

A Novel Approach to Improve Health Literacy in Immigrant Communities

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ABSTRACT

Background: Anchorage, Alaska, has a large immigrant and refugee population. In fact, it is one of the most ethnically diverse cities in the United States with almost 100 languages spoken by children in the public school system. The city's immigrant and refugee population speaks limited English, and most of these residents are unfamiliar with where or how to obtain health care services through the American health care system. **Brief description of activity:** We developed a peer language navigator (PLN) program. **Implementation:** The Anchorage Health Literacy Collaborative developed a community-wide program to address the health literacy needs of the city's immigrant and refugee population. Select people who attended Anchorage's adult literacy program (the Alaska Literacy Program) were chosen to learn about health and wellness topics as well as how to obtain health information from reliable online sources. These people, initially known as PLNs, were then trained to share health information resources with their respective communities. **Results:** A recent evaluation of the program using ripple effects mapping showed that the program has demonstrated wide success, providing understandable health information to hundreds of new English learners throughout the area and guiding them to reliable health and wellness information they can use for themselves, their families, and their community. PLNs have become leaders in their communities and have been renamed peer leader navigators. **Lessons learned:** For similar programs to be successful, PLNs should be trained using adult learning principles, allowing them to focus on topics and issues of interest to them. The program should link with community organizations to extend the reach of the program. Care must be exercised to avoid overextending or overwhelming PLNs because after they become leaders in their communities, they will receive many requests to provide guidance and education. Finally, when possible, PLNs should be compensated so they can more fully devote their efforts to serving the community. **[HLRP: Health Literacy Research and Practice. 2019;3(Suppl.):S15-S24.]**

Plain Language Summary: The Anchorage Health Literacy Collaborative in Alaska developed a program in which immigrant and refugees attending the city's adult education program to learn beginning English are chosen to serve as peer language navigators (PLNs). The PLNs learn how to obtain credible and easy-to-understand health information and then share it with their respective cultural communities. Lessons learned over time are shared.

Although Alaska has a well-deserved reputation as a rural and frontier state, the demographic diversity of its largest city, Anchorage, where more than one-half of the state's population resides, is often underappreciated. Seventeen percent of Anchorage residents speak a language other than English, and the Anchorage School District includes 27 of the 30 highest-diverse public schools in

the nation (Early, 2017; Farrell, 2018). Approximately 100 different languages are spoken by children in the Anchorage school system, reflecting the significant diversity of their families (Anchorage School District, 2018).

Many of these children and their parents are immigrants and refugees who are newly arrived in the United States. They face a number of obstacles related to learn-

ing how to navigate the U.S. health care system, which is unfamiliar to them. Some of these obstacles include basic health literacy tasks such as how to access health information in languages and formats they understand, as well as how and where to obtain health care and related social services. These families are further limited by socioeconomic challenges (National Academies of Sciences, Engineering, & Medicine, 2017). The 2015 Anchorage Community Health Needs Assessment identified poverty as one of the city's top four health-related challenges, with almost 8% of the general population living below 100% of the federal poverty level and 6.3% of households receiving public assistance at more than twice the national average (Providence Alaska Medical Center, 2015).

Furthermore, the health status of immigrants and refugees often deteriorates in the years after they arrive in the U.S. (UCLA Fielding School of Health, 2014). The longer they remain in the U.S., the worse they fare on measures such as hypertension, heart disease, diabetes, and mental health, which is likely related to limitations in language, isolation, and poor knowledge about and access to the health care system. Given this background, the challenge our Collaborative (The Anchorage Health Literacy Collaborative [TAHLC]) faced was how to engage with the city's immigrant and refugee populations in a meaningful way to support and improve their health literacy—not just of people in those populations, but of their entire communities. How could TAHLC provide these communities with easier access to health information and services? More importantly, how could TAHLC improve their understanding of how to use that information and those services?

THE COLLABORATIVE

TAHLC is a community-wide coalition established in 2007 with the mission of improving the health literacy of the city's underserved population, with a focus on the large immigrant and refugee population. TAHLC is coordinated by the Alaska Literacy Program (the city's primary adult education program for new English learners) and faculty of the graduate program in public health at the University of Alaska Anchorage. Other key partners in the Collaborative include YWCA Alaska, the Municipality of Anchorage, the Alaska Institute for Justice, and Providence Health and Services Alaska, which is the city's largest hospital system.

PROGRAM IMPLEMENTATION

Peer Language Navigators

We developed a peer language navigator (PLN) program. In concept, this program has some similarities to the approaches described by Hohn (1997), Spener (1992), and others (Bishop, Earp, Eng, & Lynch, 2002; Chervin, Clift, Woods, Krause, & Lee, 2012; Elder, 2003; Findley, & Matos, 2015; Garner, 2008; Schecter, & Lynch, 2011; Soto Mas, Mein, Fuentes, Thatcher, & Balcázar, 2013; Wright, & Grabowsky, 2011) for providing health education to people with low literacy. The program is based at the Alaska Literacy Program (ALP), which is where new immigrants and refugees in Anchorage go to learn English. We train PLNs who, in concept, are similar to community health workers—people who serve as frontline providers trained to promote health in their respective ethnic communities. PLNs are similar to those in the community they serve. They are enrollees in ALP and come from the same racial, ethnic, and socioeconomic backgrounds

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and neighborhoods, and they speak the same languages as other ALP enrollees (Findley, Matos, Hicks, Chang, & Reich, 2014; Penn Center for Community Health Workers, 2018). This connection helps PLNs build trust and rapport in working with their communities as they serve in the role of a liaison between those communities and health care services (Findley et al., 2014).

However, there are several differences between PLNs and typical community health workers. One is that PLNs did not seek careers as health workers; instead, they are immigrants and refugees who enrolled in basic English classes at ALP. We train PLNs how to find good health information and facilitate how they can share that information with their respective communities. Another difference is that in most community health worker programs, the workers are typically monolingual and focused on serving a single ethnic/language group or on addressing a single health issue (Allen, Brownstein, Satsangi, & Escoffery, 2016; Little, Wang, Castro, Jimenez, & Rosal, 2014). In contrast, our PLN program serves a diverse population of immigrants and refugees, which requires communication skills in dozens of languages and cultures. In addition, our PLNs are focused on increasing the community's general health literacy rather than on only providing information about a specific disease or problem.

Program Evolution

Before formal development of the PLN initiative, one of the initial projects undertaken by TAHLC was a breast cancer screening program. Many immigrant and refugee women coming to learn English at ALP had never undergone mammogram screening for breast cancer, and many were not even aware that such screening existed. ALP collaborated with Providence Health and Services to provide mammogram screening onsite at ALP in a mobile screening van (Johnson, Smith, Strauss, Higgins, & Weiss, 2008). This effort grew into a larger program in which TAHLC worked with the YWCA to inform community women about breast cancer screening. ALP selected women who were studying English at ALP and trained them to provide this information to other women in their communities who spoke their language; thus, the PLN program was born.

This first group of PLNs spoke and provided education to their peers in Spanish, Thai, Korean, Chinese, Hmong, and Russian. Each year since the first group, a new cohort of four to six ALP students have become PLNs; these PLNs have spoken a variety of languages (Table 1). Although the PLNs are learning English at ALP, when they communicate

Amharic/Arabic	Palauan
Arabic/Dinka	Russian
Chinese	Samoa
French	Spanish
Hmong	Swahili
Korean	Thai
Nepali	Wolof
Nuer	

with their respective communities about health concepts, they generally do so in their community's native language. However, the PLNs sometimes teach important English health terms, and all of their teaching uses the plain language, easy-to-understand concepts they learned in their PLN training. ALP students do not need to speak fluent English to become PLNs; they just need to know enough English to allow them to participate in the training.

Program Phases

The PLN program currently is a community-wide effort involving the various organizations noted earlier. To date, the program has evolved through three phases, with training based on adult learning principles (Table 2) and key concepts applicable to health literacy (Table 3).

Phase 1. The initial cohort of PLNs was selected by identifying people enrolled in ALP English courses who had a passion for helping to improve the health of their communities. Then, with support from a grant from the National Library of Medicine, the PLNs were trained to understand the concept of health literacy and to apply it to local needs, including finding and evaluating reliable health information on websites such as Medline Plus (<https://medlineplus.gov/>). The PLNs also participated in role-playing scenarios that they might encounter during outreach to their communities (Table 4).

Phase 2. Instrumental and instructional support was provided for PLNs to actually go and disseminate health information to their respective communities and to other students enrolled at ALP. In phase 2, we also provided ongoing classroom education that included further exploration of community resources. PLNs were asked to think about their connections in the community and who might be able to benefit from the new information they had

TABLE 2
Adult Learning Principles Applied to PLN Training and Program Evaluation

Adult Learning Principles	Training Activities	Evaluation Activities
Adults need to know why they are learning	Phase 1: PLNs were oriented to the following: Need for reliable health information and the dangers of misinformation; and newcomers to the community are at higher health risks because of health literacy barriers	Collected baseline and ongoing information related to motivations and concerns to identify individual motivations for learning
Adults are motivated to learn by the need to solve problems	Phase 1: ALP students selected for the PLN program were those who had a passion for solving the problem of helping their community members improve their health and learn about the U.S. health care system All phases: PLNs identified health topics important to their communities	Used process evaluation methods to identify new problems and role expansions and boundaries
Adults' previous experience must be respected and built on	All phases: PLNs were supported to select activities based on their foundations and their goals; time commitment and activities varied Phase 1: PLN educational and health experiences and perspectives were honored in class discussion when their home community and approaches were different from U.S. norms (e.g., when a child is sick, some communities might intuitively seek a home remedy rather than a Western medicine approach) Phase 2: PLN training built on how health information is used and understood in home countries and within the newcomer communities (e.g., explained to PLNs how in their home countries, antibiotics are readily available, whereas in the U.S., antibiotics are more controlled to discourage overuse; also included teaching that doctors are protecting your health when not prescribing is important to build trust rather than causing mistrust)	PLNs were asked their confidence levels at the beginning and end of each session related to class content Feedback from surveys and key informant and group interviews was used to improve the program for the next cohort
Adults need learning approaches that match their background and diversity	Phase 1: assessed English competency and computer skills/comfort level to best tailor class content and instruction Phases 1 and 2: considered the educational and health experiences of the PLNs and their community members when selecting health information content	All evaluation approaches have evolved to be plain language Evaluation methods changed over time based on PLN experiences (from digital to paper tracking of contacts versus in-class SurveyMonkey for each class) PLNs were asked to identify future projects and topics

Note: ALP = Alaska Literacy Program; PLN = peer language navigator.
 Adapted from "Integrating adult learning principles into training for public health practice," R. L. Bryan, M. W. Kreutter, and R. C. Brownson, 2009, *Health Promotion Practice*, 10, p. 557-563.

TABLE 3

Health Literacy Strategies Applied to PLN Training

Health Literacy Strategy	Strategy Examples to Train PLNs About Community Health Promotion Efforts
Identify the intended users	Phase 2: PLNs advised health day presenters on tailoring content for the intended audience Phase 3: PLNs developed their own health presentations with attention to the specific audiences that would be participating
Limit the number of messages	Phase 1: each class with the community had two to three learning objectives and key messages Phases 2 and 3: health promotion content focused on a small number of key messages
Use plain language	Phase 1: PLNs learned to identify Internet-based materials that used plain language to share in their communities Phases 2 and 3: PLNs worked to ensure all content, including medical or other complex terms, was explained in plain language
Focus on behavior	Phase 1: PLNs learned to evaluate a website by asking, "After I read this, do I know what to do?" Phases 2 and 3: key messages on topics offered at the health events focused on key messages related to specific health actions
Supplement with pictures	Phase 1: PLNs looked for plain language materials on topics of interest with pictures and videos that were understandable and culturally appropriate Phases 2 and 3: Health promotion content used pictures and demonstration with models to teach key messages
Check for understanding	Phase 1: PLNs had many opportunities to demonstrate their understanding of key messages they were learning related to health topics through direct questions and peer-to-peer sharing Phase 2: Health events included a debriefing session in which participants shared the key messages from each session, which served to reinforce learning and as an evaluation measure for PLNs

Note. PLN = peer language navigator. Adapted from "Quick Guide to Health Literacy Principles," by U.S. Department of Health and Human Services, (n.d.), <https://health.gov/communication/literacy/quickguide/quickguide.pdf> (in the public domain; permission is not required).

TABLE 4

Examples of Role-Playing Scenarios Used in PLN Training

For each of the following scenarios, PLNs were asked, "How could you use the information you have learned in this class to help?"

- Your friend tells you that her doctor said she has hypertension. She tells you she thinks hypertension means she has a lot of stress. She tells you the doctor wants her to take medicine and she is not sure if she wants to take the medicine.
- A friend tells you she is worried about her child who has asthma. She would like to learn more about asthma and what she can do to help her child.
- You are enjoying a dinner at the home of your friend. She tells you her doctor told her that she should try to cut down on eating too much salt.
- A friend tells you that she wants to be healthy and wants to start taking some vitamins. She went to the store and there were so many kinds that she didn't know what to buy. She then went on the Internet and found a website that has vitamins for sale. She said the website had a video with a doctor who said the vitamins for sale would give her more energy. The vitamins cost \$150.
- Your friend calls you and tells you that her son has been sick all day. He has a rash on his stomach and is not eating. She is worried and does not know what to do.

These and other role-playing scenarios are taught to PLNs in class in English. When the PLNs interact with their respective communities, the interactions are often in their native language.

Note. PLN = peer language navigator.

learned in phase I. PLNs also learned how to track their encounters with community members by keeping a log in which they recorded the date of each encounter, the nature of the person (or group) they met with, and the topics discussed. No names or other identifying information related to their encounters were recorded, and no consent forms were involved.

The PLNs also met monthly with TAHLC volunteers to discuss community health concerns, including those health topics brought up by community members in discussions with the PLNs. In addition to common health issues such as hypertension and diabetes, community health concerns included a wide variety of issues ranging from earthquake preparedness (an ever-present Alaskan risk with which many community members from other parts of the world were not familiar) to education about oral health. Oral health was of concern because many of the community members with whom PLNs met were from refugee communities (e.g., from rural Africa) where the use of toothbrushes is not common. One PLN, in collaboration with the TALHC training team, developed presentations about oral hygiene and personally distributed more than 300 toothbrushes to community members. PLNs also were taught that although their role was to lead others to reliable health information, it would be inappropriate for them to diagnose or recommend treatment for any medical conditions.

Phase 3. The PLNs' cultural expertise and growing health literacy skills were tapped to have them implement health outreach and messaging programs within the broader community. PLNs began to (and continue to) create education materials with oversight from the TALHC training team, which includes a nurse who reviews all materials to ensure the content is evidence-based and clinically accurate. **Figure 1** shows an example of PLN-created educational material.

PLNs also mentor new PLNs and partner with the city and others to tailor and deliver important health information to the community. For example, for one recent project, the PLNs worked closely with the city's emergency preparedness section so that emergency advice and protocols (e.g., about earthquake preparedness) would be available in multiple languages and presented with easy-to-understand concepts.

The program continues to evolve based on the participation of PLNs from diverse cultures and new needs identified by the community and organizations. Because the composition of the immigrant and refugee population is always in flux, we must regularly identify and recruit new PLNs from different language and ethnic groups from among ALP students. The collaboration between ALP and the various TAHLC member organizations helps in identifying which

groups and ethnicities have needs to address, as well as in obtaining assistance to recruit future PLNs into ALP. The overall role and goals of PLNs are described in **Table 5**.

These ongoing efforts have been supported by in-kind support from TAHLC partners, grants from Providence Health and Services Alaska and from the National Library of Medicine, and the Leonard Doak Memorial Scholarship Fund. In recognition of the PLNs' increasingly respected community roles, and in support of the self-esteem and continued development of the PLNs, TAHLC recently changed the name from peer language navigator to peer leader navigator.

RESULTS

During each year of this ongoing initiative, brief quantitative evaluations of the PLN training and outreach have been collected and used to improve implementation. Examples of the evaluation activities performed that were tied to commonly accepted adult learning principles (Imel, 1998) are listed in **Table 2**.

This year, however, the evaluation was more complex and included a ripple effects mapping exercise with two groups of PLNs. Ripple effects mapping is a participatory method of qualitative evaluation in which facilitators (one of our graduate student assistants) lead participants (PLNs) to share stories about their activities and encounters to help unearth otherwise unanticipated and thus unrecognized outcomes of their shared work (Chazdon, Emory, Hansen, Higgins, & Sero, 2017). As just one example, these ripple effects mapping sessions made us aware of a patient with hypertension whose diagnosis and subsequent treatment was the direct result of encounters and discussions with a PLN.

The evaluation identified outcomes of the PLN program on the PLNs themselves (intrapersonal), their direct contacts (interpersonal), and the wider Anchorage communities (community level). There were three key findings.

The first (intrapersonal) outcome was that PLNs improved their own health literacy, which in turn reduced barriers to their own health and well-being, and enabled them to serve as a credible and useful health literacy resource to others. Although we did not perform formal health literacy assessments with standardized tools, we did collect pre- and post-data required by the National Library of Medicine (which helped fund the establishment of the PLN program) on PLNs' self-reported confidence in finding, understanding, and using health information. At the onset of the training, PLNs enrolled in ALP had limited English skills and, therefore, limited ability or familiarity with how to locate useful and reliable health information within the American



Figure 1. An example of peer language navigator-created educational material.

health care system. By the end of the training, more than 90% of PLNs reported feeling *confident* or *very confident* in their ability to find such health information with an Internet search.

The participatory ripple effects mapping evaluation also indicated PLNs' confidence increased throughout their experience. The PLNs self-reported and demonstrated increased leadership skills. In addition, they developed strong relationships with other PLNs and community members.

The second (interpersonal) finding was that the PLNs' outreach contact logs demonstrated that they communicated with large numbers of people in their respective communities. The most recent cohort, which consisted of five PLNs, provided health information to more than 150 people during a 6-month period. Their verbal reports identified numerous scenarios in which medical issues were addressed early and potentially prevented a more serious or emergent health problem. For example, once community members realized PLNs had access to reliable health information, they approached the PLNs about health concerns or specific symptoms. Community members often shared that they were confused about their symptoms and were hesitant to go to the doctor. The PLNs encouraged community members to go to a clinician and helped decrease community members' fear and mistrust of the health system. In addition, the PLNs were able to help community members research their health concerns and develop a list of questions to take to their clinician. The

PLNs also have accompanied people to the doctor or a resource agency and helped them to navigate the maze of the U.S. health care system.

Contact log entries also indicated that PLNs encouraged preventive screenings for cancer, hypertension, and diabetes, further assisting community members to obtain timely medical care, adhere to treatment regimens, and prevent long-term medical costs. In several cases, PLNs worked with a nurse team member to connect community members at risk for diabetes with free screening available at community health fairs.

The third, and perhaps most important finding revealed by the ripple effects evaluation was at the community level. The PLNs' work reached not only people but also community organizations and events. For example, PLNs were invited to community health fairs in several venues and provided health information to attendees, guiding them to reliable health information sources. In addition, the PLNs have been actively sought as cultural experts for other community-wide health-related messaging on topics ranging from the importance of immunizations to the need for cancer screening.

LESSONS LEARNED

Based on our experience, we recommend that others consider developing a PLN-like program tailored to their own community concerns and needs. We suggest consider-

TABLE 5

The Role of the Peer Language Navigator

A PLN does:

- Develop relationships with those in need of health information and community resources
- Direct people to reliable health information on the Internet and in the community
- Try to understand feelings and concerns from another person's point of view (i.e., "put yourself in their shoes")
- Stay objective
- Empower and support people to seek help in their community

A PLN does not:

- "Fix" the situation
- Change what has happened
- Remove pain or health conditions
- Give health advice
- Make judgments about someone's health
- Know all the answers

A PLN's message for people in the community:

- "I understand you have certain health concerns/need for community resources"
- "I can show you where you can find reliable health information and community resources"
- "I am not a health professional or expert, but I can help you find the right person to ask for help"

A PLN'S responsibility to self is to:

- Know yourself and accept your limits
- Know your boundaries as you serve in this role
- Be aware of your feelings and emotions around situations
- Talk with your teachers
- Take care of yourself: body, mind, and spirit

Note. PLN = peer language navigator.

ing the following key points when implementing a similar project.

First, use adult learning principles (Table 2) and health literacy plain-language strategies (Table 3) in all phases of PLN training to maximize behavior change in the community. This will enhance participation and engagement of those involved in the program.

Second, enlist diverse partners to make the effort stronger. In our project, we partnered with health care organizations, community health centers, librarians, university departments, literacy organizations, and local government (e.g., emergency management). This expanded the reach of the program and provided diverse sources of funding and expertise. Engagement of partners also included the participation of university students. Many university programs with master's degrees in public health, psychology, and social work require that students complete an internship involving evaluation of a program. We enlisted the help of

a public health graduate student who, at no cost to TAHLC, assisted with logistics and the evaluation of the PLN program each year.

Third, allow for flexibility tailored to the interests of the participants. In phase 2, PLNs began to identify the topics and projects they knew would be of interest to their communities. Facilitating their efforts to pursue topics and projects that were interest to them increased their motivation and work effort.

Fourth, compensation for PLNs is essential. Although the amount of compensation can vary, compensation conveys value. In our project, compensation evolved over time and varied based on the level of participation, the number of sessions in which PLNs participated as learner or leaders, and with the phase of the project. Initially, PLNs received \$1,000 annually for the whole project, but the PLNs' level of performance and participation varied among the participants. To recognize individual efforts, compensation

was changed to \$25 per hour for training and presenting at community events, as well as other modes of sharing health information. In addition, the PLNs received an additional \$50 bonus if they documented contact with more than 25 community members in their contact log. Compensation allowed PLNs to devote meaningful time to the project, rather than having to “squeeze it in” between other work responsibilities, and it also was perceived as being a more professional approach to compensation. The PLNs also were reimbursed for transportation expenses.

Fifth, integrating current technology is recommended. Originally, the project used tablet computers and then laptops for Internet searches to teach PLNs how to find reputable health information. In more recent cohorts, PLNs were trained using smartphones, social media, and apps because all of the participants in these later cohorts already had smartphones and were familiar with their use. This actually provided for great accessibility and increased their community contacts by allowing instantaneous communication without the need to travel or schedule meetings.

Finally, and perhaps most importantly, be careful not to overextend or overwhelm PLNs. Over time, our PLNs have become leaders in their communities. Once acknowledged in that role, they quickly received more requests than they could deal with, and some expressed feeling overextended. It is essential to be sensitive to this possibility and to engage the PLNs when and where they are most needed. Specific strategies we used to avoid burnout were to provide monthly peer meetings, facilitated by volunteer staff, where all participants could offer support and suggestions. Such meetings were not part of the original plans but were added after the need for ongoing support was recognized. Volunteer TAHLC staff were available to meet with PLNs outside of the regular workweek to accommodate the PLNs’ availability to prepare for community presentations and activities. The PLNs also shared coverage of community events so that no PLN was too burdened by community expectations.

CONCLUSION

Our PLN program addresses a common problem—how to support the health and well-being of diverse immigrant to and refugee communities, and how to do it using appropriate health literacy strategies and adult learning principles. Diverse perspectives and partners were welcomed in all phases of the project. Regular monitoring of activities, challenges, and outcomes have helped us continue to grow and improve this collaborative effort over several years.

Our PLN program has had a beneficial effect on bringing easy-to-understand health information to several hard-to-

reach, new English-speaking populations in Anchorage, Alaska. It has been recognized nationally by both the Institute for Healthcare Advancement (recipient of the Institute’s Innovative Program Award in 2013) and the Coalition on Adult Basic Education. We hope others can learn from our experience.

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