IPRO340
Design of a Green Community Health Center of the Future

Final Presentation Fall 2008
Introduction

• “Providing affordable, quality health care among Chicagoland’s medically underserved.”

• Access Community Health Network provides medical services for Chicago’s uninsured and underinsured population

• Over 50 ACCESS facilities constitute the nation’s largest health network

¹Source: ACCESS Mission Statement
Introduction
Design Principles

• Implementation of Technology
• Sustainability
• Healing Environment
• LEAN Principles
• Open Communication
Design Principles

• Implementation of Technology
• Sustainability
• Healing Environment
• LEAN Principles
• Open Communication
Technology

- HEMOCUE B-Hemoglobin Photometer

Hemoglobin A1C test is used to diagnose patients with diabetes

The photometer produces accurate results in less than one minute

Pre-calibrated, portable analyzer that requires minimal maintenance

Price: $300.00
Technology

- Originatic: The Universal Computer
  Price: $1,799
Design Principles

• Implementation of Technology

• **Sustainability**
  - eco-friendly materials
  - reducing energy use

• Healing Environment

• LEAN Principles

• Open Communication
Sustainability

• Tubular Skylights
  Material cost: $30-800
Sustainability

- Hyperseal roof reflectivity paint
  Material cost: $30 per gallon
Design Principles

• Implementation of Technology
• Sustainability
• Healing Environment
  - aesthetics
  - atmosphere
• LEAN Principles
• Open Communication
Healing Environment

- Spa Therapy Atmosphere
- Sherwin Williams Harmony Paint
  - Contains no Volatile Organic Compounds
  - Low Fumes
  - Addresses Sustainability
  - $24.95/gallon

1AIA Webinar: Weill Greenberg Center, October 2008
Healing Environment

- Anti-microbial seating fabric
- PVC-free
- Made from recycled fiber
- Pricing based on project size
Healing Environment

- Nora rubber flooring
  - Recyclable and renewable
  - Durable
  - Hygenic
  - Aesthetically pleasing

Price: $2.82 per sq ft.
Design Principles

• Implementation of Technology
• Sustainability
• Healing Environment
• LEAN Principles
  - Identification and steady elimination of waste
  - Improvement of quality
  - Improvement of production time
  - Cost reduction
• Open Communication
LEAN Principles

Source: ACCESS Time Study at Hawthorne Facility
Design Principles

• Implementation of Technology
• Sustainability
• Healing Environment
• LEAN Principles
• Open Communication
Healing Environment

Current Floor Plan

- Exam Rooms
- Public
- Staff
- Prep & Diagnostic
- Support
Healing Environment

Revised Floor Plan

- Exam Rooms
- Public
- Staff
- Prep & Diagnostic
- Support
Healing Environment
LEAN Principles

Current Floor Plan

- Exam Rooms
- Public
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LEAN Principles
Open Communication

Current Floor Plan

- Exam Rooms
- Public
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Open Communication
Open Communication

Revised Floor Plan

Exam Rooms  Public  Staff  Prep & Diagnostic  Support
<table>
<thead>
<tr>
<th>Category</th>
<th>Brandon</th>
<th>Booker</th>
<th>Hawthorne</th>
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Challenges Encountered

- Understanding and defining the problem
- Tardiness amongst group members
- Difficulties scheduling site visits
- Lack of transportation available
- Coordinating formats used
Team Members

- Ernest Bellamy
  5th Year Arch.

- Loren Bo
  5th Year Arch.

- Lawrence Chung
  3rd Year BME.

- Danielle Di Pego
  5th year Arch.

- Pankti Gala
  3rd Year BME.

- Crystal Glover
  4th Year Arch.

- Jongpil Park
  4th Year Arch.

- Phaedra Howe
  3rd Year BME.

- Goldey Khanna
  2nd Year ChemE.

- Sarah Wahlstrom Helgren
  4th Year BME.

- Mary Yu
  3rd Year BME.

- Sungano Ziswa
  5th Year Arch.

- Matt Miller
  Advisor

- David Winkin
  Advisor