

CROSSING THE COMMUNICATION DIVIDE

Technology Unites Healthcare Systems in a Refugee Resettlement Area

There is a lack of skilled interpreters to meet the healthcare needs of refugees and other people with limited English proficiency in refugee resettlement areas. This problem has drawn the attention of the national media, and *Newsweek* (March 19, 2001) selected Grand Rapids as its example, ([Newsweek Article, Appendix A](#)). John Engler, Governor of Michigan, and numerous State Representatives have commented on the severity of the problem ([Supporting Letters, Appendix B](#)).

The lack of consistently available effective translators has resulted in significant legal, ethical, and financial difficulties. U.S. law secures the rights of every person to effectively communicate with their healthcare provider. If family, friends, or children are used to translate, it is a breach of confidentiality and threatens the intent of the law.

Crossing The Communication Divide will use technology to solve the communications problem facing refugees and their healthcare providers. Healthcare systems in Grand Rapids report a dramatic increase in cost for translation services. Simultaneously, there has been a decrease in the availability of competent trained interpreters ([Refugee Arrival Data, Appendix C](#)). There is no reimbursement to healthcare providers for translation services. Communication barriers are draining healthcare resources.

Refugees admitted to the United States by U.S. Immigration are assigned to refugee resettlement areas throughout the country. In Michigan, the resettlement zones are Grand Rapids, Lansing and Detroit. Catholic Human Development Outreach (CHDO), an agency that assists refugees, reports that over 900 refugees will arrive in the Grand Rapids area this year alone. CHDO data indicates that the immigration pattern over the last three years has brought a variety of new languages to our area. Refugees resettled during that time arrived from Bosnia (1,599 refugees), Vietnam (107 refugees), Africa (109 refugees), and Others (129 refugees). These numbers do not reflect other populations with limited English proficiency (LEP) who require translation, such as illegal aliens, non-refugee immigrants, migrant workers, hearing impaired and the learning disabled.

Project Overview:

- 1) We will establish an Interpreter Bank with three video-conferencing stations one for each language covered by the initial project.
- 2) We will expand a network that includes partner satellite sites, linking patients, providers, and interpreters, via video conferencing technology. Our network will be expanded stepwise over a three-year period.
- 3) We will recruit, hire and train interpreters to address the three largest language needs in Grand Rapids at the present time: Serbo-Croatian, Vietnamese, and Spanish.
- 4) We have contracted with an independent evaluator, The Office of Medical Education, Research and Development at Michigan State's University's College of Human Medicine (OMERAD) to monitor and evaluate project outcomes. MSU's College of Human Medicine is not affiliated with Michigan State's College of Osteopathic Medicine, which is a project participant.

What Does the Model Look Like?

Crossing The Communication Divide will be a three-year project focused on the city of Grand Rapids. The intent is to create a replicable model for improving healthcare in refugee resettlement areas that may be shared statewide and countrywide ([Model Design, Appendix D](#)).

Year One:

Metropolitan Hospital (an acute care teaching hospital) will initiate the project. A centralized interpreter bank will be established and located within the Metro network system. Translators will be recruited, employed, and trained to staff the Interpreter Bank. Recruitment of candidates will extend to the refugee population as well as the community. Successful candidates will complete a six-week interpreter training session that will include interpretation practices specific to a medical setting ([Interpreter Training Curriculum, Appendix E](#)).

In each of the refugee populations included for initial study, there are well-educated individuals who are currently being placed in factory jobs to meet their requirement for economic self-sufficiency. For example, there are Bosnian refugees who were nurses in their country; they have excellent language skills but cannot work as nurses until they complete state licensing requirements. They are presently working in factories.

A Metropolitan Hospital survey found that outpatient surgery and lab are the areas of primary need for translation services. A video conferencing unit will be placed and maintained in each of these areas of the hospital. Access to interpreters will be made by referral. The Translation Coordinator at Metropolitan Hospital indicates the highest access time for interpreters is 6AM to 6PM, Monday through Friday.

A team from Metropolitan Hospital will be in place to assist in implementing project plan and serve as an organizational model ([Team Model, Appendix F](#)).

Breton Health Center is the direct refugee health referral from Catholic Human Development Outreach. A high percentage of patients are non-English speaking. This ambulatory care site primarily serves Medicaid and low-income patients. Video conferencing units will be placed in exam rooms.

The Interpreter Bank will be available full-time Monday through Friday during designated hours. Initially, the Interpreter Bank will be staffed by one translator per language and expand to two translators per language after eight months. Authorized personnel will have access by appointment. The Interpreter Staff Coordinator will be responsible for training workshops and evaluation studies regarding use and maintenance of the equipment for both healthcare and interpreter staff.

Year Two:

The project will be extended to include Spectrum Health and St. Mary's Mercy Medical Center and their associated ambulatory care sites, as well as the Kent County Health Department.

The three main hospitals in Year 1 and Year 2 are the primary health providers in West Michigan. Year 2 will extend the services to Spectrum, St. Mary's and Kent County Health Department ([Grand Rapids Area Map, Appendix G](#)).

The Health Department interfaces with all these organizations and is responsible for the initial preventative health screen of the refugees. Video conferencing units will be placed at the designated locations at each site. These partners will have the capability to connect to the Interpreter Bank.

The availability of health information between sites would be confidential and secured by password code and supervised access. Appropriate release of information and confidentiality agreements will be observed.

Year Three:

The project will expand to Pine Rest Mental Health Services and Catholic Human Development Outreach. The issue of mental health and refugee resettlement is a primary concern. ***“Large numbers of refugees and other displaced persons are survivors of political torture, and healthcare professionals must be prepared for this possibility when treating refugee patients”*** (Cross-cultural Medicine 1992;152:301-304).

The outcome of this project will empower healthcare systems to share data in a secure exchange of information across organizational lines. Healthcare organizations will collaborate together for the single purpose of improving healthcare to the refugee and the limited English population. This project will organize interpreter resources with the use of video conferencing to facilitate availability of interpreters as well as secure and monitor competency. It will utilize the best candidates for interpretation and provide service to a greater number and in a far more efficient manner while stabilizing costs.

Innovation:

Healthcare systems across the nation, especially in refugee resettlement areas, have struggled to meet the communication needs of their patients. Health practice outcomes are dependent upon the accurate exchange of information from one person to another.

Most health providers have tried to solve the communication problem on an independent organizational level. *Crossing the Communication Divide has a unique strategy that offers a model of partner collaboration through technology.* Instead of each organization in our community working separately on the same issue, we unite to increase the availability and competency of the interpreter pool and stabilize costs. The priority issue is providing effective communication to a diverse population without draining resources. The technology of video-conferencing is affordable, accessible, and easily replicated.

This project initiates collaboration within the medical community, but it has the far-reaching potential to address legal, educational, and business concerns. Moreover, we expect the project to encourage refugees to consider healthcare careers.

Research indicates that while video-conferencing technology has proven to be highly effective, the idea of connecting interpreters, patients and healthcare providers in a refugee resettlement area is unique (Wiggins, *Real Time Communications via the Internet*. MSU, 1996). One example is the *Tele-Kidcare Brings Doctors to Inner-City Schools*, funded by TOPS. Tele-Kidcare uses video-conferencing technology to link doctors at the University of Kansas Medical Center with elementary schools. Besides talking with kids and their parents, doctors can engage in real-time audiovisual conversations with school nurses.

Another interesting example is the *Using Technology to Deliver Court Interpreting Training* project developed by Vancouver Community College. Project end recommendations state, “The survey results indicate a stronger need for a more basic level of training: *community interpreters rather than court interpreters*. Most of the survey participants interpret in social or health-care settings and have limited experience.” Drawing on the insights of this project, Crossing The Communication Divide intervenes at the level of community interpretation.

Diffusion Potential:

This project has *excellent* replication potential as:

- 1) Refugee resettlement areas across America share the same crisis of providing interpretive services, required by law, in healthcare settings.
- 2) This project improves the utilization of qualified interpreters through an easily replicated technology model involving a partnership of end users.
- 3) Health systems continually seek ways to improve the delivery of interpreter services to improve communication and stabilize costs.
- 4) Legal, educational, and business systems also have need of competent interpreters- especially in refugee resettlement areas.
- 5) Providing meaningful access for LEP persons ensures effective communication.
Nationwide, healthcare systems face the same problem as Grand Rapids. They duplicate efforts by accessing pay-per-use interpreters and by developing their own assessment plan. This system wastes time, increases cost, and impacts patient outcomes. This project addresses all of these issues.

This project has the support of Governor John Engler and other community leaders to disseminate the model across the state of Michigan. Refugee agencies in Lansing and Detroit have already expressed their interest in a future collaborative partnership.

Project Feasibility:

Year 1:

Metropolitan Hospital will install three Polycom Viewstation MP-512 video units at the Interpreter Bank. The Polycom units at the translators’ location were chosen because they will be able to communicate with units external to the hospital in Year 2 and Year 3. We will also install four locations throughout the enterprise using PC-based units. The PC-based units are possible because we have a high speed LAN/WAN connection to all the locations. The PC-based units are much less expensive, and we have several technicians that can diagnose and repair the PC technology. By using TCPIP (LAN) connections there is additional flexibility in selecting where the units can be placed.

Administration/Maintenance of the first year units will be handled by additional training of both Interpreter Coordinator and staff. Most of the issues will be user-related and can be handled by someone with just a little extra training. The IS department will supply tier- 2 support through our help desk for more advanced issues. The IS department will have spare PCs to swap for broken units. An additional Polycom conversion kit that will include all the parts required to repair a PC based unit will be purchased and available. A spare kit would allow for quicker repairs, decreasing down time. An outside vendor will service the Polycom units.

Years 2 and 3:

The remote sites that are added will purchase Polycom Viewstations to connect across the public telephone network. They will order ISDN lines from the local phone company. These ISDN lines are special lines used to connect video units together. The important thing is sound quality and video good enough to see hand gestures and facial expressions.

Maintenance of these connections requires some training for staff; this will be supervised by partner organizations' IS staff. Many issues can be encountered with such remote connections; most can be handled by an experienced user.

Security Issues:

This technology is as secure as any phone call or fax sent in the United States—and probably more so since you can see the recipient and they are in a closed room.

Applicant Qualifications:

Crossing The Communication Divide will bring to bear the talents and enthusiasm of medical caregivers at six locations, MSU's College of Osteopathic Medicine, the Kent County Health Department, and Grand Rapids' local refugee agencies. We have assembled an IS team that has 12 years of telecommunications support experience, including digital PBX installation and repair. Additionally, they have 16 years of UNIX and WAN support experience, including all forms of telecommunications service. This team has done video conferencing installations in Europe, Asia, North America and South America. They already supply support on two similar units at Metropolitan Hospital. The group has managed Metropolitan's last four off-site installations. They managed Metropolitan Health Corporation's complete network upgrade, which involved \$1,400,000.00 worth of equipment.

Community Involvement: ([Memoranda of Understanding, Appendix H](#))

This project offers an opportunity for partners to improve coordination of interpreter services using technology and community partnerships. Project partners will be involved in planning and preparation. In the first year the lead organization will be responsible for:

- 1) Establishing an interpreter center within the Metro Health system.
- 2) Recruiting, hiring and training interpreter staff and coordinator.
- 3) Retaining an independent evaluator to monitor project outcomes.
- 4) Technology design, training and coordinating interpreter staff.
- 5) Administrative oversight for the three year project.
- 6) Overseeing partner organizational teams.
- 7) Acting as fiduciary agent and preparing Metro Health FSR statements.
- 8) Providing training workshops on "Best Practices on Interpreter Utilization."
- 9) Submitting monthly narrative reports to TOPS.
- 10) Collecting project data.
- 11) Scheduling and registering patients for video conferencing sessions.
- 12) Installing and maintaining Video Conferencing units at Metropolitan Hospital and Breton Health Center.

13) Acting as tier-two technology consult for partner organizations.

Year Two—Project expanded to include Spectrum Health, St. Mary’s Medical Center and the Kent County Health Department.

Year Three—Project expanded to include Pine Rest Mental Health Services and Catholic Human Development Outreach.

The Role of Each Partner:

- 1) Coordinating their on-site technology staff to support equipment and project focus.
- 2) Establishing an organizational team as defined by the project model.
- 3) Identifying a project coordinator to represent their organization & submitting monthly narrative and financial summaries to Project Director.
- 4) Attending monthly partner meetings for problem sharing and success sharing.
- 5) Installing Video Conferencing Units as described in project model.
- 6) Assisting in the research process of using video conferencing for interpreter services.
- 7) Agreeing to be a collaborative partner to improve communication through video conferencing technology and sustaining community involvement.
- 8) Agreeing to the project model, as designed, for scheduling, data collection, evaluation, and administrative oversight.

Outputs of the Project:

A centralized interpreter bank will be established at Metropolitan Hospital or affiliated site within their network. There will be three video conferencing units installed in the interpreter bank in phase 1 of the project. These units will be staffed by full-time interpreters who are fluent in English and one other language. The languages that will be represented in this project are Serbo-Croatian (Bosnian), Vietnamese, and Spanish. The interpreter staff person will translate via the video-conferencing unit as well as call patients to confirm their appointment. The staff person will take this opportunity to introduce him/herself and remind the patient of their scheduled appointment. They will also help the patient to understand any necessary preparation information that is needed. Translation of forms or other materials may be added depending on how the project unfolds. A data collection tool for both the video conferencing visit and the phone calls to patients will be in place for the purpose of evaluation.

Video conferencing units will be placed at designated sites within participating healthcare organizations. Technology training sessions will be provided to interpreter staff. This training will include different aspects of maintenance, use and trouble-shooting.

The professional staff that will be using this technology will also have training sessions specific to their role in the “video-conferencing exam.” Best practices on interpreter utilization, providing a safe confidential encounter, culture cues from interpreter prior to the visit. Minimal technology training will be necessary to operate the unit. There will be practice sessions on different scenarios to discuss the capability of muting the camera and when it is appropriate.

Evaluation:

Evaluators recognize multiple approaches to evaluate programs. Some approximate formal research designs; others emphasize process or product components of the program. What is always paramount in selecting an approach is the match between the program’s purpose and an evaluation plan that supports that purpose. This project is unique in our geographic region, and as it is implemented we will likely uncover valuable information that permits us to modify and improve it during the implementation phase. For this reason, we have decided not to use a quasi-research design for the program evaluation. Instead, we believe a formative approach that allows for necessary modifications best suits our purpose. It can best be described as a Utilization-Focused Evaluation (Patton, 1997). To quote Patton, “Utilization-focused evaluation begins with the premise that evaluations should be judged by their utility and actual use ... the evaluator facilitates judgment and decision making by intended users rather than as a distant independent judge” (20). While an evaluation plan is proposed here, we recognize that our goal is to implement the best intervention possible to recruit and train interpreters from the refugee community and improve the quality of healthcare.

- **Evaluation Questions:**

- A. To what extent was the interpreter program implemented as planned?** Could interpreters be identified and trained from the targeted communities? Were the Interpreter Bank and video-conferencing stations successfully established? Did the network with partner satellite sites work as planned? All of the questions in this first list address implementation issues—an important first step of any program evaluation.
- B. Did the program improve access to healthcare systems by increasing the availability of trained interpreters to the community through technology?** This second set of questions focuses on the outcome of the program—improving access to healthcare.

The proposal identifies many outcomes for consideration:

1. Connecting patients and providers to language they understand.
2. Assisting professionals in providing culturally appropriate healthcare.
3. Offering job opportunities to interpreters.
4. Promoting health careers.
5. Stabilizing translation costs.
6. Creating a standard for translation services.
7. Testing video-conferencing technology linking multiple sites.
8. Establishing an interpreter bank.
9. Offering interpreter training.
10. Offering healthcare provider workshops on cultural awareness.
11. Monitoring for a decrease in the number of refugee patients who have no access to healthcare.

- **Evaluation Strategy:** An independent and experienced evaluator has already been identified to work with project staff as the interpreter program is designed and implemented. Dr. Rebecca Henry will work with the team in refining the outcomes for measurement; and developing instruments for data collection. Using a utilization-focused approach, the evaluation plan will incorporate formative strategies to determine how well the program is developing and to identify ways to improve the program if

necessary. Secondly, the evaluation will identify which outcomes should receive the greatest allocation of resources in achieving the ultimate goal of improving access to healthcare through enhanced communication and technology application.

- **Data Collection:** While the data collection instruments will be developed as part of the scope of work of the project, creating a database that will serve the following purposes:

1. A system to determine the needs of the client (patient). This may relate to their ethnicity, primary language, age, gender and type of service needed. This database will be extended to permit us to monitor how treatment was provided to each patient; in addition patients will complete satisfaction surveys.
2. Technology Evaluation: A second goal of the project is to how successfully the technology was utilized. Surveys will be developed for the different participating groups to determine if the video-conferencing and methods to link patients and providers through the interpreters were effective. We will also determine in what ways we could improve the technology application.
3. Evaluation of Training Seminars: The third major component of the evaluation is to determine if the training seminars provided interpreter staff and healthcare staff with the knowledge, skills and attitudes to become more effective in delivering culturally-appropriate healthcare to refugee populations. We will use both surveys and focus-group methodology to determine if training was perceived as useful for the interpreters and healthcare professionals.

- **Data Analysis:** Primarily, the data will be analyzed using common descriptive statistics and summaries of answers to the open-ended questions. Analyses and their interpretations will be presented to program leaders to determine if changes are necessary in the program during the implementation phase.

- **Evaluator:** Dr. Rebecca Henry will serve as the evaluator for this project. She is a Professor of Medical Education at the College of Human Medicine at Michigan State University. Dr. Henry has directed many large-scale evaluations of community-based programs and has provided consultation to many foundations and professional organizations on program evaluation topics. She will work closely with project leadership to ensure that the evaluation reflects the goals and values of this program. Recently, Ms. Rettig and Dr. Henry collaborated on a state-funded program to improve access to care in graduate medical education.