

**IPRO 340: Improving health care information systems for a community health network**

Advisor: Dan Ferguson  
Team Leader: Vitaliy Kunin  
Sponsor: Access Health Network  
Steven Glass, CIO

Team Members  
Megan Anderson  
Katie Goldsmith  
Sean Durkin  
Sarah Thilges  
Vitaliy Kunin  
Khoa Le

Recorder of Minutes: Katie Goldsmith

## **Project Introduction:**

I PRO 340 is responsible for assessing the referral process and assessing the perceptions and feelings of employees involved in the referral process at Access Health Clinics. Access is a network of community health care centers that serve the poor and underserved people in the Chicago area. The mission of Access is to provide high quality, cost effective, safe, comprehensive, primary and preventive health care in underserved Chicagoland communities. Currently the referral processes are different at many of the health care centers and many referrals are being sent out of network, to non-Access or Mt. Sinai clinics. The referral process begins when a Doctor needs to attain the expertise of another Doctor in order to effectively treat a patient's illness. The detailed steps that occur after the referral is ordered is what our team, and Access, is interested in finding out. Access is particularly interested in having our team discover whom the Doctors are referring their patients to. Whenever a referral is ordered that is out of the Access network, either Mt. Sinai or any other clinic not affiliated with Access, Access loses revenue. Along with a loss of revenue, Access has a desire to provide a continuum of care to their patients. This involves making sure that patients are receiving the same high quality of care that they would receive at an Access clinic when they are referred to a non-Access health center. Other aspects in the continuum of care involve being efficient in getting patients appointments quickly, making sure patients attend their referral appointments, and evaluating how good the quality of care the patients receive is.

## **Revised Objectives:**

Our team's objectives are still to assess the referral process and assess the perceptions and feelings of employees involved in the referral process. We will also determine if any changes need to be made to the referral process and see what can be done to make the referral process easier and less stressful for the employees involved. Our timeline has been adjusted, as we will need more time to complete at least 12 interviews. Throughout the semester, each team member will be responsible for keeping the rest of the team up to date on their progress through weekly status reports and presentations.

## **Results to Date:**

Our team has been working diligently throughout the semester to reach their objectives and ultimately the final goal. We have completed orientation in which we defined our problem and decided on roles within the team. We have also had 3 team members, Katie, Vitaliy, and Khoa, complete project management training. All 6 members of our team have undergone interview training, which was led by Sarah and Professor Ferguson. So far, we have completed 6 site visits, with two team members attending each visit. With each site visit we have a completed set of interview notes, a thought/perception questionnaire, and a flowchart detailing the clinic's referral process. Khoa has begun his analysis by creating an Excel spreadsheet comparing the referral processes across all the clinics we have interviewed thus far. Through this Excel chart our team has been able to start compiling a list of similarities and differences between the clinics.

Up to date, we have discovered similarities, differences and common problems between clinics. The key similarities we have discovered include: the MA completing the referral form, the ACCESS standard form being used, the MA filing the completed referral form, the PCP almost always following up with the patient after the consult is received, all of the health centers use a referral log book, the 3-step standard for contacting the patient for a referral appointment follow-up is used. The key differences we have discovered include: Austin refers >80% in network, Genesis refers <40% in network, Genesis uses a computer program for HMO referrals, central scheduling or the MA or the patient will make the referral appointment, how the health centers check for insurance is done differently, some health centers make appointments before receiving HMO approval, some health centers (Genesis, Melrose Park) do not refer to Mount Sinai, some health centers have full time referral staff, checking for consults is done differently across health centers, the length of time waiting for approval varies by health center, IEI had shuttle buses to Mount Sinai. Some common problems involving time, error, cost, lost revenue, quality of care, and continuum of care are: the length of time it can take to get approval for HMO (Melrose Park takes up to a week, Austin takes 2-3 days), incomplete referral forms being sent to Managed care and then being sent back to the health center for completion, being short staffed (referrals are delayed), and the patient not attending their referral appointment.

With these preliminary findings we have the potential for recommending some innovative ideas to prevent revenue loss and provide a quality and continuum of care. Some of our current ideas include providing each clinic with a list of all the Access clinics and what specialties they possess, and using a computerized system to obtain HMO referrals. Current outputs produced through the execution of the assigned tasks include our thorough documentation of each clinic's referral process. Khoa's comparative analysis is also a current output produced to date.

Our current results, such as the comparative analysis, will help lead to the production of an ideal standardized system for referrals. From the analysis, our team will be able to recommend changes that will help Access address its loss of revenue and problems involving the continuum of care and the quality of care. Thus far, many of our results will prove to be of great interest to our sponsor. For example, Access will be very interested to see our list of similarities and differences so that they can see that there is currently no standardized process for the referral system. They will also be interested in hearing some of the innovative ideas that certain clinics are using. These results will help Access with their problems of quality and continuum of care, and may also help address their issues with loss of revenue.

The current results will be incorporated into our proposed solution by using the innovative ideas that are in use by some of the clinics. We will also include the feelings of the employees involved in the referral process to propose changes, such as possibly hiring full time staff to work on referrals.

### **Revised Task/Event Schedule**

Some dates such as, the last interview, analysis completion, exhibit/poster, final oral presentation and final report have been moved back. We had to move the dates back due to some missed interviews and scheduling conflicts, which in turn pushes everything else back since we need the information from the interviews before we proceed with the analysis and completion of the project. Milestones are highlighted in yellow.

<b>Project Deliverable and Milestones</b>	<b>Due Date</b>
Project Plan	25-Sep
1st Interview	29-Sep
Mid-Term Progress Report	23-Oct
Last interview	17-Nov
Analysis completion	28-Nov
Exhibit/Poster	30-Nov
Project Abstract	22-Nov
Web site (optional)	27-Nov
Final Oral Presentation	30-Nov
Final Report	1-Dec
Team Information	30-Nov
Comprehensive Deliverables CD	1-Dec

<b>Tasks</b>	<b>Date</b>	<b>No. of team member/Hours</b>
Orientation (1) defining the problem. (2) deciding on roles	28-Aug	5 member / 1 week 5 members / 1 week
Training: (1) project management (2) interview training	4-Sep	3 members / 2 days 5 members / 1 week
Interviews: Types: referral, psychological  (1) note taking (2) conducting interviews (3) text documentation (4) charts and diagrams	29-Sep	2 or 3 members per interview  1 person / 8 weeks 1 person / 8 weeks 1 person / 8 weeks 1 person / 8 weeks

Analysis: (1) Make comparative matrices (2) Conduct analysis session (3) Design ideal referral process (4) Design data capture/info tracking referral process	7- Nov	2 members / 3 days 2 members / 2 days 2 members / 3 days 2 members / 2 days
---	-----------	--

### **Updated Task Assignments and Designation of Roles:**

Our team's task assignments and designation of roles have not changed since the project plan was submitted, with the exception of Megan now being in charge of a documentation binder. Due to the small size of our groups, we do not have different members for the sub groups. All team members participate in all tasks. However, we have 1 person in charge of managing each task. No changes have been made due to our team structure working very efficiently thus far.

<b>Name</b>	<b>Educational background major</b>
Megan Anderson	Psychology
Sean Durkin	Information Technology
Katherine Goldsmith	Psychology
Vitaliy Kunin	Electrical Engineering
Khoa Le	Computer Engineering
Sarah Thilges	Psychology

Team leader	Vitaliy Kunin
Sub teams	Sub Team leaders
Interviews	Sarah, Megan, Katie
Analysis	Khoa
Documentation	Sean

<b>Analysis sub team</b>	<b>Roles</b>
Megan Anderson	Conduct analysis session
Sean Durkin	Design ideal referral process
Katherine Goldsmith	Design ideal referral process
Vitaliy Kunin	Design data capture/info tracking referral process
Khoa Le	Make comparative matrices, Conduct analysis session

<b>Documentation sub team</b>	<b>Roles</b>
Megan Anderson	text documentation, and documentation binder
Sean Durkin	graphical, text documentations
Katherine Goldsmith	text documentation
Vitaliy Kunin	graphical documentation
Khoa Le	text documentation

<b>Interview sub teams</b>	<b>Role</b>
Team 1	
Megan Anderson	interviewer
Sean Durkin	note taker
Katherine Goldsmith	interviewer
Team 2	
Vitaliy Kunin	note taker
Khoa Le	note taker
Sarah Thilges	interviewer
Team 3	
Vitaliy Kunin	note taker
Megan Anderson	interviewer
Katherine Goldsmith	note taker
Team 4	
Sean Durkin	note taker
Khoa Le	note taker
Sarah Thilges	interviewer
Team 5	
Katherine Goldsmith	interviewer
Vitaliy Kunin	note taker
Khoa Le	note taker
Team 6	

Sean Durkin	note taker
Megan Anderson	interviewer
Vitaliy Kunin	note taker

## **Designation of Roles**

### Meeting Roles

Minute taker: Katherine Goldsmith

Agenda Maker: Vitaliy Kunin

### Status Roles

Weekly Timesheet Collector/Summarizer: Megan Anderson

Master Schedule Maker: Sean Durkin

Interview Trainer: Sarah Thilges

## **Barriers and Obstacles:**

Our team's problems have involved communication with health centers and the limited availability of our team members. We have had problems with health centers not being prepared for our visits, and the people we were supposed to interview were on vacation or took the day off. We have dealt with this problem by re-scheduling the missed visits, calling a day in advance to remind the clinic of our visit, and by re-adjusting our task schedule to accommodate for the interviews going later than planned. Availability has been a problem because we have a small team with limited availability and have had to work within the clinic's availability. We have resolved this problem by only scheduling visits on Monday, Wednesday, and Friday to accommodate our schedule and the clinic's schedule. We will continue to deal with the barrier of communication, should a problem arise again, in the same manner that we previously concluded to be effective.

## **Conclusion:**

Our IPRO 340 team hopes to complete referral assessments at 10-12 of the ACCESS health centers. From the data gathered at these health centers we hope to complete a cross analysis that will identify the best ways to conduct the referral process and highlight any problems that happen in the referral process. From the cross analysis we will create a standard form and procedure that ACCESS can use in all of their clinics.