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." <sup>1</sup>
- 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



### Introduction



Service Population by Payer Source



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





### Hamburger

Hotdog

### Team Breakdown



- 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

- 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







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

- Spa Therapy Atmosphere<sup>1</sup>
- Sherwin Williams Harmony Paint
  - Contains no Volatile Organic Compounds
  - Low Fumes
  - Addresses Sustainability
  - \$24.95/gallon

<sup>1</sup>AIA Webinar: Weill Greenberg Center, October 2008

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







Nora rubber flooring

 Recyclable and renewable
 Durable
 Hygenic
 Aesthetically pleasing
 Price: \$2.82 per sq ft.



- 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

### **Minutes During Stages**



Source: ACCESS Time Study at Hawthorne Facility

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

Current Floor Plan



B O O K E R

**Revised Floor Plan** 



B O O K E R

B O O K E R





#### **Current Floor Plan**

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#### **Revised Floor Plan**

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### **Open Communication**

**Current Floor Plan** 



B R A N D N

### **Open Communication**





### **Open Communication**

**Revised Floor Plan** 



### Finance

	Brandon	Booker	Hawthorne
Demolition	\$8,679	\$3,270	\$7,460
Construction	\$121,691	\$102,050	\$148,060
Misc	\$76,136	\$83,690	\$90,620
Furniture	\$15,657		\$13,860
Total	\$222,163	\$189,010	\$260,200

## 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