Muncie's Eye Center in order to achieve efficiency and purpose.









The use of few materials of timber, steel. and marble allows for clean sophisticated light allows a clear distinction and way finding for the eye care patients as well as the sense of a clean facility with shiny surfaces and bright white finishes. Focal points are made through furniture statements and are subtle enough for all generations. The reception desk has two heights to allow for universal design by providing a easy check out for all users and especially for wheel chair users. Waiting areas are broken up with partition walls and furniture arrangement to provide privacy while also allowing the space to feel open.

feel that exists throughout the facility. Eagle Eye Centre Clinic, Singapore The monotone color scheme of dark to







http://retaildesignblog.net/2012/08/07/eagle-eye-centre-clinic-by-kyoob-id-singapore/

# Pacific Eye Center, Hawaii







http://www.ahldesign.com/projects/pacific-eye-center/

The main design elements were utilized in organic forms and colors that correlates through the color palette, and furnishings. Natural colors such as browns, tans, and greens were used to achieve a calming and sterile environment for the staff and patients using the space. Playing off the shape of the eye, curved elements are implemented in furniture layout as well as bulk heads and built-ins. Elements of water was important for the architects to include to allow for visual drama and more importantly audible relief for the patients. Eye wear is also sold within the center and is incorporated in the design with built-ins. The layout of the space plan is an open concept with few rooms on the exterior

of the main room.

The design concept of Indian Chakra was used to make the patients feel welcome and comforting while spending hours within the center. This evidence based design shows strong correlations to subconscious healing through color therapy. Natural colors and nature elements and textiles will placed within sight and reach of the patients and Hues of orange, yellow, and green were used in design as well as accents of living plants, wood detail and tweed treatment chairs while still meeting all medical and fire codes and regulations. Health Care design has been pigeon-holed with the strong negative connotations of being artificial, sterile, cold, congested, cluttered and dark. Treatment bays were designed in an open concept, radiating from a central nurse station for patient safety and spatial relief with natural lighting.

ogan Regional Dialysis Center, Utah







http://jessbearinteriordesign.com/

Family Eye Care Center of Atlanta







http://www.jkgcollaborative.com/Family\_Eye\_Care\_Center\_of\_Atlanta.html

The center has a more modern, fun atmosphere which is prevalent through contrasting finishes, and bold prints such as the striped flooring. This seems like a great feel for a family care center which also achieves a sense of sophistication and cleanness. The exam lanes are completely hidden from the waiting room, and checkout area which provides a private and quiet area for treatment. The large window provides a connectedness of the environment into the space, and allows for a great storefront for business and advertisement. Bold black and silver accents compliments the modern feel through the window frames,

electronics, and seating.

The owner of the Eye Studio, Dr. Meikle wanted this office to be a modern eve center that had a clean and light look. visually appealing and eye on the eyes. There are few bold elements like the chairs and display cases that break up the space visually. Flooring is a great design aspect of this space providing easy wayfinding for blind. Carpet and wood flooring separate the areas into distinct spaces without having walls to define the spaces. This open concept of the waiting and retail area has an adequate amount of layered lighting. Ambient, cans, pendants, and natural lighting is used to complete this look. Separate rooms for examination are private and separated from the main area and hopefully follow these same qualities of design.

# The definite cleanliness of the space are The Eye Studio, Tennessee







http://www.ennco.com/portfolio-meikle.html

SkyVision Surgical Eye Center, Ohio







http://www.domokur.com/portfolio/1705/

This center's interior design directly reflects the name of the surgical eye center. SkyVision is replicated through floating elements of advertisement and eye care product and also provides a division of spaces while keeping the space open. The rich, dark finishes allows for an upscale and sophisticated feel for patients. Lots of different textures and pattern allow for cohesion and make for a unique design. Flooring elements as well as built-in product casework separates spaces. Waiting areas are small and separated and more personal feel. The space seems to be adequately lit through both artificial and natural Interior windows lets lighting.

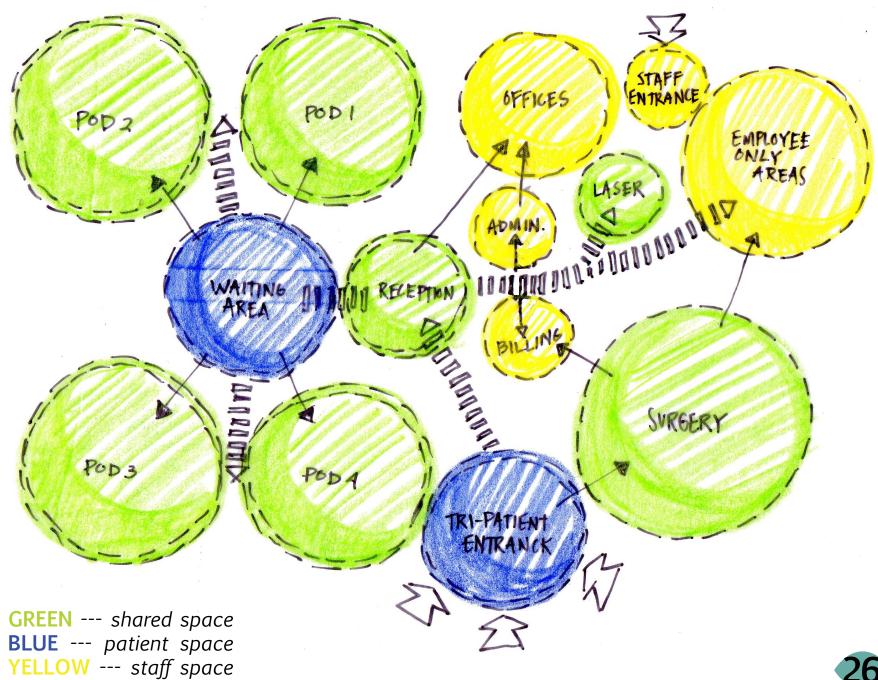
this light travel through several areas of the center.

Through research of other eye centers I have gathered several ideas that I plan to implement into the Muncie Eye Centers Design. Regarding ADA codes, I plan on making the bathrooms accessible to wheelchairs as well as all service counters and efficient waiting room area for the users wheelchair. Also braille will be used in signage and contrasting colors will also help people with low visual acuity to navigate through the space. Flooring and colors in contrast will divide up the spaces for easy wayfinding. Proper signage interior and exterior will be clear for all to read and understand. New finishes will be applied for acoustical barriers as well as comfortable and modern patterns and chairs can be found in the new interior. All furniture must be material safe by code as well as easily cleanable for custodial staff. Control of dimming artificial and daylight/views, as well as an added dilating room will help patients eye strain. Division of spaces will allow for privacy between patients, and staff in the waiting areas as well as in offices and lanes. Eyewear and frames will be sold to generate money for the Center as well as provide a one-spot place for customers to visit their doctor and shop. A concept will be implemented later on in the process and carried out in the design elements and principles through color, movement, furnishings, and essence within the space.

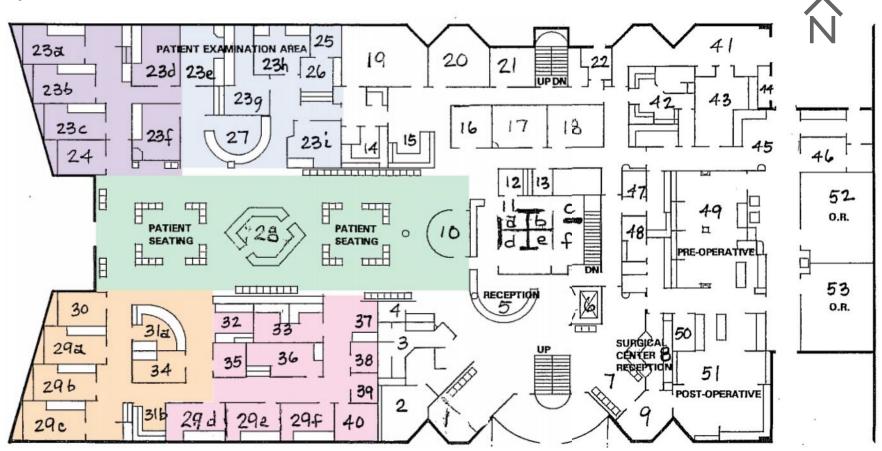
ROOM NAME	TAG	APPROX SQUARE FEET	NEEDED MORE OR LESS SQ. FT.	NEEDED ADJACENCY	ZONES (P=PRIVATE, SP=SEMIPRIVATE, B=PUBLIC)	DAYLIGHT /VIEW	PLUMBING	SPECIALTY EQUIPMENT	FURNITURE	PROTOTYPE DRAWING
Office (Surgery Manager)		11' 4" x 9' 4"		near surgery center	P	D/V	N	Phone, Computer	File Storage, Desk, Task Chair, 2 chairs	
Womens Public	†	11 4 85 4		centrally	<u>                                     </u>	D, V		Hand Dryers, Sink,	handicap stall, Lounge	
Restroom	2	12' 5" Long	М	located	В	N	Y	Toilet, Grab bars		P2
Mens Public				centrally				Hand Dryers, Sink,	2 Stalls, including 1 handicap stall, 2 Urinals, Lounge Chair	
Restroom	3	16' 3" Long	?		В	N	Υ	Toilet, Grab bars	Optional	
Coat Closet/Coffee Bar	4	4' 6" x 13' 6"	М	centrally located	В	V	Υ	Coffee/Expresso Maker/Microwave	Countertop/Trash Can	P3
Reception Desk	5	14' 5" x 30' 0"	-	near clinic side	В	D/V	N	3 Computers, Vending Machine, 2 Phones	Reception Counter, File Storage, 3 Task Chairs	P4
Elevator	6	7' 10" x 8' 11"	-	centrally located	В	N	N	none	none	
Surgery Waiting Area	7		-	near surgery side	В	D/V	N	none	Lounge chairs/end tables	
Surgery Reception				near surgery	n.	D/V	 	Commutan Customs	December Country	
Desk Family Viewing	8		<u>-</u>	near operating	В	D/V	N	Computer Systems	Reception Counter	
Room	9		?	rooms	В	V	N	none	Lounge chairs	
Office (Insurance/Billing									Desk, Task Chair,	
Manager)	10	15' x 9' 8"	L	near 11	Р	V	N	Computer, Phone 2 Fax Machines, 5	Guest Chairs	
Cubicle (billing reps)	112 f	21' 9" x 22' 0"	N/A	together	P	N	N	Computers, Phones, Big Printer, Small Printers/Scanners	6 Chairs, 6 Cubicles, File Storage	
			IVI	centrally						
Mailroom	12	5 '4" x 7' 7"	-	located centrally	P	N	N	none	Organization Storage	
Electrical Room	13		-	located	Р	N	N	none Hand Dryers, Sink,	Storage Shelving	
Galley	14	4' 6" x 4' 5"	-	UNKNOWN	Р	N	N	Toilet, Grab bars	storage	
Office (Admin Assistant)	15	10' 4" x 10' 0"	-	centrally located	Р	v	N	Computer, Printer, Fax Machine	Task Chair, Desk, Storage	P5
Laser Room/ SLT	16	9' 9" x 9' 8"	-	behind fire wall	P	N	N	Computer, Luminas Spectra 2 Machine, Lasik Testing Wave Scan Machine	4 Chairs	23

	I	l	I	benind fire		1	İ	Medical Novis 2000	ĺ	Ī
Laser Room/YAG	17	12' 10" x 8' 9"	-	wall	Р	N	N	Machine	Stool, Storage, Chair	
									Chairs/ Examination	
Lasik Room	18		-	UNKNOWN	Р	N	N	Laser, eye equipment	Table	
				centrally					Chair, Conference	
Office(C.E.O)	19	19' 7" 13' 8"	L	located	Р	D	N	Computer, Printer, Phone	Table w/ 6 Chairs,	
								Computer, Paper	Desk, Storage,	
Office (Executive				centrally				Shredder, Phone, Large	Executive Chair, 3	
Director)	20	14' 0" x 14' 7"	L	located	Р	D	N	Printer	Chairs, Table	P6
Office (Medical									Desk, Executive Chair,	
Optometrist)	21	18' 9" x 11' 3"	-	UNKNOWN	Р	D	N	Mini-Fridge, Printer	Chair, Bookcase	
				centrally						
Janitors Closet	22		-	located	Р	N	Υ	none	Storage Shelving	
								Reliance Koenig Kramer		
								Machine, Computer,		
North Clinic Exam								Projecto Chart Machine,	4 Chairs, Reclining Eye	
Lanes	23a-i	14 ' 3" x 8' 5"	-	LANE	SP	D/V	N	Projection Screen	Exam Chair, Storage	P7
Office (Private									Desk, Storage, Task	
Exam Lane)	24	10 ' 2" x 7' 1"	_	LANE	Р	D	N	Computer, Printer	Chair, Chair	
Office (Medical								,	2 Chairs, Desk,	
Optometrist)	25		-	LANE	Р	N	N	Computer	Bookcase	
Office (Plastic										
Surgeon)	26		-	LANE	Р	N	N	Computer, Printer	3 Chairs, Storage	
<u> </u>								2 Computers, Printer,		
Technician Station	27	11' 11" x 4' 6"	М	LANE	SP	D/V	N	Fax Machine	3 Chairs	P8
		a = 8' 6", b =								
		7' 1", c = 8'								
		7", d = 8' 10",								
		e = 7' 0", f =								
		2' 11", g = 3'								
Central Desk		0", opening =								
(Patient Care Rep)	28	2' 7"	L	LANE	SP	D/V	N	2 Computers, 2 Printers	2 Chairs, Storage	P1
						<u> </u>		Reliance Koenig Kramer	, ,	
								Machine, Computer,		
								' ' '	4 Chairs, Reclining Eye	
South Clinic Lanes	29a-f	14 ' 3" x 8' 5"	-	LANE	SP	D/V	N	Projection Screen	Exam Chair, Storage	
Office (Physician)	30	10 ' 2" x 7' 1"	-	LANE	Р	N	N	Computer, Printer	Chair, Chair	
Technician Station	31a	12' 3" x 12' 5"	М	LANE	SP	D/V	N	2 Computers, Phones	3 Task Chairs, 4 Chairs	
Technician Station	31b		М	LANE	SP	D/V	N	Computer, Printer, Phone		
Telephone			<u> </u>		-	<del>  '                                   </del>	1	Copy Machine, 2		
•	22	8'6" v 10' 4"		LANE	P	l <sub>NI</sub>	N	1 ' '	Storago 2 Chairs	
Operator/Scheduler		8'6" x 10' 4"	<del>-</del>	LANE	<u>  '</u>	N		Computers, 2 Phones	Storage, 2 Chairs	
Office (Physician)	33		-	LANE	Р	N	N	Computer, Printer, Phone	Chairs, Task Chair	

<del></del>		+	1	-	<del> </del>	+	1	<del>                                     </del>	+	
								Marquette Mac 5000		
								Resting ECG System,	Reclining Eye Exam	
Testing	34		-	LANE	Р	N	N	Zeiss IOL Master	Chair, Chair	
Office (PAT Nurse)	35		-	LANE	Р	N	N	Computer, Phone	Chair, Desk	
Minor Procedure										
Room	36		-	LANE	Р	N	N	Computer, Refrigerator, S	Storage, Chair	
								Printer, 2 Computers,		
				located near				Zeiss Optical Coherance		
Testing	37		-	lanes	Р	N	N	Tomography	3 Chairs	
				located near					2 Chairs, Storage for	
Visual Field Room	38	6' 0" x 6' 10"	М	lanes	SP	N	N	Humphrey Field Analyzer	Lenses	
				located near					2 Chairs, Storage for	
Visual Field Room	39	6' 0" x 6' 10"	М	lanes	SP	N	N	Humphrey Field Analyzer		
				located near				, , , , , ,		
Testing	40	7' 10" x 9' 4"	-	lanes	Р	N	N	Laser, 2 Computers	2 Chairs	
Warehouse				located near				, ,		
Delieveries	41		-	exterior	SP	N	N	Overhead rolling door	none	
								Lockers, Benches,		
Womens Dressing				centrally				Changing Rooms, Sink,		
Room	42		-	located	Р	N	Υ	Toilet	Lounge Chairs, Mirrors	
Surgery Employee				near surgery					Vending machine,	
Lounge	43		М	side	P	V	N	none	Tables, Chairs, Lounge	
Louinge	43		IVI	near surgery		\ <u>'</u>	IN	Hone	Tables, Chairs, Lourige	
Oxygen Storage	44			side	P	N	N	none	Storage Shelving	
Oxygen Storage	144			centrally	1		111	Hone	Storage Sherving	
Clean Storage	45			located	P	N	N	none	Storage Shelving	
Clean Storage	43			centrally	1	111	110	Hone	Storage Sherving	
Janitors Storage	46			located	P	N	N	none	Storage Shelving	
Janitors Storage	40		-	located	F	IN	IN	Lockers, Benches,	Storage Shelving	
Mens Dressing				centrally				Changing Rooms, Sink,		
Room	47		_	located	P	N	Y	Toilet	Lounge Chairs, Mirrors	
	48					N	Y			
Restroom	48		-	only?	В	IN	T	Toilet, Grab bars	Lounge Chair Optional	
Dro On Bossa	49			near surgery	P	,,	l <sub>v</sub>	2	?	
Pre-Op Bays	+	+	-	side	'	N	Y	<u> </u>	<u> </u>	
Restroom	50		-	<u> </u>	В	N	l Y	Toilet, Grab bars	Lounge Chair Optional	
Doot On Door				near surgery	D	,,				
Post-Op Bays	51		-	side	Р	N	Υ	?	?	
				near surgery		],				
Surgery Suite	52	1	-	side	Р	V	Υ	?	?	
				near surgery	_	<b>]</b>	<u> </u>			
Surgery Suite	53			side	Р	V	Υ	?	?	



# EXISTING ESTIMATED SQUARE FOOTAGE



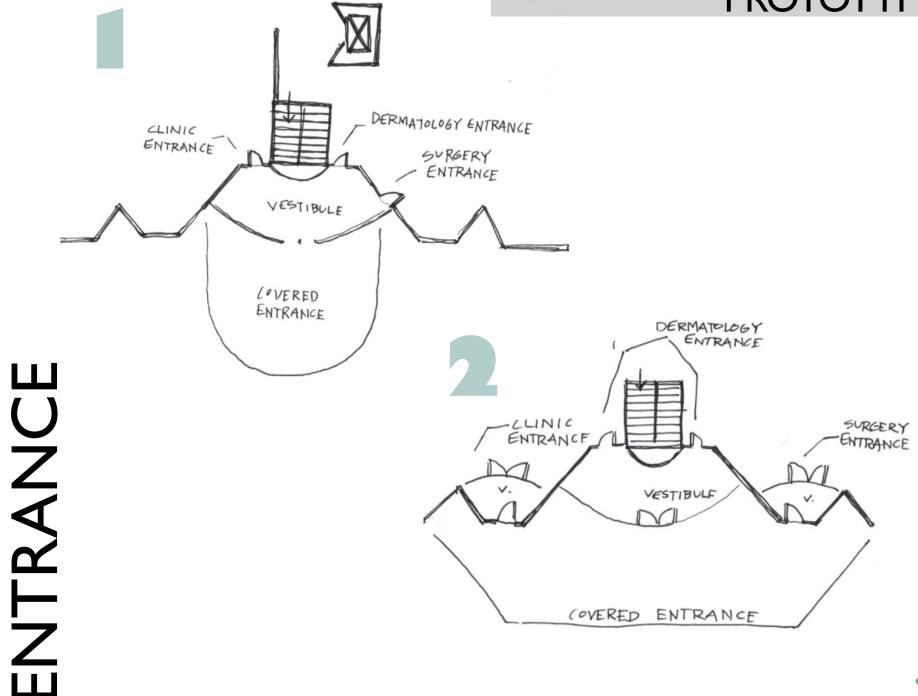
BLUE-POD 1: 1840 PURPLE-POD 2: 1625 PINK-POD 3: 1800 ORANGE-POD 4: 1940 GREEN-LOBBY: 3170

WHITE-ALL OTHER SPACES: 2200

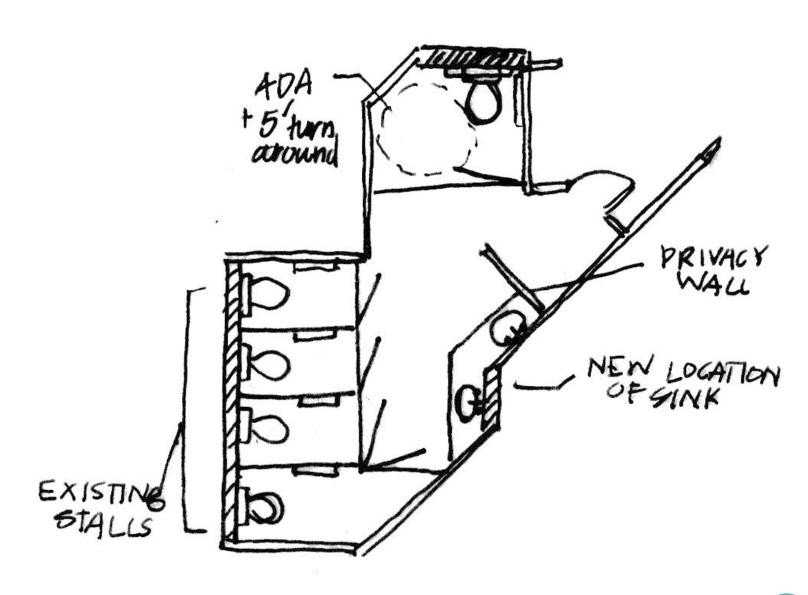
TOTAL: APPROX. 12,600 SQ. FEET

ON FIRST FLOOR

# PROTOTYPE I

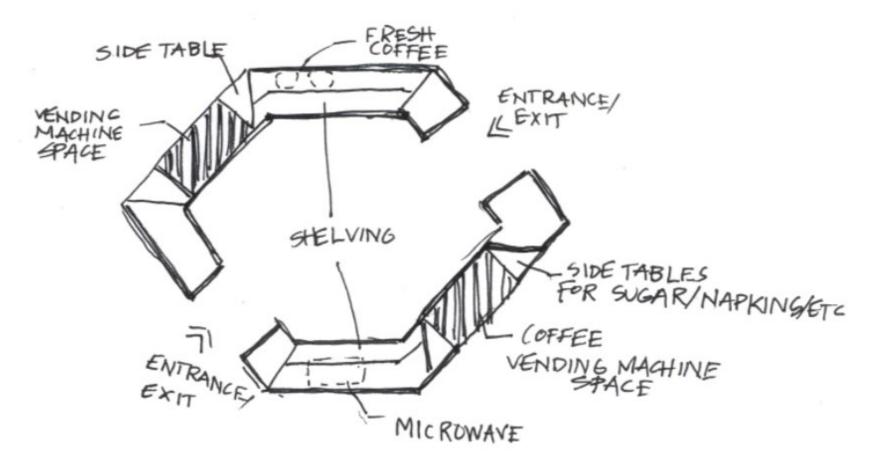


# OMENS PUBLIC STROOM



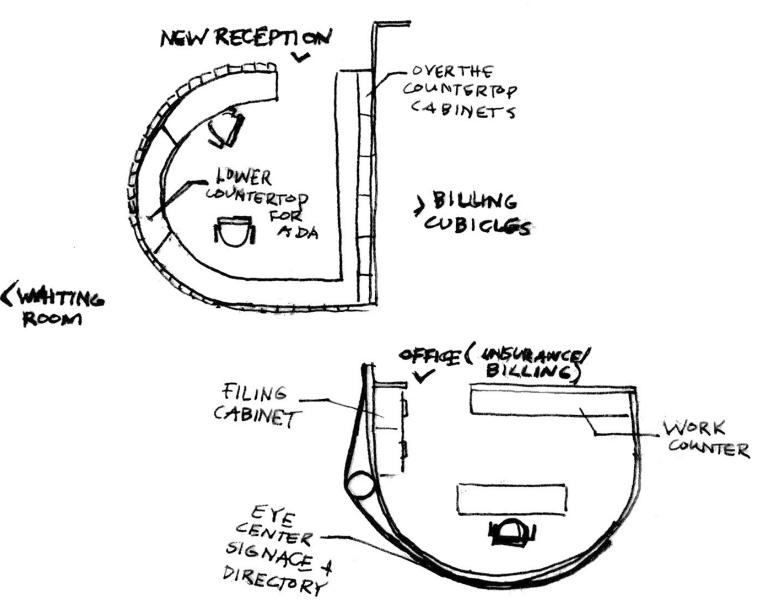
# PROTOTYPE 3

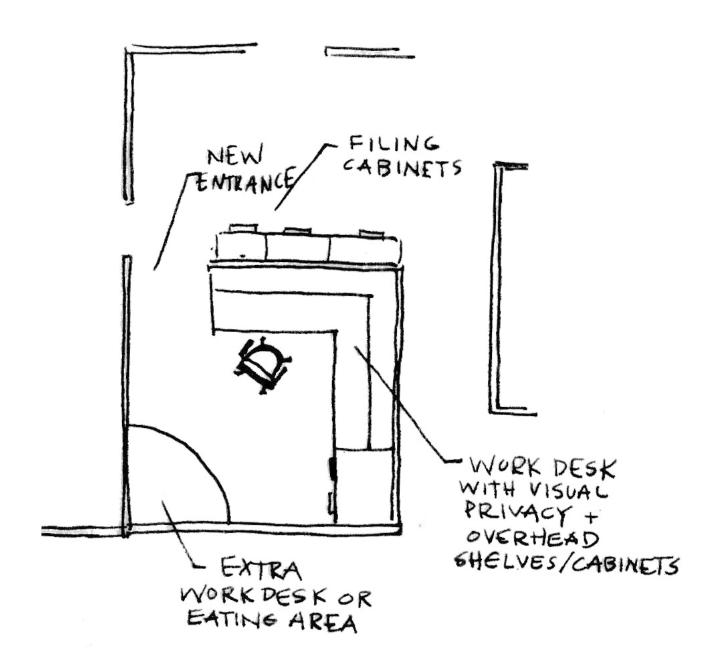




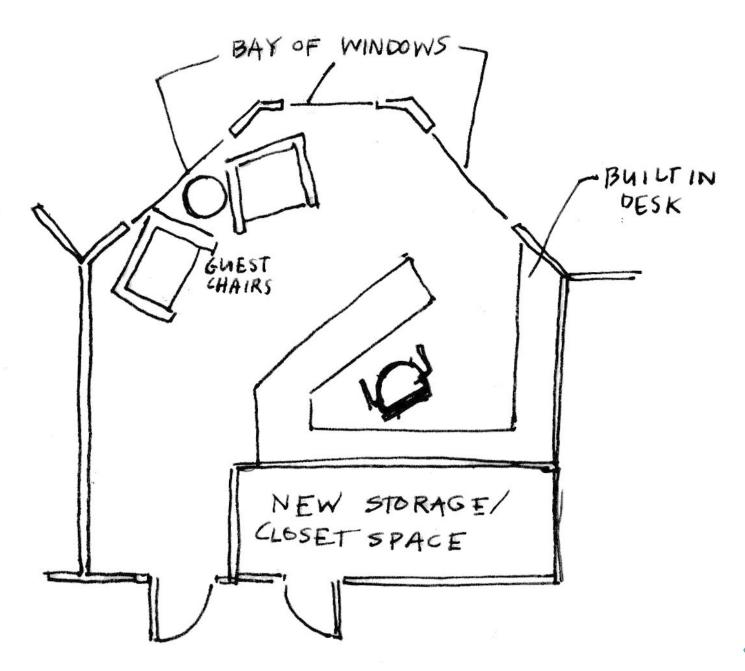
# PROTOTYPE 4

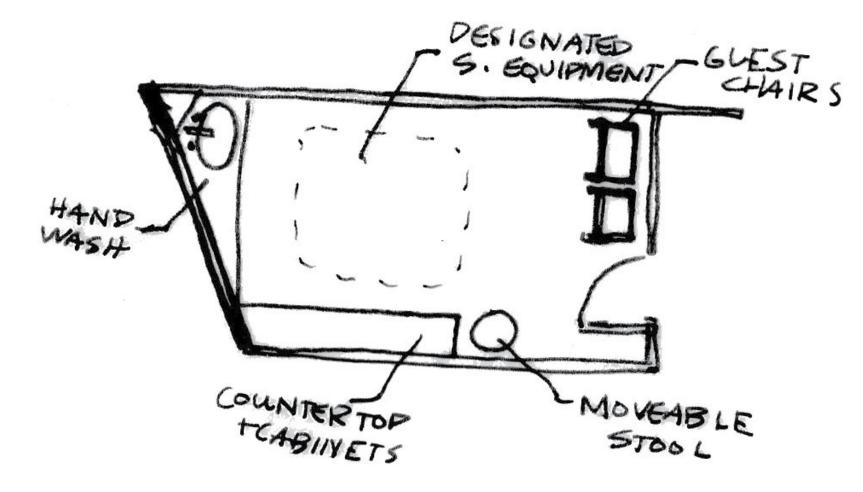
# RECEPTION DESK

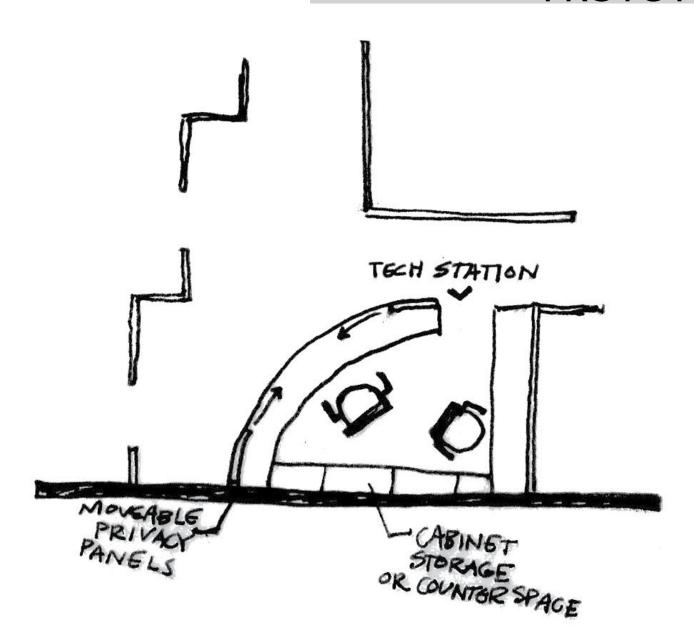




# EXECUTIVE OR







### LIMITATIONS

#### **CODES:**

American Society for Healthcare Engineering
Infection Control Risk Assessment
Healthcare Guidelines Revision Committee
Institute for Clinical Systems Improvement
Green Guide for Healthcare
Indiana State and Muncie Local Codes
Health Insurance Portability and Accountability Act
United State Department of Health and Human Services
Americans with Disabilities Act

Updated codes/regulations
Clean environment/finishes
Renovations of interior
System efficiency
Sustainability
Building/electrical/etc. codes
Client privacy and security
Government grant/funding
Accessible design

#### **OTHER:**

Budget
Restrictive Walls
Finishes
Spaces
Building
Circulation/Wayfinding
Structure

# MATERIAL PROPOSAL

The 2010 HGRC Guidelines continue to require that wall finishes be washable, noting that design for a healthy and productive indoor environment can be accomplished through measures such as the use of low volatile organic compounds finishes and reduced moisture entrapment and cannot conflict with health care safety and infection control codes and standards. This aspect and related topics are discussed at length in the APIC 2009 text on ventilation. Floor coverings must be easily cleaned but also enhances patient comfort, noise, and safety. Newer floor coverings focusing on sustainability better address the balance of concerns with patient comfort (noise), patient safety (reduced slips, falls, and injury), staff back injury (rolling beds, carts, stretchers), life cycle costing (maintenance and replacement), and cleaning (equipment and staff) Current evidence demonstrating the efficacy of antimicrobials when applied or incorporated into or onto inanimate surfaces, patient care equipment, fixtures, or finishes, including carpeting, specifically for prevention of HAI is lacking. The Guidelines emphasize clean ability and do not support antimicrobial treatments; rather, they support privacy curtains that are washable, or more preferable, a wipeable fabric with a smooth surface.

After all of the findings and research, as a designer I can make several recommendations for improvements and renovations for the Muncie Eye Center. The first change that needs to be made is shown in the above Prototype Two, to separate the entrances

FIND INGS

to ease confusion and maximize efficiency. The Lobby needs to be decreased in size and separated to add more rooms like the Dilating room. The Technical Station (28) will be relocated in a semi-private area to use the space for a public coffee and snack

bar shown in Prototype One. Most of the room location dealing with the lanes will remain the same, for needed adjacency. Optimizing the technician Station by combing them can make space for another relocation of space. Elimination of glass block in the office (10) can eliminate the privacy and distraction issues. Carpet and flooring distinction needs to be implemented to provide pathways to lead the patients into specific lanes. Color coordination along with the paint colors and ceiling panels within the lanes can correlate with the lane. The existing coffee bar station could be converted into a small dilating room depending on the expansion and total square footage. Acoustical panels will bring down the volume within the lobby as well as absorb the spaces noise travel. Another small space that needs to be utilized is the existing non used planters that are integrated behind the lobby waiting chairs. Once new ergonomic chairs are purchased for the waiting areas, these spaces need to be arranged into two organized sections to direct the clients in the north versus the south lanes. We also discovered that there must be or simulated, 20 feet of visual space to the visual board in relation to patient to chair in testing. ADA accessable stalls need to be added near the waiting area. Wayfinding and circulation needs to be larger to comply with ADA. Separation of entrances will eliminate confusion to the patients. However, working within the restriction of fire walls for the laser room, plumbing walls for the bathroom, and exterior walls are the major limitation. Administration offices need to be centrally located for easy access for both practices of the clinicals and surgery. Reception and billing spaces need to be located beside each other for efficiency. Traveling paths directly to each pod, as well as wayfinding through finishes and signs will maximize efficiency.

### **ESTIMATED BUDGET**

The Muncie Eye Center has not given the designers a complete budget for the project, therefore below is the designers proposed budget to the client.

Most of the specialty equipment within the Eye Center will remain, which will allocate the budget on other needed spaces. Construction will be about 35% of the total budget to move around some space allocation and mainly to separate the confusion at the front entrance to lead clients to the three direction medical centers, the clinic, the surgery center, and the dermatology space upstairs. 25% will be used on lighting and ceiling acoustics, to provide layered lighting to complement the day lighting as well as control the volume. The rest of the budget, 40% will be used to aesthetically update the interior through paint colors, furniture and other design features for a modern transitional look.

### SOLUTION ANALYSIS

Design strategies or environmental interventions	Single-bed rooms	Access to daylight	Appropriate lighting	Views of nature	Family zone in patient rooms	Carpeting	Noise- reducing finishes	Ceiling lifts	Nursing floor layout	Decentralized supplies	Acuity- adaptable rooms
Health care outcomes											
Reduced hospital-acquired infections	**										
Reduced medical errors	*		*				*				*
Reduced patient tails	*		*		*	*			*		*
Reduced pain		*	*	**			*				
Improved patient sleep	**	*	*				*				
Reduced patient stress	*	*	*	**	*		**				
Reduced depression		**	**	*	*						
Reduced length of stay		*	*	*							*
Improved patient privacy and confidentiality	**				*		*				
Improved communication with patients and family members	**				*		*				
Improved social support	*				*	*					
Increased patient satisfaction	**	*	*	*	*	*	*				
Decreased staff injuries								**			*
Decreased staff stress	*	*	*	*			*				
Increased staff effectiveness	*		*				*		*	*	*
Increased staff satisfaction	*	*	*	*			*				

<sup>\*</sup>Indicates that a relationship between the specific design factor and health care outcome was indicated, directly or indirectly by empirical studies reviewed in this report.

<sup>\*\*</sup>Indicates that there is especially strong evidence (converging findings from multiple rigorous studies) indicating that a design intervention improves a health care outcome.

### **DUE DATES TASKS**

AUG.-DEC. 2012 PROGRAMMING

JAN.-FEB. 2013 SCHEMATICS

MAR.-APR. 2013 DESIGN DEVELOPMENT

APR.-MAY. 2013 CONSTRUCTION DOCUMENT

MAY.-JUN. 2013 SCHEDULES + CON. MANUAL

JUN.-JULY 2013 BID PROCESS

JULY. 2013 - JAN.2014 CONSTRUCTION

JAN. 2014 - FEB. 2014 REVISIONS + PUNCHLIST

FEB. 2014 - MAR 2014 POST OCCUPANY EVALUATION

### SUMMARY OF DATES

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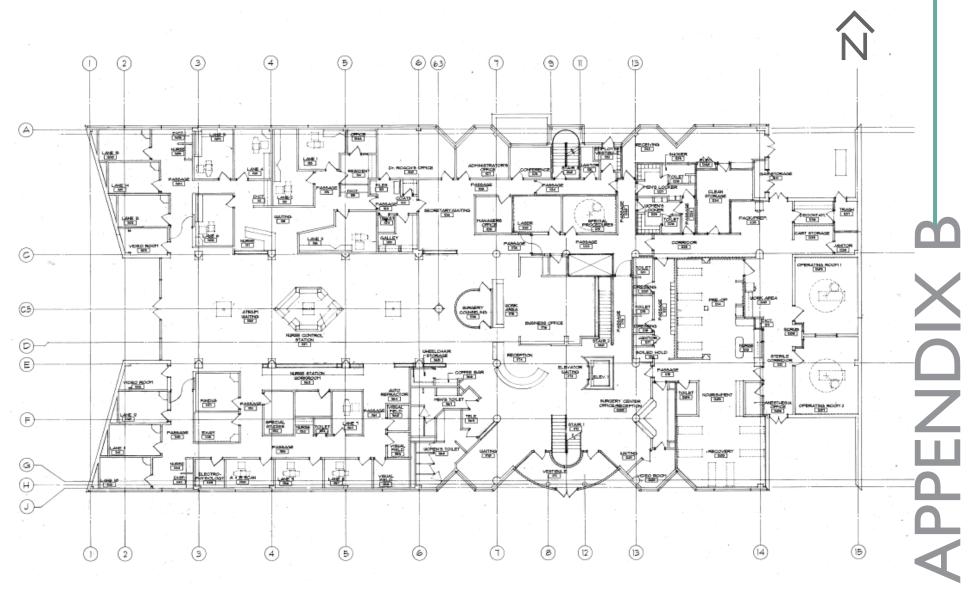
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Sweets catalog file 2010: architects, engineers & contractors.. (2010). New York: McGraw-Hill.

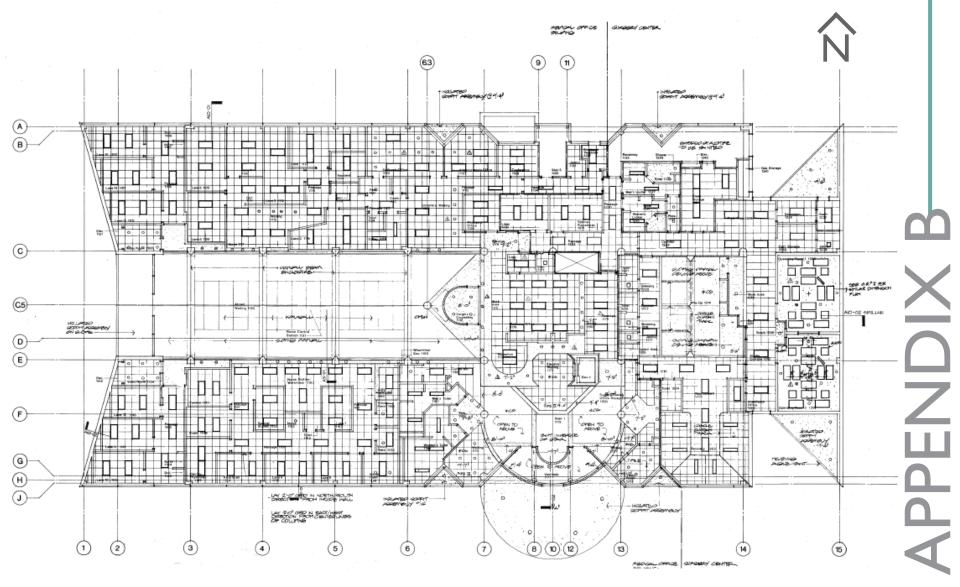
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APPENDIX

### FLOOR PLAN



### REFLECTED CEILING PLAN



### SURVEYS: ADMINISTRATION

#### **Questions for Secretaries and Administrative Personnel**

We would really appreciate if you took the time to fill out our survey. We are a group of interior design students at Ball State University looking to make the American Health Network Eye Specialists facilities better for you and your patients. Thank you and have fun with it! We need all the feedback we can get to improve your work environment.

#### Answers:

<b>RESPONDANT 1</b>	RESPONDANT 2	<b>RESPONDANT 3</b>	<b>RESPONDANT 4</b>	<b>RESPONDANT 5</b>
Name (optional):				
Sandy	Dawn Wolf	Melita Flowers	Sue	Jim Hinton
Title/ position:				
Executive Director	Patient Service Supervisor	Administrative Assistant	PtServ Rep/ Scheduler	Pt Account Rep
STORAGE				
V X	do you need to include in	<u> </u>		
No Answer	Computer, phone, adding machine	Stationary, basic offices supplies, administrative and personnel files,	Pt info, doctor schedules, new patient info, appointment cards, envelopes, office	File cabinets, drawers
		physicians' credential files, minute books	supplies, paper	
2. How does your curr	rent storage space compar	re to what would be ideal?		
С	С	С	С	С
B. you would	like less storage space like more storage space nt amount of storage spac any):	e is adequate		
	ent work surface compar	e to what would be ideal?		
С	С	С	С	С
A. you would	like less work surface			

B. you would like more work surface

C. your current amount of work surface is adequate

Comments (if any):

#### **PRIVACY**

4. How does your current visual privacy compare to what would be ideal?

1. How does your current	t visual privacy compare t	o what would be lacul.		
B- "I would prefer my	С	B- Many times I have	B-Pt's are able to see	С
door not having a		to make confidential	and hear as I am	
window because I		phone calls and have	scheduling	
leave my door open all		to either go to another	appointments. Pt's	
the time and when it is		office to make those	often walk up to my	
shut people still press		calls. My computer	area when I'm on the	
their face up against		screen faces the	phone to inquire about	
the window wanting to		walkway the staff	the wait time	
come in. A window		travels when going		
dressing would be fine		through my area and if		
instead of replacing		I am working on		
the whole door."		confidential material I		
		have to turn my screen		
		off or minimize what I		
		am working on at the		
		time. This reduces		
		production.		

A. you would like less visual privacy

B. you would like more visual privacy

C. your current amount of visual privacy is adequate

Comments (if any):

5. How does your current audio privacy compare to what would be ideal?

С	С	B-It is difficult to	B-See above, same	В
		conduct a professional	answer	
		call when staff walk		
		past talking and		
		laughing and I have to		
		excuse myself from the		
		call to ask them to		
		keep the noise down		
		or ask the caller to		
		repeat themselves		

A. you would like less audio privacy

B. you would like more audio privacy

C. your current amount of audio privacy is adequate

Comments (if any):

6. Which of your daily tasks require the most privacy? (ie. Computer screen, phone calls, etc)

o. Which of your daily tasks require the most privacy. (ie. doinputer sereen, phone cans, etc)					
"Mainly phone calls or	Computer, phone	Computer screen,	Both	Phone calls	
when I am working on		phone calls,			
sensitive material."		paperwork,			
		discussions with staff			

No answer	"Managers and Melita	No answer	Anyone who uses pt	I need privacy when I
	due to sensitive		personal info	make collection and
	issues."			billing calls
AESTHETICS				
	nt color scheme or do you	think it could improve?		
2	С	С	A	A
A. you like it as				
B. you don't lik		1 .1		
C. you like som	e aspects but would rather	r change others		
9. What colors, patterns	s. and/or textures would n	nake you feel more comfor	table and the most produc	ctive at work?
More contemporary	Muted	No answer	I'm good with as is	Blue
streamlined modern."				
vovemovo.				
LIGHTING	it lighting in your space?			
Co. Do you have efficient	C.	С	С	С
A. needs more	U	10	· ·	T G
B. needs less				
C. adequate				
C. adequate Comments (if a	ny):			
Comments (if a		vour new snace?		
Comments (if a 11. What type of lightin	g would you like to see in		Same as I have now	It is ok
Comments (if a 11. What type of lightin		your new space? No answer	Same as I have now	It is ok
Comments (if a  11. What type of lightin  No Answer  FUNCTION	g would you like to see in	No answer	Same as I have now	It is ok
Comments (if a 11. What type of lightin No Answer FUNCTION 12. Who do you need to	g would you like to see in solution N/A  be near for most efficience	No answer y? Why?		
Comments (if a 11. What type of lightin No Answer FUNCTION 12. Who do you need to Melita because she is	g would you like to see in N/A  be near for most efficience  Business staff for	No answer  y? Why?  I work most closely	ICC tech, or most team	It is ok  No answer
Comments (if a 11. What type of lightin No Answer FUNCTION 12. Who do you need to 'Melita because she is	g would you like to see in solution N/A  be near for most efficience	No answer  y? Why?  I work most closely with the Executive		
Comments (if a 11. What type of lightin No Answer FUNCTION 12. Who do you need to 'Melita because she is	g would you like to see in N/A  be near for most efficience  Business staff for	y? Why? I work most closely with the Executive Director and the C.E.O.,	ICC tech, or most team	
Comments (if a 11. What type of lightin No Answer FUNCTION 12. Who do you need to 'Melita because she is	g would you like to see in N/A  be near for most efficience  Business staff for	No answer  y? Why?  I work most closely with the Executive	ICC tech, or most team	
Comments (if a 11. What type of lightin No Answer FUNCTION 12. Who do you need to 'Melita because she is	g would you like to see in N/A  be near for most efficience  Business staff for	y? Why? I work most closely with the Executive Director and the C.E.O., so location is adequate	ICC tech, or most team	
Comments (if a 11. What type of lighting No Answer  FUNCTION 12. Who do you need to Melita because she is my assistant."	g would you like to see in N/A  be near for most efficience Business staff for supervision  perform throughout the da	No answer  y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for t	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer
Comments (if a 11. What type of lightin No Answer  FUNCTION 12. Who do you need to Melita because she is ny assistant."	g would you like to see in N/A  be near for most efficience  Business staff for supervision	y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for the Computer, phone calls,	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer
Comments (if a  11. What type of lightin No Answer  FUNCTION 12. Who do you need to 'Melita because she is my assistant."  13. What tasks do you p 'All business	g would you like to see in N/A  be near for most efficience Business staff for supervision  perform throughout the da	No answer  y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for t Computer, phone calls, scheduling	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer
Comments (if a 11. What type of lightin No Answer  FUNCTION 12. Who do you need to Melita because she is ny assistant."	g would you like to see in N/A  be near for most efficience Business staff for supervision  perform throughout the da	No answer  y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for t Computer, phone calls, scheduling appointments,	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer
Comments (if a 11. What type of lightin No Answer  FUNCTION 12. Who do you need to Melita because she is ny assistant."	g would you like to see in N/A  be near for most efficience Business staff for supervision  perform throughout the da	No answer  y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for t Computer, phone calls, scheduling appointments, paperwork, filing, etc.	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer
Comments (if a  11. What type of lightin No Answer  FUNCTION 12. Who do you need to 'Melita because she is my assistant."  13. What tasks do you p 'All business	g would you like to see in N/A  be near for most efficience Business staff for supervision  perform throughout the da	y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for t Computer, phone calls, scheduling appointments, paperwork, filing, etc. Good equipment, good	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer
Comments (if a  11. What type of lightin  No Answer  FUNCTION  12. Who do you need to  "Melita because she is  my assistant."	g would you like to see in N/A  be near for most efficience Business staff for supervision  perform throughout the da	No answer  y? Why?  I work most closely with the Executive Director and the C.E.O., so location is adequate at this time.  y, and what is needed for t Computer, phone calls, scheduling appointments, paperwork, filing, etc.	ICC tech, or most team leaders hose tasks? (i.e. phone, co	No answer

14. Does your job require you to be in a private office or could you be in a shared work environment?

Private office	Private area as much	Private	Could be in a shared	shared
	as possible		work environment	

15. If there were shared offices, would you need a small separate space for temporary privacy such as a phone call? Circle *Yes* or *No.* Comments (if any):

or nor dominance (in unity).						
No Answer	Yes	Yes	No	Yes		

16. What design aspects could we incorporate to make your job easier. Please feel free to list anything from aesthetics to functionality.

No Answer	Some way to make my	No answer	I would like a half wall	No answer
	computer screen less		beside my area with	
	visible to those		glass at top to see out	
	walking up behind me.		and block pt view and	
			sound while on phone	
			with people	

17. On a scale of 1-10 with 1 being never and 10 being non-stop, how often do you interact with the patients face to face or in person?

	person:							
ſ	1-2	1	2	Should be 2-3 maybe	3			

18. On a scale of 1-10 with 1 being never and 10 being non-stop, how often do you interact with the patients on the phone?

10. On a scale of 1 10 Wi	til I bellig liever alla 10 b	chig non stop, now often d	o you miteract with the p	aticitis on the phone:
3	1	2	10	9

19. On a scale of 1-10 with 1 being never and 10 being non-stop, how often do you interact with the doctors and nurses?

9	7	8	8	3

20. What are your biggest issues with your current space?

"I am actually very	"I am generally only at	The privacy issue and	See response to 4 and	It is ok
content with my office	the Muncie office once	having a good chair.	5	
space. Aesthetically it	a week, so my area is			
could use some	usually sufficient;			
attention and I would	however because of			
like it to be a bit more	my position, I			
private when I do shut	sometimes need more			
my door, but other	privacy to talk with			
than that it is a very	staff members as I do			
accommodating work	not have an area that is			
space."	completely closed off			
	for privacy. I usually			
	get around this by			
	going into an office			
	where I can shut the			
	door. Also, I am unable			
	to work on sensitive			
	issues on my computer			
	due to the open area			
	and the screen being			
	visible to anyone who			
	walks up behind me."			

General comments:

No	o Answer	No answer	No answer	No answer	No answer

### SURVEYS: NURSES/DOCTORS

#### **Questions for Doctors and Nurses**

This survey is being conducted by interior design students from Ball State University. We greatly appreciate you participating in this questionnaire in order to make this space more efficient for you and your colleges. Please answer honestly and thoroughly, your answers will be take into great consideration when designing your office space. Thank you!

Answers:					
RESPONDANT 1					
Name (optional):					
Rita Singh?					
Occupation:					
Retina surgeon					
Pod # or name:					
No answer					
not?	would be helpful for a	all or some of the nurs	ses to be centrally loca	ated? Why or why	
Yes-better cross-					
coverage for other teams					
teams					
<ol> <li>Are the current lighting levels for these rooms appropriate for the activities that are taking place?     Please state whether the current lighting is efficient and whether they should be increased or     decreased within the spaces below:         <ul> <li>a. Procedure rooms:</li> </ul> </li> </ol>					
ok					
	dual work stations/of	fices:			
poor					
c. Public	areas/hallways:				
poor					

3.	Is there a reason why the dilating patients leave the procedure room? If so, would it be more efficient for the dilated patients to have a specific room for this process apart from the main					
	lobby		•	•		
	would be					
	a separa					
ullilly I	it dilating	groom				
	4. On average, how many hours do you spend in your office per day?					
Α		0.0				
		0-2				
		2-4				
_	_	4+			1 2	
C 5.	On av	erage, n	iow many nours do yo	ou spend in your pod p	er day?	
C	a	0-2				
		2-4				
		2 1 4+				
6			nds do vou work in ne	r week? If the answer	is more than 1 nlease	state the number
0.			e other pods you wor		is more than 1, pieus	state the hamber
A	01 11011					
	a.	1				
	b.	2				
	c.	3				
	d.	4				
	Ot	her pod	ls:			
7.	Would not?	d you be	e receptive to having (	or keeping) your offic	e adjacent with your	pod(s)? Why or why
No ans	wer					
		spatial	problems do you face	within the office on a	day-to-day basis?	
No ans	wer					
9.	9. Do you have suggestions on the location of seating and task areas in order to make your path of travel more efficient? If so, what are they?					
No ans	wer					

10. What method	is of communication a	re you using now to r	elay patient informati	on to other pods? Is
this method e	effective? Why or why	not?		-
No answer	J 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			
11 What addition	nal anagagyuguld ba b	amaficial to way?		
	nal spaces would be b	enencial to you?		
No answer				
12. What purpose	e would you like the c	enterpiece structure i	n the lobby to have?	
Educational and				
interesting				
13 In your specif	fic position, what equi	nment/furniture do v	ou need to accomplis	h daily tasks? (i e
-	omputer, filing cabinet	,	ou need to decomplish	radify tasks. (i.e.
	riputer, ming cabine	is, storage, etc.)		
Stool, computer				
14. Do you have a	any aesthetic or color	scheme suggestions for	or the future design of	f the space?
A more up to date				
color scheme				
Thank you for your t	ime and participation	Please list any other	concerns or ideas you	i have below it will
		-	concerns of fueas you	i nave below, it will
	better space for you:			
Better carpeting,				
anything but what we				
have!				

### SURVEYS: PATIENTS

happier colors

#### **Questions for Clients**

We, the interior design senior students at Ball State University, are conducting a survey to gather data that will help with the redesign of the Muncie Eye Care Center. We hope to create a more functional space for you, the clients, doctors and staff of the facility.

<b>RESPONDANT 1</b>	<b>RESPONDANT 2</b>	<b>RESPONDANT 3</b>	<b>RESPONDANT 4</b>	<b>RESPONDANT 5</b>
RESPONDANT 6				
	er entertainment such		Ü	-
Magazines/television ocal newspaper	Yes, tv is not loud enough to hear what is being said (underlined television, music, magazines)	tv	television	Yes
res				
	1	4	4	5
3. Do you feel t	the amount of seating i	n the waiting area is:	excessive, adequate, o	r <i>inadequate</i> . Circle
One.				
ndequate	adequate	adequate	adequate	Adequate
idequate				
		comfortable having c	omeone sit from you?	Cinala ama, 1 2 2
More than3				
More than 3	3	2	3	1 1
More than 3				
More than3		2	3	
More than 3  2  1  5. Do you find	3	2	plain.  I enjoy the large window that faces the street. It lets in lots of	
More than3	3         the interior style pleas	ing/comfortable? Ex	plain.  I enjoy the large window that faces the	1

6. Do you feel that the walking distance between CHECK-IN and the WAITING AREA is: too far, adequate, or I could walk further. Circle one.				REA is: too far,		
	,					
adequate	adequate	adequate	adequate	Adequate		
adequate						
adequate, or	I could walk further.					
adequate	adequate	adequate	adequate	Adequate		
adequate						
	regetation in the inte	-	V. J. D. L.	I v.		
yes	Yes, some flowers would be nice	yes	Yes I like trees	Yes		
I like vegetation but it						
doesn't look like it						
belongs						
please explai	J 1 J 1	rotected throughout yo	our entire visit? (YES/	NO). Circle one. If no,		
to be more private						
yes						
10. Do you feel t	hat you have to wait	too long to be seen? (Y				
yes	yes	no	No, not normally	No		
No answer						
-	een, do you feel that	you have to wait too lo	ng to check out? (YES			
no	yes	no	no	No		
No answer						
	12. Have you ever experienced a problem accessing the restrooms? (YES/NO). If yes, please explain.					
They are not very accessible for handicap patients, need to have automatic opening for them, doors are heavy	no	no	no	No		

13. Do you feel that a separate waiting area after dilation is necessary? (YES/NO). Circle One.

No answer

no	no	no	no	No
No answer				

14. What would make you more comfortable during your waiting time?

		0,7		
Maybe a television at	Better magazines to	No answer	No answer	None
other end of waiting	look at such as			
area. Chairs are not	woman's day, family			
very comfortable	circle, ladies home			
•	journal			
No answer				

15. Do you find the space easy to navigate? (YES/NO) If no, explain why.

	3	1 5	, , ,	1	
	yes	yes	yes	yes	Yes
ĺ	No answer				

16. How can we make your experience at the Eye Center more pleasant? Please comment.

More reading material/newspapers	I think there should be more than one ty	No answer	The coffee could be better	No answer
No answer	more than one tv		Better	

### **PHOTOS**

























## PHOTOS



















