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
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

- Meditech Database
- New Input System
- New ACCESS Health Care Database
- Sinai Database

Data entered by OB
Propopulated info

Electronic On-Site Logs

Onsite Retrieval
Offsite Retrieval
Integrated Perinatal Interfaces (UCG log)
Perinatal Log Interface
Onsite Lab-Log interface
ACCESS Health Care Database
Monthly Report
Daily Report
Demographic information from Meditech
- 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

- Parinda Shah (Team Leader)
  - Molecular Biochemistry and Biophysics
  - Freshman

### AUTOMATED HOLLISTER TEAM
- **Jesse Cohoon**
  - Professional and Technical Communication
  - 5th Year Senior
- **Armando Limon**
  - Business
  - Junior
- **Dhaval Thakkar**
  - Computer Science
  - Senior
- **Karla Wilhoit**
  - Mechanical Engineering
  - 5th Year Senior
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

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- Questions???