Improving Information Systems in the ACCESS Community Health Network



## **IPRO 340 Objective**

 Improve information systems that support the perinatal treatment program at ACCESS sites



- Existing Information Systems
  - Manual logs used to record all information
  - Although effective, not as efficient as automated logs





















# What ACCESS is 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



- Nation's largest network of Federally Qualified Health Centers that provides health care services to the uninsured and underserved
- 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
- 33 of the 40 ACCESS health centers in Chicago have implemented a perinatal treatment program
- Ranks in the top 10% for quality among community health centers in the nation

### **ACCESS - Mt. Sinai Relationship**

- Mt. Sinai Hospital is ACCESS's primary care partner
- Depend on Mt. Sinai for technical support in terms of the MEDITECH system
- ACCESS perinatal patients are encouraged to deliver at Mt. Sinai hospital

## **Plan of Action**

- Formed three teams to find potential information system problems:
  - Perinatal Care team
    - Investigate the flow of the perinatal care treatment program
  - Perinatal Information Systems team
    - Investigate the information flow within the perinatal care treatment program
  - Mount Sinai Visit Program team
    - Investigate the existing tour program to Mt. Sinai

# PERINATAL CARE FLOWCHART

### Potential Opportunities for Improvement PERINATAL TREATMENT PROGRAM

Busy Front Desk

- Solution: Improve Phone system
- Solve phone traffic overloads
- Patients do not return for follow-ups
  - Solution: Automate Scheduling
  - Create method to alert employees of lost patients
- Many patients, one OB
  - Solution: Save OB time by automating Hollister Form





# INFORMATION SYSTEMS FLOWCHART

### Potential Opportunities for Improvement PERINATAL CARE INFORMATION SYSTEMS

Create monthly reports from manual logs

- Solutions: Automate manual logs
- Will make information readily accessible



- Scheduling process differs at Mt. Sinai & ACCESS
   Sites
  - Solutions: Make user-friendly automated scheduling system
- Information in Hollister is redundant
  - Automate Hollister Form and pre-populate with information

# Deciding on Solutions to Pursue

 Shared our findings with sponsor
 Final Sponsor Decisions:

 Automate the manual logs
 Automate the Hollister Form Maternal/Newborn Record System

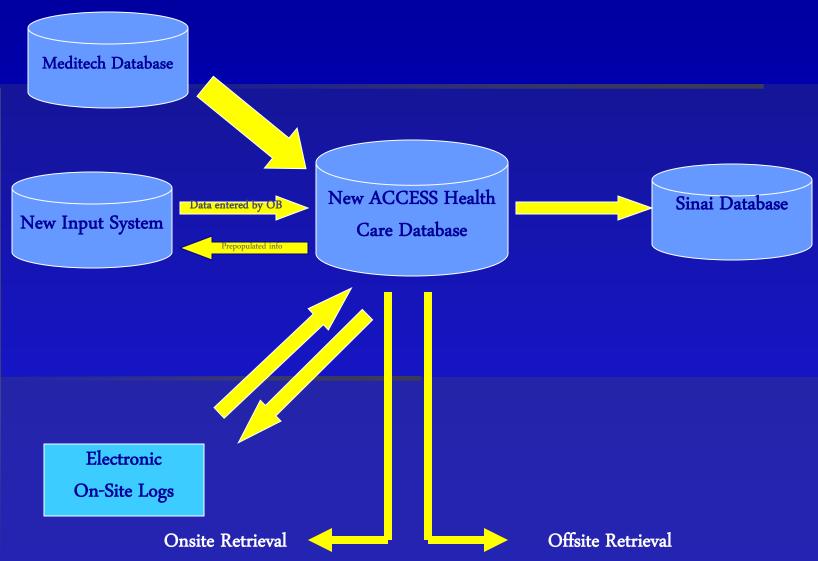
## Regrouping of IPRO 340 into new teams

- Automated Logs team goal:
  - Automate the Perinatal Care Log
  - Automate the Integrated Perinatal Log (UCG)
  - Automate the Lab Log

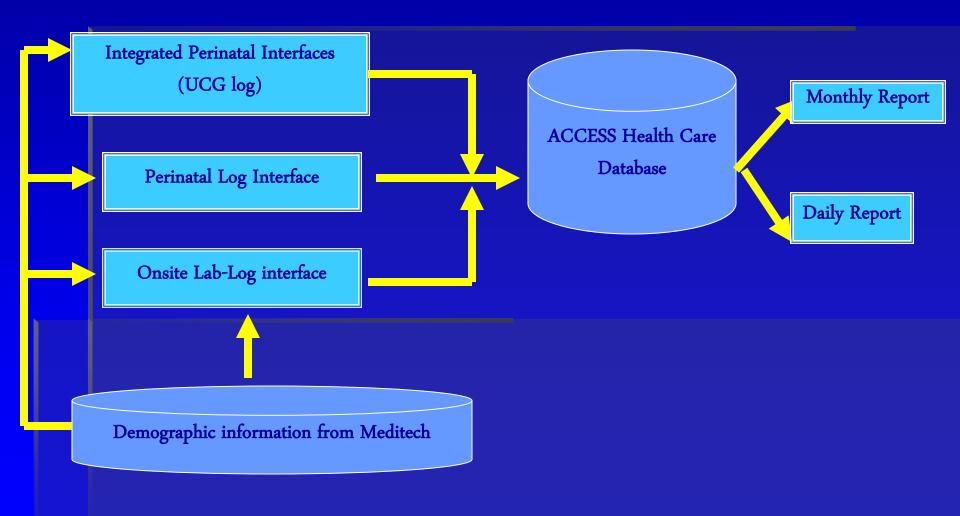
### Hollister Form team goal: Automate the Hollister Form



## **Automated Hollister Flow Chart**



## Automated Logs Flow Chart



### What the future holds

- Complete design, code, and implement the Hollister Form and Automated Log information system at Grand Blvd Health Center
- Once successful at Grand Blvd, expand systems to multiple health centers.
- Evaluate and improve the information systems for a new treatment program

## **Team Members**

#### AUTOMATED LOGS TEAM

#### Suman Bir

- Chemical Engineering
- Junior
- Joanne Mathews
  - Molecular Biochemistry and Biophysics Junior
- Pooja Oza
  - Molecular Biochemistry and Biophysics
  - Junior
- Jason Resch
  - Computer Science
  - Senior

#### AUTOMATED HOLLISTER TEAM

- Jesse Cohoon
  - Professional and Technical Communication
  - 5<sup>th</sup> Year Senior
- Armando Limon
  - Business
  - Junior
- Dhaval Thakkar
  - Computer Science
  - Senior
- Karla Wilhoit
  - Mechanical Engineering
  - 5<sup>th</sup> Year Senior
- Parinda Shah (Team Leader)

Molecular Biochemistry and Biophysics Freshman

#### Acknowledgements

#### Steven Glass

- CIO at ACCESS Community Health Network
- Angela Ellison
  - Perinatal Care Director at ACCESS
- Patricia (PJ) Jones
  - Manager at Grand Blvd Family Health Center
- Ryan Hochstetler
  - IPRO Fellow
- Dr. Ferguson
  - IPRO 340 faculty advisor

#### **IPRO 340**

 Improve information systems that support the perinatal treatment program at ACCESS sites

Questions???