

# Illinois Institute of Technology

## IPRO 340

Improving Information Systems at  
ACCESS Health Network



# What is ACCESS all about?

---

## **MISSION**

- ▣ Provide high quality, cost effective, safe, and comprehensive health care in underserved Chicagoland communities

## **VISION**

- ▣ Participate in community life to promote health, well-being and economic development

## **VALUES**

- ▣ Access to care and strives to create opportunities for new and returning patients to obtain services

# Quick Facts about ACCESS

---

- ❑ Nation's largest network of Federally Qualified Health Centers
- ❑ Serves approximately 160,000 patients (450,000 annual visits)
- ❑ About 1 in 4 of ACCESS patients are uninsured
- ❑ About 43% of ACCESS patients are Medicaid beneficiaries
- ❑ Ranks in the top 10% for quality among community health centers in the nation

# IPRO 340 and ACCESS

---

- Goal of Partnership

- Improve information systems in accordance with ACCESS' mission

- Current Objective

- Help ACCESS prepare to adopt new information technology

# Current Project Timeline

---

| Fall 2005                               | Spring 2006                      | Summer 2006 |
|---|----------------------------------|-------------|
| Researched Technology Adoption Barriers |                                  |             |
| Employee Computer Skill Assessment      |                                  |             |
|   | Employee Computer Skill Training |             |
|   | EMR Vendor Assessment            |             |

# Current Project Objectives

---

- Prepare ACCESS employees to adopt new information technology
  - Assess ACCESS' Employee Computer Skills
  - Develop and Test Computer Skills Training Protocol to be rolled out over the summer
- Evaluate EMR Vendors

# Step 1: Assessment

---

## ■ Methodology

- Designed skills tests
- Administered tests at 12 health centers
- Assessed 110 ACCESS employees via internet or paper
- Scored tests and gathered data
- Analyzed data

# Step 1: Assessment

---

■ 12 health centers, 102 individuals assessed

- Ashland (6)
- Auburn-Gresham (4)
- Booker (10)
- Cabrini (6)
- Grand Blvd. (1)
- Humboldt Park (10)
- Pilsen (11)
- Plaza (10)
- San Rafael (5)
- La Villita (29)
- South State (9)
- Taylor (1)



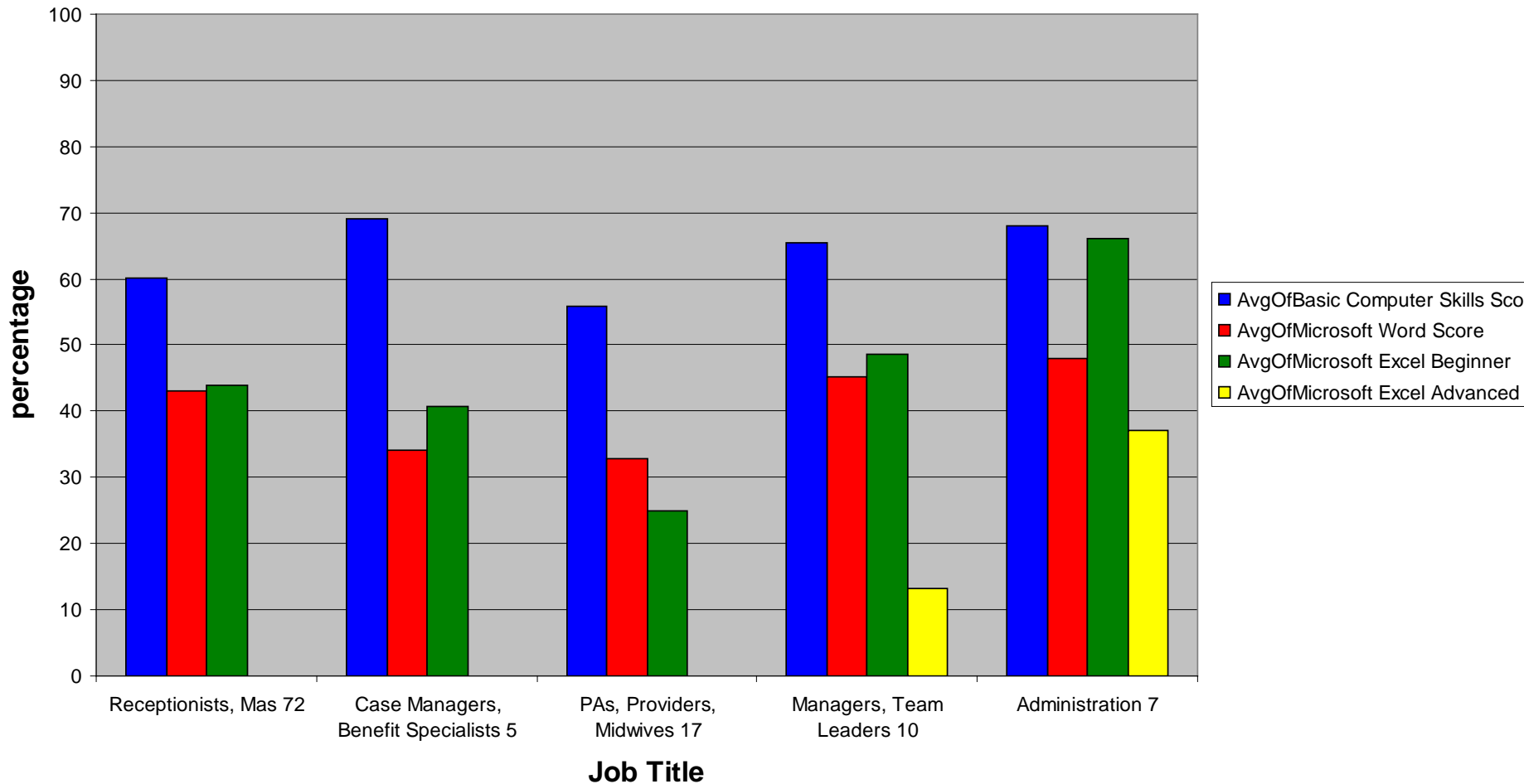
# Step 1: Assessment

---

- Obstacles encountered during Rollout
  - Providers refused to take the tests
  - Testing environment varied by health center
  - Employees were very busy
  - Sometimes not enough computers available for assessment → paper tests
  - Initial tests needed modifications

# Results by Job Description

## Overall Average Scores of Employees



# Step 1: Assessment

---

## □ Analysis of Results

- Extremely broad range in scores from all positions for all tests
- Providers scored lower than all job categories for all tests
- 18% scored  $\geq 80\%$  on the Basic Computer Knowledge Test
- 7% scored  $\geq 70\%$  on the Microsoft Word Test
- 7% scored  $\geq 80\%$  on the Microsoft Excel Test
- 0% scored  $\geq 50\%$  on the Microsoft Excel Advanced Test

# Step 1: Assessment

---

## ▣ Conclusions

- Effective training needed
- Investing in more computers may make training process easier
- Implement a shift in attitude to increase compliance to training
- Get providers involved in training
- Training program should be flexible to accommodate busy schedules

# Step 2: Training

---

## Methodology

- ❑ Selected Training Software Vendor
  - Customguide Software Chosen for Training Pilot
- ❑ Designed Computer Training Model
  - Basic Computer Knowledge, Word, and Excel skills
- ❑ Piloted 3 Training Programs at 6 Health Centers
  - Pilots varied in amount of support
- ❑ Analyzed Results of Knowledge Gained from Training

# Step 2: Training

---

## Training Pilots

|         | Survey | On-site Support | Walk through with Employees |
|---------|--------|-----------------|-----------------------------|
| Pilot 1 | ✓      |                 |                             |
| Pilot 2 | ✓      | ✓               |                             |
| Pilot 3 | ✓      | ✓               | ✓                           |

# Step 2: Training

---

## ▣ Problems Encountered

- Providers refused to participate
- Computer access was limited
- Technical difficulties encountered by the users
- Health Centers were unable to keep up with training schedule

## Step 2: Training

---

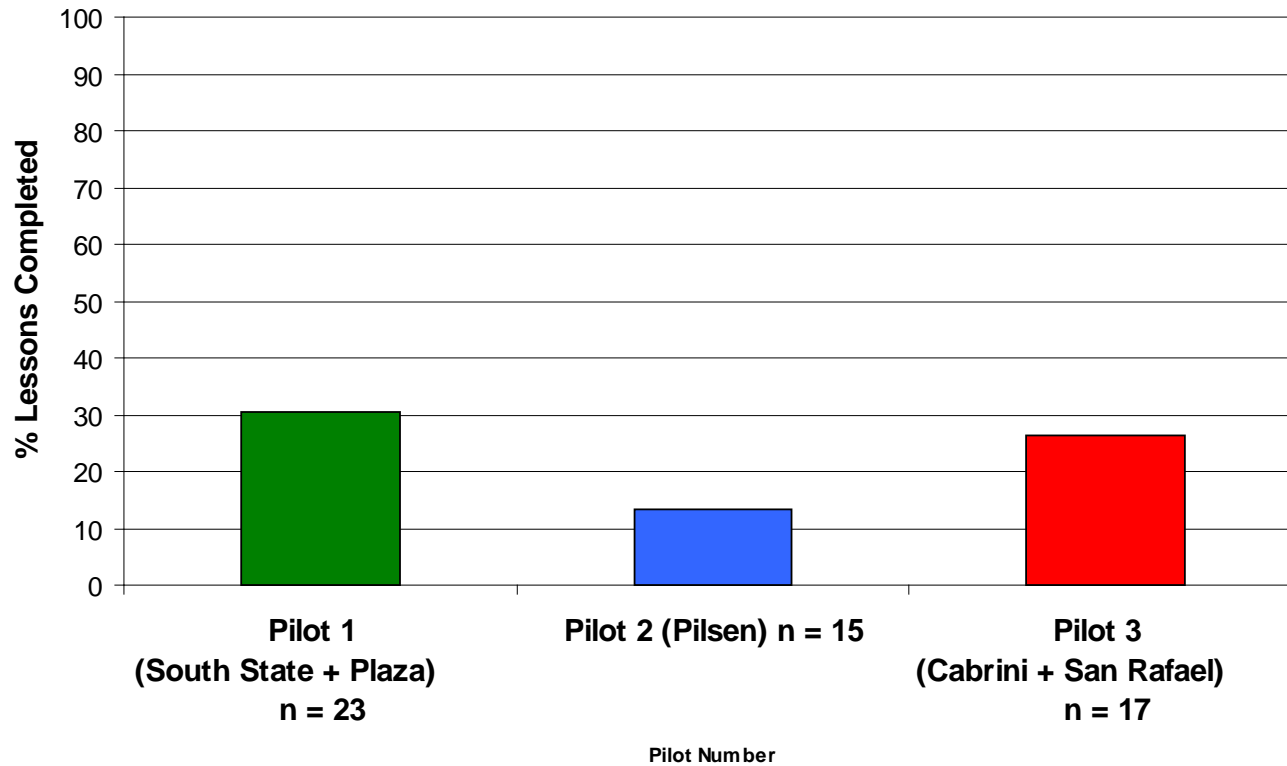
What makes a training program successful?

- Enthusiastic and dedicated leadership
- Continuous use of the knowledge obtained
- Positive reinforcement or consequences for negative behavior



# Training Results

**% Completed by Pilots**



# Step 2: Training

---

- ▣ Conclusions from training

# EMR Vendor Evaluation


---

- Purpose of Project

- Help ACCESS narrow down the scope of the EMR vendors available

# EMR Vendor Evaluation Update

---

- ❑ ChartWare
  - ❑ Logician
  - ❑ NextGen
  - ❑ PEARL
  - ❑ EpicCare
  - ❑ Physician Practice Solution
  - ❑ PowerMed EMR
  - ❑ PracticePartnerPatient Records
  - ❑ Health Probe Patient Information Manager
  - ❑ QD clinical
  - ❑ SOAPware
  - ❑ Clinical Works Module
  - ❑ Physician Practice Solution (ASP)
  - ❑ Welford Chart Notes
  - ❑ NextGen(ASP)
  - ❑ TopsChart (ASP)
  - ❑ Electronic Healthcare Systems, Inc, (EHS)
  - ❑ Business Computer Applications (BCA)
  - ❑ Meditech
- 
- ❑ NextGen
  - ❑ Electronic Healthcare Systems, Inc, (EHS)
  - ❑ Business Computer Applications (BCA)
  - ❑ Meditech
  - ❑ PowerMed
  - ❑ Health Probe Patient Information Manager
  - ❑ QD clinical
  - ❑ SOAPware
  - ❑ Welford Chart Notes
  - ❑ Logician

# Team Members

---

- Jacquelyn Lange (Team Leader)
  
- Assessment Team
  - Reshma Marri (Team leader)
  - Sean Durkin
  - Jack Calzaretta
  - Evans Ogbebor
  
- Website
  - Jessica Li
  
- Training team
  - Annie Riaz (Team Leader)
  - Maryum Riaz
  - Kwandong Kim
  - Deborah Hsu
  
- EMR Evaluation
  - Vadim Sinitsyn (Team Leader)
  - Malwina Jaracz
  - Josh Sammons
  - Dheera Rajpal
  - Jessica Li

# Acknowledgements

---

- Who do we acknowledge?
  - Steven Glass, CIO ACCESS Health Network
  - Dr. Annette Towler, Training Education
  - Professor Ferguson, Team Coach