Kensington Center for Health: An Exploration of Health, Wellness and the Built Environment.

Rose Peck
Virginia Commonwealth University

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Kensington Center for Health

An exploration of health, wellness and the built environment.
Rose Peck
MFA Thesis Project
May 2015
IDES 699 & IDES 690
VCUarts Interior Design

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Fine Arts at Virginia Commonwealth University.

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B.A. English
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M.F.A. Design: Interior Environments
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Virginia Commonwealth University
Richmond, Virginia, May 2015
# TABLE OF CONTENTS

7..................Manifesto & Preface
9..............................Abstract
11............................Introduction
21.............................Site Analysis
27..........................Building Analysis
31............................The Program
37.............................Case Studies
57........Schematic Development
71...........................The Space Plan
79.............................Perspectives
87..................................FF&E
89.............................The Exhibit
93......Final Presentation Boards
95...............Acknowledgments
97.........................Works Cited
Fallingwater, or Kaufmann Residence
Frank Lloyd Wright, 1939
Mill Run, PA.

“A building should appear to grow easily with its site and be shaped to harmonize with its surroundings. [...] Design shall become in its atmosphere as pure and elevating in its humble way as the trees and flowers are in their perfectly appointed way.” –Frank Lloyd Wright

MANIFESTO & PREFACE

This is a project that explores how design can integrate medical treatment and community support.

This project seeks to respond to the health needs of the community and integrate design elements in the way that Frank Lloyd Wright’s projects respond to nature.

Fallingwater respects the Bear Run by cantilevering over and meandering through the twists and turns of the river. The house grows out of the river, rather than trying to force it to change or take away from its natural beauty.

This project will gently respond to and quietly merge with the community without imposing or demanding.

I will design this project in the spirit of creating a thoughtful place that responds to what is while imagining what could be.
MOTIVATION
The high prevalence of chronic disease is creating a national healthcare crisis. Chronic disease is defined as a long-lasting condition that can be controlled but not cured and is the leading cause of death and disability in the United States. As a nation, 75% of our healthcare dollars goes to treatment of chronic diseases, and one out of every two adults has a chronic condition.

About half of US adults (47%) have at least one of the following major risk factors for heart disease or stroke: hypertension, dyslipidemia, smoking and sedentary lifestyle. Ninety percent of Americans consume too much sodium, increasing their risk of high blood pressure. In 2011, more than half (52%) of adults aged 18 years or older did not meet recommendations for aerobic exercise or physical activity.

Access to quality, effective support when managing chronic conditions is imperative to addressing treatments focused on healthy living and well-being. Well-being integrates mental health (mind) and physical health (body) and suggests a holistic approach to disease prevention and health promotion. The support and integration of community services to supplement clinical treatment is necessary to effectuate lifestyle changes.

PROBLEM
Fragmented healthcare treatment of complex and chronic health conditions often misses the view of the patient as a whole person and the idea of well-being. Clinical treatment of chronic disease is focused on self-management as a way to avoid or minimize illness and risk factors. There is a need to reinforce recommendations healthcare providers given the poor adherence rates of lifestyle change recommendations.

METHODS
Chronic disease is mostly caused by correctable problems such as poor diet, lack of exercise, tobacco use and high blood pressure. The Community Preventive Services Task Force recommends identifying effective community-based and healthcare system-based programs to which providers can refer their patients for additional education and support.

This project will investigate models of comprehensive care focused on treatment of chronic disease. The following precedent models are analyzed for programmatic strategies: Saint Anthony Hospital’s new Focal Point Campus Center in Chicago IL, Stephanie Tubb Jones Health Center at Cleveland Clinic and Akershus University Hospital in Norway. Non-medical case studies are also reviewed to look at space planning strategies, material use and architectural considerations.

RESULTS
Consideration of a holistic sense of well-being that focuses on disease resistance, resilience, and self-management is necessary to realize and sustain health outcomes. Community engagement is imperative to improve adherence rates for lifestyle changes. The case studies reviewed all foster a strong tie to the community, offer spaces for connection, interaction and a variety of social resources.

CONCLUSIONS
The Kensington Center for Health aims to design a community wellness space that is focused on prevention, resilience and self-management. A new typology of a community-anchored wellness clinic could provide an environment to support positive change. This clinic will be a new model of care by combining the necessary access to fitness, healthy food, healthcare and childcare while fostering community, providing patient education and emotional support.
FACTS & FIGURES

A chronic disease is a long lasting condition that can be controlled but not cured. Some examples are heart disease, obesity, arthritis & asthma.  

One out of every two adults has a chronic condition.  

Treatment of chronic conditions accounts for 75% of national healthcare spending.  

One half of all patients leave primary care visits not understanding what their doctor advises.  

Lack of physical activity and poor nutrition are the top two health risk behaviors that cause much of the illness, suffering, and early death related to chronic diseases.  

Average adherence rates for prescribed medications are about 50%, and for lifestyle changes adherence rates are below 10%.
WELLNESS

Wellness is an active process through which people become aware of and make choices toward a more healthy state. The Wellness Wheel shows six main factors that are all equally important to achieve wellness. This project will use the wellness wheel to develop a strategy to address the six components of wellness.

The Kensington Center for Health will create spaces that combine the components of wellness by thoughtful programming that combines physical health with community support, education, behavioral health and facilitate each user’s pathway to their own understanding of spirituality.
THESIS STATEMENT

This project aims to design a community wellness center that fosters a community that supports well-being.

Kensington Center for Health will create a central space to support activities that foster wellness and respond to the low adherence rate for recommended lifestyle changes.  

PROGRAM SUMMARY

A CLINIC SPACE that provides quality primary care and sub-specialty care.

A FITNESS CENTER with exercise classes and fitness equipment to support physical health.

A CAFE with fresh and local food and a teaching kitchen that provides educational programming.

A CHILDREN’S CENTER provides drop-in childcare to create a fun place for children to play.
Why is community support imperative to promoting wellness?

Providing local clinics that are integrated into the community is essential to help the battle against the staggering growth rate of chronic conditions.\(^7\)

Research highlights the importance of creating spaces that are attractive in appearance, supportive of social interactions, and welcoming for people to linger and cultivate social capital within the community.\(^3\) These spaces should be a part of every community. People who feel an emotional bond with a neighborhood, park, or other setting demonstrate greater commitment to the community surrounding that place, and report higher levels of well-being.\(^3\)

Kensington Center for Health will become a space for building a healthy community with the clinic as its center piece that integrates clinical care, community support, physical fitness and healthy diet.
INTRODUCTION TO THE BUILDING

Architect Charles M. Robinson designed Kensington Street Elementary School at 3101 Kensington Avenue in Richmond, VA in 1919. The building operated as an elementary school until 1986 when it was closed due to low enrollment. In 2001 the building was converted into apartment units. 9

The Colonial Revival building has a large flat roof, engaged Corinthian columns, and tall round-arched windows. Anchoring either end of the central section are three story square towers, each topped by a copper dome above a bracketed frieze and dentil cornice.

The Kensington Street Elementary School is centrally located in the residential neighborhood of the Museum District. It is ADA accessible, has ample parking, large windows and is an ideal site to create a welcoming space for the community.

By adding a health clinic, fitness center and cafe, this building can be the metaphorical heart that delivers life to the neighborhood.
The Museum District by the Numbers:

- **$44,000** — Median Income
- **7,428** — Residents Per Square Mile
- **30** — Median Age
- **22%** — Percentage of Family Households
- **20.4%** — Percentage of Population Below Poverty Level
- **2,873** — Total Number of Residents

Map Legend:
- Kensington Street Elementary School
- Museum District Neighborhood

The building is located in the residential Museum District of Richmond, VA. The boundary of the neighborhood is shaded in gray.
The building has original terrazo and wood in the public corridors. In a 2001 renovation, the original classrooms and assembly spaces were separated into forty private apartment units.
Sun Analysis
The building has direct light on the west, south and east sides. The large windows on the front facade capture indirect light and direct light in the summer.
The Building

- Year Built: 1919
- Stories: 3
- Foundation: Basement
- Exterior: Brick
- Building Height: 54 ft
- Construction Type: 3A
- Heating: Forced Hot Air

Area of Project Scope

- First Floor “Cafeteria” Space and Second Level
- Gross Area: 18,004 sq ft
- Occupancy Type: Mixed Use
- ADA accessible

Building Analysis

- Cross section through cafeteria space
- Cross section through ramps
- Main entrance is ADA accessible
- Auditorium
- Cafeteria
- Ramp beyond to second level
- Staircases and rear entrances
- June 21
- March and Sept. 21
- Dec 21
- Area of Project Scope

Plan

1
2
3

[Plan Diagram]
Section through classrooms and central assembly space

- 8am east sunlight
- June 21
- March and Sept. 21
- Dec 21
- Area of Project Scope

- 5pm west sunlight
- Spin west sunlight

Classrooms
Ramps
Assembly Space
**THE USERS**

**Residents**  
of the Museum District community  
Number of residents 2,873  
Average age = 30

**Visitors**  
that come to exercise, attend an annual medical checkup, take a cooking class or eat a freshly prepared organic meal

**Clinicians & Medical Support Staff**  
the staff of the clinical team

**Cafe Chefs and Staff**  
the staff of the cafe

**Personal Trainers and Fitness Instructors**  
staff of the fitness center

**Maintenance Team**  
those that maintain the facilities

**Staff in Children’s Center**  
certified teachers

**Children**  
ages 2-10 are entertained while their parents visit the clinic, cafe or fitness center

---

**GRAPHIC PROGRAM**

The Kensington Center for Health has three main areas and an additional supportive area where the Children’s Center is located.

---

**Clinic**

- 6% Children’s Center
- 33% Fitness Center
- 38% Cafe

**Fitness Center**

- 44% Group exercise space
- 17% Group rooms
- 15% Free weight
- 5% Fitness storage

**Cafe**

- 25% Prep kitchen
- 22% Seating area
- 18% Community room
- 16% Teaching kitchen
- 3% Changing/locker rooms
- 2% Free weight
- 1% Fixed cardio

---

**THE PROGRAM**

1. **Reception**
   - Sub specialty rotation
   - Conference room
   - Exam rooms
   - Ancillary care rooms

2. **Clinical**
   - Exam rooms
   - Free weight
   - Group rooms
   - Marketing area
   - Inpatient rooms
   - Teaching kitchen
   - Prep kitchen
   - Community room
   - Seating area
   - Prep kitchen

3. **Fitness Storage**
   - Group exercise space
   - Group rooms
   - Free weight
   - Fixed cardio
   - Changing/locker rooms
   - Marketing area

---

*THE USERS*  

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of the Museum District community  
Number of residents 2,873  
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certified teachers

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ages 2-10 are entertained while their parents visit the clinic, cafe or fitness center
<table>
<thead>
<tr>
<th>Program Spaces</th>
<th>Type of Space</th>
<th>Qty</th>
<th>Unit</th>
<th>Total</th>
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<td>1,000</td>
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Square footage estimates were calculated based on occupancy codes and empirical analysis of local cafes, fitness centers and medical exam rooms.

This programming document will evolve as the space plan develops.

Subtotal Net Program....................14,260 sq ft
30% Circulation............................4,753 sq ft
Total Gross................................19,013 sq ft*
Total Occupant Load......................386

*minus Children’s Center of 1,000 square feet located on lower level.
Important adjacencies are considered to make space plan decisions. These adjacencies analyze how to use proximity to create emphasis, collaboration, consider privacy and security, all with the goal of creating community.

This matrix shows the importance of privacy and security in the clinical areas, and important adjacencies within each main programmed area. Easy access and transitions for staff in each designated work environment are essential considerations.
CASE STUDIES

The following pages are examples of architectural and medical precedents. The precedents explore what the Kensington Center for Health can learn from other projects.

What can community clinics learn from innovative and flexible workplaces?

What can this project learn from other medical buildings focused on engaging the community?
The Salk Institute of Biological Research
Louis Kahn, 1958
La Jolla, California

The Salk Institute of Biological Research is a research facility in La Jolla, California. Architect Louis Kahn used orientation and symmetry to create hierarchy and focus. He used simple gestures that highlight the Pacific Ocean and created community by surrounding the central plaza (left) with private offices and laboratory spaces.

The scientists need private offices to support their research, so Kahn designed their offices to orient towards a central plaza that mimics a European city plaza to encourage social interaction and collaboration. A seating pit near the end of the central water feature allows a place for impromptu meetings or a place to meet for a coffee or lunch. Long benches in the plaza invite the users to sit outdoors, and a cafe space on a lower level creates a more formal seating area for groups.
LESSONS FROM THE SALK:

The Salk Institute is a premier example of the use of a space plan that mediates private and public spaces. The private offices support the needs of the researchers while still maintaining visual site lines to engage with the public spaces. The open balconies and stairways create a place for researchers to meet as they are entering and exiting their offices. This precedent will guide the space planning process of the Kensington Center for Health to consider adjacencies and orientation of public and private spaces.
Areas of circulation create clusters of meeting spaces on the staircases and in the hallway (left). Open offices with glass partitions maintain acoustical privacy and visual transparency (below).

PRECEDENT

Google Headquarters “Googleplex”
Clive Wilkinson Architects, 2005
Mountain View, CA

The Google Headquarters at Googleplex Mountain View will demonstrate principles of building community through circulation, flexible seating arrangements and open areas that invite conversation and collaboration. The complex is built around the idea of a “main street” with building blocks that all radiate off the central circulation area.
GOOGLE WORK SETTINGS

The work settings below show thirteen typical layouts of spaces and their function. Clive Wilkinson designed these different types of areas inspired by areas on a university campus to accommodate different styles of working and the varying needs of the users. Each space was integrated into the space plan of the site according to public and private zones. Hot areas are more active and public, and cold areas are secluded and private.12

LESSONS FROM GOOGLEPLEX:

Googleplex successfully creates a place to learn, work and play. The complex is a community modeled around the idea of a university campus and a small town.12 The Kensington Center for Health can take cues from the Googleplex master plan and the layout of many different types of places to work, play, interact and rest. The Kensington Center for Health will use this case study to design a vibrant, open, inspiring and comfortable space to learn and collaborate.

Work Settings and Diagrams by Clive Wilkinson

42.1
Exam room with natural light. Ample clearance around exam table, privacy curtain to separate companion seating from the exam table when privacy is needed.

Private consultation areas off of main hallway circulation.

Teaching kitchen to instruct patients on healthy eating tips and cooking techniques.

PROGRAMMATIC CASE STUDY

Stephanie Tubb Jones Health Center at Cleveland Clinic
Moody Nolan, 2011
Cleveland, OH

Stephanie Tubb Jones Health Center at Cleveland Clinic (STJ) will serve as a programmatic case study of a health clinic designed entirely around treating chronic conditions. It incorporates a teaching kitchen and includes primary and specialty care. A navigation center helps patients coordinate services. This clinic is an example of going beyond traditional healthcare services and linking with community resources to help patients and their families get the healthcare, financial and social services they need.

Services at this clinic focus on chronic disease management including: treatment for diabetes, hypertension, kidney failure, mental health, specialized care for women and children, primary care, preventive care, health education and specialty care including cardiology, nephrology, ophthalmology and podiatry.

LESSON FROM STJ HEALTH CENTER:
The clinic has community education rooms and a kitchen designed to teach classes on healthy eating techniques and habits. The patient navigation center provides a physical space to localize all of the navigational services a patient may need, including wayfinding, navigating specialty visits, arranging transportation and questions about navigating insurance and finances.
The main lobby uses vibrant colors and natural light to welcome visitors.

Recreational outdoor spaces are a central feature of the campus.

Cafe and retail spaces welcome the community.

Focal Point Community Campus is a model of a project that aims to provide health to the community through a new type of healthcare campus. The project will include programming based on extensive community research. Spaces include retail stores, day care, and revenue-generating tenants to reinvest the funds into services such as continuing education and wellness classes, a center for creativity and a recreation center with pool and sports facilities (pictured left).

LESSONS FROM FOCAL POINT:
The campus will focus on the complete well-being of its community members and provide a place that community members are drawn to. The vice president of mission and community development emphasized that “providing for the health of the community is much broader than traditional healthcare”.

This project is an inspiration to create an inviting and innovative model integrating medical care, retail destinations and recreational programming scaled down to a smaller neighborhood level.
The atrium has open spaces for seating and a café.

Wood, natural light and greenery brighten the central atrium.

Akershus University Hospital is a welcoming and informal place designed with the needs of the patients and their relatives in mind.

Each department of the hospital has a different architectural expression to help create a varied visual experience and aid in wayfinding.\textsuperscript{15}

The main thoroughfare (pictured left) is a glass-covered atrium space that links the various buildings on the hospital campus. It uses wood as a dominating material. This glass-covered “main street” is structured as a series of open spaces of differing character, offering various functions such as kiosk, pharmacy, hairdresser, church and café.\textsuperscript{15}

LESSONS: This project uses natural materials and daylight harvesting that are two essential components to healing spaces.
The main programmatic goal of Kensington Center for Health is to create spaces for patients and clinicians to interact comfortably.

An analysis of exam room typical layouts from several existing clinics indicated factors to consider. The results of the analysis showed the importance of group conversation, ample space for patient education, sight-lines sensitivity and patient and family comfort.
The exam room pictured below is from Nemours Children’s Hospital Orlando, Florida, designed by Perkins + Will. This exam room uses floor material and a drop soffit as well as color to establish provider zone.

In this concierge care clinic layout, private waiting areas reduce perceived wait time and increase patient and family comfort by creating private areas with comfortable soft seating and warm ambient lighting. The provider sits side by side around a monitor with the patient and caregiver to review results or care plan.
Concept and schematic design of Kensington Center for Health evolved through a series of drawings, models and watercolors that are explained on the following pages.
Building geometry analysis provided organizational cues. Three dimensional models of the structure and parti revealed a strong axial character that influenced subsequent development.
CONCEPT: OPEN

The Kensington Center for Health is open to the community in order to create a welcoming and holistic healing space. Open space plan encourages interaction between programmed space.

The parti uses building geometry to explain the diagram of the concept of open. Open cannot exist without a counterpoint of closed. The parti diagram explains how the geometry of "open" will manifest in the design.

Parti diagram explains concept of "open".
Schematic block plans explore initial space plan organization.

The watercolor studies explore removing the lower level of the former auditorium space to create one large atrium.

The exercise demonstrates the need to organize and unite the building around one centralized communal space and respect the axial quality of the existing building.
Adjacencies, acoustical privacy and program relationships are analyzed through bubble diagrams. This study demonstrates that the clinic adjacencies and privacy concerns were driving forces. Due to square footage limitations, the staff office area will occupy the level above the clinic. Ample square footage for the children’s center is provided on the lower level of the building.
Exploration of double central stairs from atrium to cafe.

Sketch exploring central reception desk with cafe on mezzanine level above.

Perspective sketches help to visualize the space and the user experience. These sketches illustrate the central atrium and the long central hallway. Through a series of critiques and using these drawings as a tool, it was decided that the central atrium should be the main programmed fitness space and the cafe space should be supportive programming that wraps around the central atrium.
A floor plan and section sketch illustrates initial layouts ideas.

PERSPECTIVE SKETCHES

The consultation and examination room begin to take shape. Perspective sketches imagine how an ideal space plan could meet the needs of the patients and providers.
THE SPACE PLAN

Following the schematic and conceptual development, the space plan of The Kensington Center for Health is articulated.
A CENTRAL ORGANIZING FACTOR

Building geometry analysis provided organizational cues and revealed a strong axial character. Structural walls and a long central hallway indicated that the program be organized and united around one central communal space.

Removing the lower level of the former auditorium space created one large atrium. The atrium opened the building both in plan and in section. The fitness center programming fills the central atrium in a soaring “cathedral to wellness”.

Analysis of the cafe space indicated that a double height cafe that overlooks and supports the fitness center would help support the concept of OPEN.

The fitness center is anchored on three sides by a primary care clinic with ample space for patient education, a physical therapy room, a teaching kitchen, group clinic spaces and a cafe with fresh, healthy food.
Section illustrates rhythm of the four floors and ramps that flank the central atrium.
THE CATHEDRAL TO WELLNESS

The central atrium features a colored glass wall that extends from floor to ceiling. A mezzanine level with fixed exercise equipment and space for stretching and free weights is centrally located and elevated in the atrium. This central space is the core of Kensington Center for Health both physically and conceptually.
THE CAFE

The double height cafe is an echo of the central atrium that supports the concept of OPEN. The cafe is a welcoming place to eat a salad or have a juice or coffee. The colored glass wall visually connects the cafe to the hallway and back to the central atrium.
THE CLINIC

The concept of OPEN is expressed in the clinic floor plan by connecting patient and family consultation rooms with an exam room.

The waiting room below features a translucent glass wall that allows natural light to enter the space.
The connecting wall features a drop ceiling detail that visually connects the two rooms while addressing the need to feel comfortable and secure during a medical visit.

The section shows the rhythm of the drop ceiling and its relationship to the windows and the connecting door. The exam rooms are 10’ wide, 13’ tall and 12’ wide. The drop ceiling detail brings the ceiling down to human scale while maintaining natural light from the windows.
Provider Workspace

- Softshell Chair
  - Vitra
- Lightline Architectural Glass Wall
  - By KI
- Mohawk Breaking Form Carpet Tile

Community Spaces

- Capri Cork
  - In Gold
- Allermuir Stacking Counter Chair
- Bernhardt Remy Lounge Chair
- Studio Dunn Sorensia
- Custom Terrazzo Flooring
  - By NTMA
- Glass Pro Colored Glass
  - In French Blue

Clinic

- Corian Sandstone
- Bernhardt Story Table
- Plyboo in Chocolate
- Lamnam Porcelain Tile
  - In Argento
- Codaesee Bo B Side Chair

Furniture, Fixtures & Equipment

Clinic

- Allermuir Stacking Counter Chair
- Bernhardt Remy Lounge Chair

Provider Workspace
A postcard designed by the class advertised the show.

The thesis project culminated in a class exhibition at the VCU Depot Gallery. The class designed vinyl graphics to represent the theme of the show, “From There to Here”. The concept represents the physical distances all of the seven graduating students traveled to study at VCU and the concept of time and place. Each project exhibited is an adaptive reuse project that studies the relationship between original architecture and a new interior.

We installed vinyl graphics and applied them on the front window, entrance wall, and as name cards below our individual projects.
A 1/16 inch section model constructed from chipboard, cardboard and plexi illustrates the levels of the central atrium with the glass feature wall.

The presentation boards are mounted and displayed with the 1/16 inch scale building model for the exhibition.
Exploring the relationship between health, wellness and the built environment.

This clinic will be a new model of care by combining the clinic with staff offices and fixed exercise equipment. It is imperative to improve adherence rates for lifestyle changes.

Consideration of a holistic sense of well-being that focuses on healthcare crisis. Chronic disease is the leading cause of death and disability in the United States. The high prevalence of chronic disease is creating a national healthcare crisis. Chronic diseases cause much of the risk behaviors that are examples of heart disease and stroke.

This project aims to design a community wellness space that is a central organizing factor in appearance, supportive of social interactions, and nurture the cultivation of creating spaces that are attractive and comfortable and secure during a medical visit. Providing local clinics that are integrated into the community is essential to help the battle against the staggering growth rate of treatment of chronic conditions accounts for 75% of national health care expenditures. Average adherence rates for prescribed medications are about 75%.

The Kensington Center for Health will become a space that supports a healthy community. The primary care clinic is the community support, physical fitness and healthy diet. These spaces should be a part of every community. People who feel an emotional bond with a neighborhood, park, or other community. These spaces are important to create an environment to support positive change.

Focus on wellness, patient engagement, and community engagement.

Program Goals:

1. Engage the community.
2. Focus on wellness.
3. Patient support.
4. Wellness programs.
5. Community programs.
6. Education programs.
7. Service programs.
8. Research programs.
10. Economic programs.
11. Social programs.
12. Environmental programs.
13. Technical programs.
14. Continuous improvement programs.
15. Technology programs.
16. Marketing programs.
17. Management programs.
18. Legal programs.
19. Administrative programs.
20. Financial programs.

Kensington Center for Health

Community:

- 2,873 Total Number of Residents
- 20.4% Population Below Poverty
- 22% Family Households
- 30 Median Age
- $44,000 Median Income

PROGRAM GOALS:

- Engage the community.
- Focus on wellness.
- Patient support.
- Wellness programs.
- Community programs.
- Education programs.
- Service programs.
- Research programs.
- Policy programs.
- Economic programs.

Museum District Neighborhood:

- HVAC Forced Hot Air
- 54ft Building Height
- 1919 Year Built
- Zoo
- Natural Science Museum
- Art Museum
- Virginia Museum of Fine Arts
- Elementary School
- 1/16” = 1’ Scale

First Level Floor Plan

- 1. Exercise Room
- 2. Locker Room
- 3. Reception
- 4. Teaching Kitchen
- 5. Consult Room
- 6. Clinic Waiting Room
- 7. Staff Offices
- 8. Fixed Exercise Equipment
- 1/16” = 1’-0” Scale

Second Level Floor Plan

- 1. Exercise Room
- 2. Locker Room
- 3. Reception
- 4. Teaching Kitchen
- 5. Consult Room
- 6. Clinic Waiting Room
- 7. Staff Offices
- 8. Fixed Exercise Equipment
- 1/16” = 1’-0” Scale

Legend:

- 0’ 16’
- 1/16” = 1’ Scale

Section illustrates rhythm of the four floors and ramps that flank the central atrium.
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36.4 www.cfmoller.com/p/Akershus-University-Hospital-Nye-Ahus-i269.html
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