**Appendix D: Community Assessment Report**

**NN/LM NER Focused Outreach Project**
**Community Assessment**

**Submitted to**
**National Network of Libraries of Medicine**
**New England Region (NN/LM NER)**

**July 27, 2010**

**Submitted by**
**Sabrina Kurtz-Rossi, Health Literacy Consultant**
**Phone 781-835-6488; Email sabrina_kurtz-rossi@comcast.net**

**Table of Contents**

**Community Assessment**

A community assessment was conducted February through July 2010 in the two communities identified for focused outreach–Providence, Rhode Island's Latino community and rural residents in the Western Maine Health District (Androscoggin, Franklin, and Oxford counties).

**Purpose:**  To guide decisions related to how best to conduct focused health information outreach in the selected communities.  The community needs assessment was also implemented as part of a systematic approach to identify and connect with community-based organizations and other agencies that may be interested in partnering with the National Network of Libraries of Medicine – New England Region (NN/LM – NER) in outreach work.

**Methodology:**  Key informant interviews were conducted to gain a better understanding of community strengths and needs.  This is an intensive rather than extensive data collection methodology designed to provide in-depth understanding of the target community rather than broadly generalizable results.  A literature review on the health information seeking behaviors of rural populations (Maine) and on the health information seeking behaviors of Latinos (Rhode Island) was also conducted.

**Evaluation Questions:**  What are the community health information needs, supports and barriers?  What are the primary health topics of concern within the community?  Where do people in the community look for and find answers to the health questions they may have?  Do people use the Internet to find health information?  Where do people access the Internet?  What health information websites do they use?  How confident are people in their abilities to find accurate and reliable health information?  What are some of the barriers to using the Internet to find health information?  What are some of the resources in the community that assist people in using the Internet?    What is the best way to teach people how to use the Internet to find reliable health information?  Who are the people in the community that help teach community

members how to use the Internet to find reliable health information?  Who in the community would be interested in partnering with the NN/LM NER to improve community access to health information and the use of reliable resources?

**Sample:**  NN/LM NER members and other known community contacts were called or emailed regarding the focused outreach project and asked to identify key informants in the community.  Key informants are individuals who live and work in the targeted community and whose organization or agency provides health, education, or other social serves to the community.  Recommended key informants were contacted via phone and email, provided with a brief description of the project and asked if they were willing to be interviewed.  In-person interviews were scheduled with those who agreed. Following the interview, all key informants were asked to recommend others in the community (snowball sampling technique) who might be interested in the topic and willing to be interviewed.  A total of 19 key informant interviews were conducted: nine in the Western Maine Health District and10 in Providence, Rhode Island.

**Instrument:**  A semi-structured interview protocol was developed guided in part by Social Cognitive Theory.  Social Cognitive Theory states that to change behavior, one must have the self-efficacy to perform the new behavior, external factors that enable the behavior to take place, control over the change, and a role model to demonstrate the behavior.  Questions in the interview protocol were structured to determine confidence in finding health information and using the Internet, and community resources that support access to computers and the Internet, including possible role models.  Core questions were followed by probes to help elicit more information and detailed descriptions.   All questions were open-ended to avoid yes or no responses.

**Data Collection:**  All key informant interviews were conducted in-person and at a time and place of convenience for the interviewee.  The interviewee's place of work was the preferred location as this helped the interviewer better understand the key informant's context and community.  Interviews lasted approximately 45 minutes depending on the key informant's availability.  Some took as little as 30 minutes others as long as 90

minutes.  Generally, the interviewer made every effort to keep interviews to less than one hour.   Key informants were told their responses would only be shared in aggregate.  They were then asked for permission to record the interview.  When permission was granted (all gave their consent) the interviewer turned on a tape recorder or computer for note taking and proceeded with the interview.  Notes and recorded data were transcribed immediately after the interview to ensure accuracy.  All interviews were conducted by Sabrina Kurtz-Rossi, Health Literacy Consultant, or Megan Coffman, Research Assistant.

**Data Analysis:**   Interview data were coded and organized into themes.  All transcripts from the Western Maine Health District and then from Providence, Rhode Island were read and a list of general themes was generated.  Once themes were recognized, units of data (phrases, sentences, or paragraphs) related to each theme were noted.  Themes were named and all data coded to that theme were organized together. In this way community patterns were identified and described.

**WESTERN MAINE HEALTH DISTRICT**

**Literature Review:**  Maine is a rural state in New England with a widely scattered population[1].  Maine is one of the oldest states in the U.S. with 15% of the total population age 65 years or older.  The median age is 42 years, giving Maine the distinction of having a population with the oldest average age of any state.  In 2008, the total population of Maine was 1,316,456.  Ninety-five percent of the population is white and only 7.5% speak a language other than English at home (U.S. Census, 2000).  In 2001, large numbers of Somali refugees began resettlement in Maine primarily in the cities of Portland and Lewiston/Auburn.  The number of Somalis now living in the Lewiston/Auburn area is nearly 4,000 and most do not speak English (Maine DHHS, 2002).

---

[1] The U.S. Census classifies "rural" as all territory, population, and housing units with a population density of less than 1, 000 people per square mile in a core census block and an overall density of less than 500 people per square mile in the surrounding census block.

Maine has a median household income below the national average and employment is a constant concern among residents.  Twelve percent of individuals of all ages live below poverty level and 16% of children under 18 years in poverty.  Fifteen percent of Mainers have less than a high school education.  The leading causes of death in Maine include chronic disease such as heart disease, chronic lung disease, diabetes, cancer, and Alzheimer's disease. Because Maine is a rural state with a widely dispersed population primary care, dental care, and mental health services are limited.  This is due to lack of providers, lack of facilities, and lack of services that support access such as public transportation.  (U.S. Census Bureau, 2000; Maine DHHS, 2002)

**Western Maine Health District:** Within the past 10 years, the state department of health, working in conjunction with local partners has created a public health infrastructure that includes eight public health districts and 28 comprehensive community health coalitions called Healthy Maine Partnerships (HMPs). The Western Health District is located in the southwest region of the state and is made up of three counties (Androscoggin, Franklin, and Oxford).  Comparing public health indicators across districts, the Western Maine Health District ranks lowest overall with the highest infant mortality, highest rate of teen pregnancy, highest breast and colon cancer rate, highest rate of chronic lower respiratory disease, highest diabetes death rate, highest percent of adults with asthma, and highest smoking prevalence to name just a few (Maine DHHS, 2007).

The Western Maine Health District has a total population 56,741 and is one of the more rural districts with a population density of 45.6 people per square mile.  It also has one of the highest population-to-physician ratios of 1,091 patients to one physician. Four HMPs serve the Western Maine Health District.  HMPs throughout the state focus primarily on tobacco, nutrition, and physical activity, substance abuse prevention and chronic disease management (Maine DHHS, 2007).

**Rural Health Information Seeking Preferences:** Rural populations are both vulnerable (at high risk for health care problems) and underserved (receiving fewer

health care services including health information services).  Health care disparities exist among vulnerable and underserved populations and could be improve by greater access to health information and services. Providing health care in rural areas is challenging in part due to inadequate access to accurate, reliable, and up-to-date health information to providers and consumer.  Maintaining good health is also challenging in part due to inadequate access to health information.  In terms of how rural residents access health information, many say they find answers to their health questions by visiting a health care provider although may have limited access.  Family and friends are also cited.  Other noted sources of health information include newspapers, radio, social service providers, public libraries, schools and the Internet.  (Flaherty 2008, McKeehan 2008. Chang, 2004)

**Rural Residents Online:** The Internet is a relatively new, although increasingly used, source of information and may be particularly useful to those with inadequate access to health information and services due to their rural location. Rural internet use has increased significantly over the past ten years.  In 2000, 41% of rural residents were online as compared to 52% in 2003, and 70% in 2010.  Broadband is also growing with 3 – 19% of rural online users on broadband.  Still, rural residents use the Internet less than those living in urban areas.  Other factors for the lower use in rural areas may be demographic in terms of rural residents being older, less wealthy, and having lower levels of education.  Lack of technology and health information literacy skills are also barriers. However, Pew Internet & American Life Project notes that while rural communities have more new users of the Internet than urban and suburban communities, they are often "enthusiastic adopters" meaning once they go online they go online often (Rainies 2004, Horrigan 2009).

**Key Informant Results:**  Interviews were conducted with nine service providers living and working in the Western Maine Health District and includes staff from the four Healthy  Maine Partnerships (HMPs), three medical librarians, one public librarian, and one school health coordinator.  Data is organized into six major themes (demographics, community health concerns, health information sources, the Internet – barriers and

supports, and outreach ideas and opportunities) and 24 subthemes.  Listed in each subtheme are the direct quotes from key informants related to that topic. It is within these 24 subthemes and direct quotes that patterns and insights emerge that will inform how the NN/LM – NER might improve its health information outreach to this community.

**DEMOGRAPHICS**

**Theme –The community is rural with a growing elderly population**
- We serve the general public but women and elderly come the most.  Women and elderly are the population the hospital wants to serve and attract.
- There is need for a community center or senior center.  It's isolating living here.
- It's a rural community with a growing elderly population.
- Senior issues are big.
- I see more elderly than young people.  I also see parents of young children or grandparents with children.
- All clients are rural.
- We serve everyone but the focus is on low income.  Primarily rural folks.
- Population is rural, many are seniors.

**Theme – There is very little ethnic diversity except for Lewiston where there is a young and growing Somali community**
- We also serve the public in Lewiston/Auburn and immigrant populations.  Have translation for Somali Bantu population and some but limited French because this is an old French speaking community.
- With the Somali it also includes Ob-Gyn, pediatrics, mental health, heart disease, and diabetes.
- We serve the general community.  A lot of use by the downtown population – new immigrants, Somali, low income.  Largest immigrant community is Somali.
- Some are well educated professionals from Africa who negotiate well.  They are going to school to work on their English skills.
- Somali adults who are not educated are really lacking in terms of accessing information.  Language is a barrier.

- Last ten years Somali community has come in which causes extra challenges.
- For Somali community basic needs are not met and that causes health concerns. Language is a barrier to getting services. High sugar and high fat diet. Lack of access to resources. Not knowing how to access.
- Some Spanish speaking and some Asian but mostly English and Somali. Some elders speak French.
- Very Anglo Saxon. All English speaking. But we are expecting the Somalis to make their way North from Lewiston.

## COMMNITY CONCERNS

### Theme – Public health activities focus on tobacco, nutrition, and physical activity; heart disease, cancer, obesity, and diabetes are also concerns

- Focus is primarily tobacco, nutrition, and physical activity.
- Smoking, nutrition, and physical activity are topics of concern.
- Tobacco and nutrition are very important. Still very big.
- Workplaces, physical activity, nutrition, and tobacco are areas of focus.
- Tobacco, obesity, physical activity, nutrition, and chronic disease.
- Heart disease and nutrition.
- Obesity is a health concern.
- Cancer, especially breast cancer.
- I get lots of request for information on cancer.
- Getting folks to manage their chronic conditions is a major issue.

### Theme – The public health focus is also on substance abuse prevention (alcohol) and chronic disease management

- Substance abuse, smoking, depression and other mental health issues.
- Obesity, heart disease, and diabetes in Lewiston/Auburn. In rural communities the strategic initiative in all sites is on heart disease, diabetes, and obesity as primary, smoking, alcohol, and substance abuse as well.
- We provide outreach to worksites and the community around prevention of disease, tobacco, nutrition, and substance abuse.
- Questions about alcohol are also big.

- Other programs include substance abuse prevention (alcohol) and chronic disease management.
- My focus is on substance abuse and website content management.

**Theme – Poverty, unemployment, and low levels of education are top community concerns and well know social determinants of health**
- Jobs are a major issue.
- Lots of loss of jobs.
- The economy is a big issue.
- Money is an issue. Being able to cook a healthy meal is an issue.
- Homelessness in Lewiston.
- Low socio-economics, low education and lots of unemployment.
- Lots of folks are on Medicare and Medicaid.
- People are trying to manage their own heath with no money.
- Educational attainment is an issue. You can't make it on a high school diploma.
- In the state of Maine we still have low levels of literacy.

**Theme – Teen and young adult issues include health, education, and opportunity**
- Teen health issues include a rise in teen pregnancy in this area.
- College and paying for college is a concern among young people.
- High dropout rate. One out of four kids does not graduate with the class. This is an ongoing topic of concern.
- There is also a high substance abuse rate.

**Theme – Lack of transportation is a barrier**
- Transportation is also a big issue.
- Transportation is an issue to getting good food.
- Seniors are concerned about transportation to doctor appointments.

**Theme – Other noted health topics of concern**
- Women's issues such as menopause and pregnancy – teen pregnancy.
- Lead is an issue in Lewiston.

- Alzheimer's and stroke are issues of concern among seniors.
- Death and dying is also an issue.
- Autism is a big one because a provider focuses on it.
- Local food movement in general is a health concern. You can't fix health without fixing the food system.

## HEALTH INFORMATION

**Theme – People get their health information from a variety of sources including health professionals, mass media, schools, workplaces, community organizations, and the Internet**

- They get information from their primary care provider.
- They get it through the Healthy Maine Partnerships, Head Starts, Community Assistance Programs (CAPs), WIC, and other social service agencies.
- They listen to TV. They watch infomercials.
- They ask friends also but they are not always good sources of information.
- They go to neighbors.
- The River Valley Healthy Communities Coalition (RVHCC) is one place where people learn about health.
- Also from doctors and the Internet.
- The paper and TV, not so much radio.
- They get it at schools and worksites – the ones that have wellness programs.
- School health coordinator sends home a lot of information to parents.
- The Somalis get information through adult education and Catholic Charities.

**Theme – People use the Internet**

- Of course there is the Internet. Everyone goes online for health information.
- Most people go to the Internet.
- Also folks use the Internet. People use the Internet a lot.
- Even low income folks have access to the Internet now. It's more accessible.
- Most people are using it [computers]. Perhaps not the people that go to food pantries, but it's moving in that direction.

**THE INTERNET**

**Theme – People access computers and the Internet in their homes, schools, libraries, and workplaces**

- Many have access at home but others through the schools, libraries, and work.
- People have computers in their homes.
- Some folks have them at home.  But not like in the big cities.
- More and more people are getting Internet access.  People find a way.  They also have cell phones and laptops.
- Public libraries have free access computers.  A lot of people go to the public libraries.
- Even older people have computers at home.  And they know they can go to the library to use computers.

**Theme – The Maine laptop initiative provides laptops to all middle school students**

- Schools give out laptop computers.
- Maine laptop initiative started in 1993.  Those students are now really proficient using technology.
- All students get a lap top in 6th grade.  Governor Angus King started that state-wide. You're assigned a lap top but must return it at the end of the year.
- School children have them in school.  They bring their laptops home.  So not only do kids use it but they share with their parents while they are at home.

**Theme – The Somali community is also online**

- Somalis are also online they most definitely are.  Not the older Somalis but definitely the children and young adults.
- Their children have access through their schools then they learn they can get online in the library.  They are quick to learn.

**Theme – Seniors use the Internet to stay connected**

- Many elderly are using the Internet and email for communication with friends and family. Still some are unconnected but more and more elderly are hooked up.

- When I sit with seniors I ask if they have Internet access and some will say yes but they only use email. A few will try the Internet.
- A lot of folks are online to keep in touch. Seniors use email.
- Only seniors are reluctant to use the Internet.
- Almost everyone even the elderly use the Internet. They are online now, it's amazing. Five years ago the elderly were not online. They use it at home or the public library.

**Theme – Libraries are public access points to health information and the Internet**

- People have a lot of public access. A lot of access through libraries.
- They go to libraries.
- They go to the public library and Learning Resource Center. Libraries are key to access to computers.
- Sometimes they go to the public library. Public librarians also refer folks to the medical library.

**BARRIERS**

**Themes – No broadband and limited skills are barriers to access**

- Not everyone has home access. A lot of folks have dial up. That really limits access.
- Still many don't have Internet access, some that do use dial up. If they don't have broadband it's very slow.
- Not having the skills to access is a barrier.
- More of a digital divide with helping people use the equipment. Not so much access anymore.
- Other barriers include low health literacy and low literacy in general.
- Seniors may have physical issues and visual issues.

**Themes – Low health information literacy is a concern**

- People believe everything they find. They don't ask questions.
- They don't understand the difference between a .com, .net, or .org.
- People will normally take the information that comes up first. If it's Mayo or MedlinePlus they get reliable information. If it's an advertisement they get that.
- Generally, people trust the content.

- I don't think they check.  They know it's not all reliable but they don't evaluate.
- People believe that what they find is all legitimate because they don't understand the difference.  If it has information and looks nice then it's correct.
- Talk with Karen Rogers, Director of Education, at Franklin Memorial 207-779-2575.  She is very interested in health literacy.

## Theme – If people knew of reliable sites they would use them

- It's very easy to find information but reliability is an issue.
- They don't know reliable sites.
- People don't understand how to look and identify reliable sources.  Most people just Google.
- If they knew where to go they would use it.
- If people are guided to a reliable source they will use it. Without that they go anywhere and a lot of it is not good.

## SUPPORTS

## Theme – Adult education programs offer computer skills training and support

- Adult education is where a lot of people learn. They always have classes on basic Internet use.
- Adult education may offer it.  School Administration District (SAD) 9 Adult Education and also in Jay / Livermore Falls Adult Education.  They have computer lab and they may be open to the public.
- SAD 17 Oxford Hills and Buckfield have adult education.  They certainly do have computers classes.
- Central Maine Community College.  They have a big presence in the community.  They probably have a computer lab.
- B-street Community Center has computer lab run by Lewiston Adult Education.
- People learn to use the Internet through adult education classes, and through public library classes.
- Oxford Hills and Buckfield adult education are potential partners.

**Theme – Public libraries also offer computer access and support.**

- Librarians help people.  Norway library is an exceptional library.  Paris library is also strong.  They have a room of computers for youth.
- Public libraries are a big resource.  Taking off the Pounds (TOP) is run out of libraries there is one in Jay.
- If we wanted to do something with libraries Deb Clark could pull together a meeting.  They would want to be involved.  They always include school librarians.
- Public libraries in Farmington, Wilton, New Sharon, Philips, and Jay are all members of the Central Main Library District.  They meet quarterly. Primarily public librarians, school librarians, and special librarians.
- The Lewiston Public Library offers all kinds of workshops in their computer lab.  Excel workshop, online job searching, etc.  The computer lab has 14 computers, all connected to the Internet.
- A couple of years ago we did outreach at each library in the community. They are a great resource.  .


**Theme – The school health program offers a unique opportunity for partnership**

- Schools would also be good.  Talk to the school health coordinators.
- The Oxford Regional High School has a school-based health center run by Stephens Memorial.  They see 60 to 90 kids with health concerns like teen pregnancy.  Eight kids are on the school-based health team.
- Most schools have a health coordinator and school health program.  Could make sure reliable resources are integrated into the health curriculum.  Pat Carson is School Health Coordinator in Regional School Unit (RSU) 17. Rick Colpets is Superintendent.  He is into intensive pilot projects and then if it's successful promotes it to other principals.
- First step would be to meet with the health coordinators.  They would then have to sell it to the Superintendent.  We could do a train the health for teachers and librarians.  Lori is School Health Coordinator in RSU 44.
- If it's not simple and straight forward it won't work.  Also trust is a big issue.  It needs to be promoted by the schools or someone else they trust.

**Theme – Community-based organizations are important resources**

- Career centers have computers but are focused towards careers.
- Area Agency on Aging - SeniorsPlus – covers the Western District.
- REACH – domestic violence prevention program.
- Tri-County Mental Health covers the Western District.
- Community Concepts is the CAP agency in the Western District.
- Municipalities and Chambers of Commerce.
- Community dental is another.
- The Healthy Maine Partnerships serving the Western Health District- Healthy Oxford Hills, River Valley Healthy Communities Coalition, Healthy Androscoggin, and Franklin Community Health Network.
- The Learning Resource Center (a consumer health library) at Stephens Memorial

## OUTREACH

**Theme:  Immediate training opportunities**

- Matter of Balance is eight workshops to help seniors overcome their fears of falling.  This could be an opportunity to show them resources to help them.
- Worksites have a great potential.  Healthy Oxford Hills maintains a worksite round table.  Could have someone do a 20 – 30 minute presentation and give out materials.  Meets four times a year.
- The Learning Resource Center could add something onto our community lunch for the elderly and have a little program after lunch.
- October 1, 2010, there is a Healthy Seniors Conference at Sunday River.  SeniorsPlus puts it on once a year.  Could do a session on using the Internet or a table.
- The Lewiston Public Library computer lab is open from 9 – 3.  College students help people with problems filling out forms online and job searching online.  This trained group of lab monitors might be open to working together.  They don't have much training with online health information.
- Maybe have health week with information in libraries.  Could be a coordinated effort where libraries had displays of books and set up computer workshops for the community.

- Healthy Oxford Hills could weave it into their services. Could feed reliable Internet resources into their Powerpoint presentations or give out handouts.
- The Learning Resource Center does a lot of outreach. We have resources and a good space. They also take education out to the community. We hold classes here in the big conference room or out in the South Paris church or in the Bethel community center.
- The hospital [Franklin Memorial] is planning a partnership with Maine Medical and Tufts University School of Medicine. Train medical students when they are being formed. Will start next year. Call Dr. David Dixon or Dr. Kimberly Gooch at Franklin taking lead at Tufts.
- Gold Leaf is a non-profit for seniors. UMF contributes space. They do mini courses on topics of interest to seniors. Call University of Maine at Farmington and ask to talk with someone from Gold Leaf Institute. Janet O'Neil does office support.
- KeepMeWell.org is an online health assessment tool developed by the state. They are promoting it and sending folks to the libraries if they don't have computers. But librarians are not trained on KeepMEWell.org other health sites.

**Theme: Media outlets for promotion.**
- In the fall and spring, an adult education brochure is mailed to every household. We could put in a half-page advertisement for $100.
- Promote in local newspapers such as the Sun Journal and Bethel Citizen. People do read local newspapers. Also through local radio WOXO, and other stations.
- Local TV public access channel has a calendar of events or will run a video.
- We have a spot on the Daily Bull Dog which is an online newspaper, mostly reaches Farmington but also Jay. It's well used in the community and the Community Health Network has a column. Contact Bobby Hanston.
- MyHealthyCommunity.org is a social networking site and many departments at Franklin Memorial are using it as a tool to have blogs and post information and do online chats  I use it to post parent resources around substance abuse.

## PROVIDENCE, RHODE ISLAND

**Literature Review:** Rhode Island is a small state in New England. In 2008, the population of Rhode Island was just over one million people (US Census Website,

2008). Of that, approximately 11.6% identify as either of Hispanic or Latino[2] origin according to census data. And 20% of the population speaks a language other than English at home. Rhode Island had a median household income above the national average, and as of December 2009, the unemployment rate is around 13%. The leading causes of death for Rhode Island residents are: heart disease, cancer, stroke, chronic lung diseases, pneumonia, and influenza (Rhode Island Department of Health, Minority Health Office, n.d.).

**Latino Population in Rhode Island:** Many of the Hispanics in Rhode Island are from Puerto Rico, the Dominican Republic and Columbia. Ninety-eight percent of Rhode Island's Hispanic population lives in urban areas, primarily Providence, Pawtucket and Central Falls. Approximately 78% of the Hispanic population over five speaks Spanish at home, and 37% report speaking English poorly or not at all. Cancer, heart disease, homicide, AIDS, and unintentional injuries are the leading causes of death for the Hispanic population in Rhode Island.  Latinos in Rhode Island are less likely to smoke and consume alcohol than the general population. They are also more likely to consume five or more servings of fruits and vegetables a day compared to the rest of the population. However, Latinos in Rhode Island are more likely to be obese than the general population of the state (Rhode Island Department of Health, Minority Health Office, n.d.).

The Latino population in Rhode Island is growing rapidly and the needs of the community are changing as quickly. Rhode Island is not one of the mature immigrant gateway states like New York, Illinois and Florida, but since 1990 Rhode Island's Latino population has grown rapidly (Elder, J., Ayala, G., Medina, D. & Talavera, G., 2009). As a newer immigrant destination, Rhode Island does not have the same support network that the mature immigrant gateway states have had the opportunity to build. So there are greater barriers to health care services.  The demographics of the community are changing, the Latino community in Rhode Island started out being mainly male, but now

---

[2] According to the U.S. Census, Hispanics or Latinos are individuals who classify themselves as either: Spanish, Hispanic or Latino or list themselves as Mexican, Mexican-American, Chicano, Puerto Rican, or Cuban. (United States Census, Hispanic Origin Information, 2000)

more men are bringing their families to Rhode Island (Elder, J., Ayala, G., Medina, D. & Talavera, G., 2009).

**Latino Health Information Seeking Preferences:** In order to effectively reach members of the Latino community, messages to Latinos must be tailored and in-line with the traditional values of family and social groups come before the individual. Latinos respond to messages that focus on family and community health over messages that are directed at an individual.  (Elder, JP. Ayala, G., Medina, D., Talavera, G., 2009). Overall, Latinos perceived family support and approval as being more important than making an individual decision (Apodaca, X, Woodruff, S., Candelaria, J, Elder, JP, & Zlot, A, 1997).  Britigan, Murnan, and Rojas- Guyler, found that overwhelmingly Latinos in their study sought health information for family members and friends (2009). Which will require tailored health communication and community interventions for Latinos versus messages geared to the general public that are directed at the individual (Elder, 2009, Marin, G, & Triandic, 1997). Latinos prefer to hear about health information through more personal interactions. Promotoras have been one successful model in reaching members of the Latino community. The Secretos de la Buena Vida, a program targeting the diets of Latinas is an example of the success of Promotoras (Elder, 2009).

**Latinos Online:** From 2006 to 2008, there was a 10% rise in the number of Latinos in the United Stets using the Internet. This brings the number of Latinos in the United States who use the Internet to 64% (Livingston, G., Parker, K., & Fox, S., 2009). There are still dramatic differences between Latinos who were born in the United States versus foreign born, who are college graduates versus less than a high school diploma, and who have an income less than $30,000 versus $50,000 or more. Age is also a factor: 77% of Latinos between 18-34 use the Internet, 65% of Latinos between 35-49 use the Internet, 53% of Latinos between the ages of 50-64, and 25% of Latinos over 65 are online (Livingston, G., Parker, K., & Fox, S., 2009).

However, a lower proportion of Hispanics compared to non-Hispanic whites reported using the Internet to look for and find health information. Latinos agree that the Internet can be a useful tool in improving health, and studies have shown that when Latinos have access to the Internet they are confident they can find the health information (Pena-Percell, 2008).

**Key Informant Results:** Interviews were conducted with ten service providers living and working in Providence, Rhode Island and includes staff from two adult education programs, two public librarians, the largest community health center serving Latinos, and the director of minority health at the Rhode Island Department of Health. Data is organized into six major themes (demographics, language and culture, community concerns, health information, the Internet – barriers and supports, and outreach ideas and opportunities) and 23 sub themes. Below each subtheme are the direct quotes from key informants related to that topic. It is within these 23 subthemes and direct quotes that patterns and insights emerge that will inform how the NN/LM – NER might improve its health information outreach and services to this community.

## DEMOGRAPHIS

### Theme – Diversity and county of origin

- Rhode Island has a very large ethnic community – one of the largest in the country. Culture, language and literacy are all diverse in the community.
- We serve racial and ethnic populations. We also work with populations recently settled here. Now we see a lot of African and Iraqi refugees.
- There is a rich and large Hispanic community mostly from the Dominican Republic, Puerto Rico, and Guatemala. From all over South America.
- The Hispanic community in Providence is from Guatemala, Dominican, Colombia, Salvador, Mexico, and Bolivia.
- A majority of the Latino community is from Columbia and Guatemala.

**LANGUAGE AND CULTURE**

**Theme – Culture and use of health care services**

- Unless they are really sick they do not go to the doctor. They also find ways to get medicine from their country.
- Culture of going to the doctor. People wait until the last minute to see a doctor. People will wait until they go back to their home country to see doctors.
- Many from the Latino community will say yes to a doctor or their recommendations to appease the doctor but will not follow through.
- Members of the community do not see the point of preventive care. If you are healthy or are not feeling too bad then there is no reason to see the doctor.
- It is only necessary to see a doctor if you are really feeling bad and then you go to the emergency room.
- Members of the community try to hold on to cultural remedies and see someone who has a tea or other remedy that will diagnose or make you feel better. Many Latinos do not talk about health.
- They rely on medicine from local stores. Any Bodega has over the counter medicine.

**Theme – Language as a barrier to health care**

- We do a lot of work around language access. Making sure people know about the CLAS standards and they have access to translators in all settings, and written materials available in their language so they can make informed health care decisions.
- Language and being afraid because they are not documented are barriers to care.
- Economics and language prevent people from seeking out care.
- Language and culture are barriers for Latinos to access information and care.
- Health literacy is a key issue.

**COMMUNITY CONCERNS**

**Theme – Health insurance**

- Many students do not have health insurance. Not having insurance is a concern.
- Not having health insurance.

- People often need help finding a doctor or and health center or they are trying to find health insurance.
- Access to care is the biggest issue for people in the community.  They want to receive preventive services, but cannot afford them.  Cost of care weights on their minds.
- Cost of care and greater access will also encourage members of the Latino community to seek preventive care.

**Theme – Chronic disease is a community health concern**
- Diabetes is a big issue in the community.
- Other health topics include chronic conditions, high blood pressure.  And how to identify stoke.
- Diabetes, obesity, diet, chronic disease are health topics of concern.
- There is a huge concern about diabetes.  Almost 100% of the state's population has diabetes.
- There is concern about chronic illness, but people feel like there is little they can do to change the situation.
- Blood pressure, cholesterol, prostate cancer screenings are extremely popular with the Latino community.
   There is great concern from chronic illnesses.
- Latinos in Rhode Island are concerned with diabetes and childhood obesity.  High blood pressure and cancer are also of concern.

**Theme – Asthma and other environmental health issues**
- High on the community priority list is asthma, diabetes, cardiovascular disease, and obesity.  There is also an issue around lead because the housing is older.
- There is a growing awareness of the need for a healthy environment.
- Community members are concerned with lead poisoning, asthma, diabetes, heart disease, and cancer.
- Asthma, diabetes, and obesity are health topics of concern.  Also depression for adults and teens.

**Theme – Other health concerns**

- Last year students were asking about Swine flu.  They didn't know what they were supposed to do. The Internet could have helped.
- For men, respiratory illnesses.  They come from the tropics and in the cold weather they don't dress warm enough and they get sick.  Allergies too.
- In the Latino community unintended deaths and homicide are above state average.
- Patrons often ask about oral health, nutrition, obesity, drugs, STIs, and alcoholism.
- Pregnancy is a topic of concern.  Young women don't know what to do.
- All topics related to child health and checkups.  Health in general.

**Theme – Healthy foods**

- People want to eat healthier, but there is nowhere for people to go to buy fresh fruit and vegetables.  There are not enough supermarkets in Latino neighborhoods.
- In order to stay healthy everyone cooks.  But it is sometimes hard to find fruits and vegetables and other foods that they are used to eating in their home culture.

**HEALTH INFORMATION**

**Theme – When looking for health information Latinos begin by asking people they know and trust**

- To get information Hispanics ask people – word of mouth is how they find out about doctors and health centers.
- People go to family and friends to find health information.
- They do ask their family members and friends.  Often times it's a younger relative who has a better grasp on the language, technology, and culture to help.
- The Latino population has an informal network of community leaders and people go to them.
- Latinos want more personal interaction.
- Also goes word of mouth.
- Most commonly people ask friends or family for health information.
- People will seek out information from friends and family. Word of mouth is an essential part of finding out health information in the Latino community.

**Theme –The radio is an important source of health information**

- There is a doctor named Pablo Rodriquez.  He does a radio show every morning called Nuestras Salud.  Everybody listens to that show.
- Radio too such as Poder 1110.
- There is a public health doctor called Pablo Rodriquez who does a TV and radio health show.  People will go to those programs for health information.
- For the older population public radio is one of the main vehicles to get out information.  There is a strong network of Spanish access TV and radio that folks utilize very well.

**Theme – Public libraries and community health centers are recognized health information resources**

- They go to the library.
- They use computers in all the libraries as well.  Public libraries have public access computers.  These computers are often used by high school students and younger.
- The community uses the library as and information community center.
- Community health centers help people find health information.
- Community health centers are key to helping people find health information.  Blackstone Community Health Center for example.
- A lot of health fairs.  Always health fairs.  Everyone does health fairs.

**THE INTERNET**

**Theme – Latinos online**

- I believe computers are in 95% of homes.  All Hispanics have access to computers.
- A growing number of members of the Latino community have access to the Internet, but it is mainly young people that are using it.
- Yes they do go to the Internet to find health information.  Definitely my professionals from other countries.  In my opinion, very few don't use the Internet.  R
- People access computers at home and in school.  But the computers in the schools are old and don't work well at all.
- Internet access is increasing.
- Younger people access the Internet across racial and ethnic lines.

**Theme – Specific websites**

- I go to sites I know already. But I don't have a health site I go to.
- Need to have Spanish web address. Something they would remember. SaludParaMi.org or FamiliaSaludable.org. Most people don't speak English.
- I like English sites so I can practice my English but the health sites I looked at were in Spanish.
- People need to hear about a site from someone they know or trust to be willing to go to it. They will not go on their won and are skeptical the information is accurate.

**BARRIERS**

**Theme – No computer at home**

- No access to computers and the Internet due to economic conditions.
- Not having a computer at home, not being computer literate, not speaking English, not reading Spanish or another language are barriers to using the Internet to find health information.
- General access to computers and the Internet is a barrier to accessing health information. Public library system not always perceived as accessible.

**Theme – The language barrier**

- Communication barriers if they do not Speak English, because there is a general lack of Spanish language speaking librarians in Rhode Island.
- Illegal immigrants are afraid to go to the library to ask for assistance. Many Latinos see the public library as an instrument of the government and are afraid to use their services for fear of being turned into immigration authorities.
- Other barriers could be financial. Now you need to pay for information online.

**Theme – Low health information literacy skills**

- People do use the Internet, but it is mainly just using Google and searching and they do not know if the information they are finding is accurate.
- I do not think people use the Internet in a way that provides reliable and trustworthy information. I don't think people know the difference.

- People are not confident that they can find the information they are looking for and do not know if it will be accurate or not.
- They don't know if the information they found is accurate, they don't even know that it could be wrong.
- People don't always decide if it's a trusted source or not.
- Especially difficult if you don't have computers skills.  Also low literacy and speaking a language other than English.
- Do not have the information literacy skills necessary to use the computer or conduct information searches.
- Also being able to just navigate where to find information.  People mostly trust the information they find.  How to determine who to trust is a higher level skill.

**Theme – Latinos generally do not  ask health care providers questions**
- Many people do not question health care providers and do not ask any questions because culturally doctors should not be questioned.
- People do not know how to ask questions about their health.  People are nervous and intimidated in the best of circumstances.
- With the Latino population there are additional language and cultural barriers.  Patients will answer specific questions, but will not offer additional information.
- Mostly we as Latinos and immigrants don't ask too many questions.  The doctors ask the questions the patient answers the questions.
- We are taught not to question things.  They don't know what questions to ask.  Culture says don't question doctors or teachers.

**SUPPORTS**

**Theme – Libraries and adult education programs offer computer training and support**
- The library is one of the resources in the community that assists people in finding health information.
- Libraries also have computer education.
- Libraries are another good option for teaching people how to use the Internet and find good health information.

- Libraries have access.
- The Welcome Back Center is providing basic computer classes this summer. Just basic for those in my program. There is a computer lab.
- Hispanics and Technology and Education? (HITEP?). Their mission is to provide education about technology and computers to the Hispanic population in Providence. Anything that has to do with computers, Oscar Mejias can do it. All courses are taught in Spanish.
- Dorcus Place has a computer lab. Computer training is integrated into the curriculum. They have a full time computer teacher.

## Theme – Network of Minority Health Centers serves and supports the Latino community in Providence

- The starting point is community-based organizations that work directly with the target audience. They are trusted and provide culturally and linguistically appropriate information.
- Progreso Latino and International Institute do a lot of work with the Latino community in Rhode Island.
- Channel One, Progreso Latino, and Blackstone Health Center all do important work in the community and are well respected by the community.
- Rhode Island Family Literacy and Progreso Latino are the two biggest ESL providers in the state, maybe an NLM grant and pilot project could be set up to create this type of program.

## Theme – Program for foreign born health professionals offer train-the-trainer opportunity

- The problem for many foreign born professionals is that they are over qualified for many jobs, under qualified for other jobs. Some are doctors but not licensed in the U.S. There is no orientation to what they need to do to work in their field here in the U.S.
- We provide services for internationally training professionals. Wey now have 202 participants. We do some ESL classes but not everyone needs English classes.
- A lot of esteem issues and loss of identity.
- The foreign born professionals that are in the Welcome Back Center will become leaders in the community. So they could help others. A course or workshop on reliable

consumer health information and training on resources for health professionals would be of great value to this group.  They could be trained and then teach others in the community.

## OUTREACH IDEAS

### Theme – Training opportunities

- I would put it in my class.  It's about health and they would love it. My computers sessions meet every Saturday 3.5 hours for eight Saturdays. It's not a formal class, but a drop in whenever they want to learn. I could have a guest speaker during the class.
- The International Institute is always looking for speakers for different subjects – healthcare, immigration, fire department.  They do presentations in the cafeteria.  Mostly they are done in English.
- I think there needs to be more training for library staff on the best Internet sources to find health information.  Regular training on MedlinePlus and other NLM sites would be a good start.
- Also reaching out to the local ESL program to add a piece on information literacy in general and how to search for health information in particular would be a great start. Also the Rhode Island Department of Health has a certification program called Diabetes Information and Referral and Education Specialist (DIRES). This program trains people at health centers, community centers, etc to be able to interact with the community on the issue of diabetes, obesity, and chronic disease.  Perhaps during the training session an NLM specialist could do a session on MedlinePlus, NIHSeniorHealth, and other resources.
- Resource specialists are community health workers and serve as patient navigators. The Minority Health Program supports them in our projects.  For example, a pediatric enhancement program has parents there to help other parents navigate.
- The have a health education program in the schools.  The DOE and DPH partner on this.  They do work with an online journal called TRRIV or RIDE.  Adolescent health issues of concern. Used by teachers and programs in the schools.
- Minority Health Promotion Centers funded by the Minority Health Department would be interested.  Most are multi service agencies and they have computer labs that are underutilized.

- Brown has a group of Latino Medical Students.  They can also bring information to the community.  They don't know this information.
- Parent Information Center.  They have a computer lab and train parents where to find information.  Lisa Schaffran is Associate Director.  They would be a good partner.  Give a workshop on how parents can navigate the Internet for support groups for parents with children with specific conditions.

## Theme – Promotion

- Dr. Pablo Rodrique has a radio show, Nuestras Salude 88.1 AM.  He brings in experts to provide information on a topic of the day.  People call in and he guides them.  Everyone listens to that show.  He's very well respected.
- Latino professionals meet once a month.  They meet at the South Side Restaurant. They meet the second Friday of the month 6-9 pm.
- There are a number of Latino doctors in the community that are well known and have been around a long time.  Community members trust them and they are well respected – Dr. Jose Blanco and Dr. Pablo Rodriquez.
- If they see websites on the TV or in other media, they go to these sites.
- There is a big event called Back-to-School Celebration in August.  They have ten sites and they give out 10,000 backpacks.  NN/LM NER could be a co-sponsor for $500 and could put information into the backpacks.  Jorge Cardenas, Neighborhood Health Plan is organizing it.

## Theme – Other

- Someone from Brown is doing a study and some Minority Health Promotion Centers are intervention and some control.  The study is related to health information and the Internet.  Need to find out more about this.
- There is work in Providence to adapt the public libraries and incorporate health into their model.  They have developed the model to support both basic literacy and health literacy.  They see the library as more of a community hub.  Leadership group called Library Network of Providence.  Marcus Mitchell oversees one or two of the community library branches.  Library branches are being more creative.  This could be the place to work on literacy and health.

**Recommendations:** The following recommendations are drawn from the information collected from interviews with key informants and from the consultant's experience as a health information literacy specialist. It must be emphasized that this is not a complete list as new insights will emerge as the project team reviews and discusses the data.

**Western Maine Health District**

1. *The community is rural with a growing elderly population.* Focus outreach efforts on meeting the health information and computer literacy needs of seniors. An immediate outreach opportunity is the Healthy Seniors Conference on October 1, 2010 in Oxford County. In Franklin County, The Gold Leaf Institute might be interested in adding health information and the Internet to their mini-course offerings for seniors.

2. *Very little ethnic diversity except in Lewiston where there is a young and growing Somali community.* Consider outreach efforts that address the language, culture, and health needs of the Somali community in Lewiston/Auburn. Healthy Androscoggin, Lewiston Adult Education, and the Lewiston Public Library all offer opportunities for teaching and training.

3. *Community-based organizations are important resources and potential partners.* Specifically, the four Healthy Maine Partnerships would be key allies in developing, implementing, and sustaining any health information outreach in the Western Maine Health District. They are also well connected to the schools, hospitals, social services agencies, public libraries, municipalities, and businesses in the area.

4. *The school health program offers a unique opportunity for partnership.* Most schools have health teachers and a school health coordinator. In addition, the Maine laptop initiative encourages Internet skills development. Work with the

school health coordinators to integrate health information literacy into the curriculum.

5.  *People use the Internet and access computers in their homes, schools, libraries, and workplaces.* However, because broadband is limited and unemployment and low levels of education are prevalent partnering with public libraries, adult education, and other community agencies will help with public access and support.

**Providence, Rhode Island**

1.  *When looking for health information, Latinos begin by asking people they know and trust.* There is an informal network of community leaders that people go to for advice. They also meet regularly. At least two key informants are active in this group. Be sure to engage these leaders in any Latino community health information outreach efforts.

2.  *Program for foreign born health professionals offers a train-the-trainer opportunity.* The Welcome Back Center provides support to internationally trained health professionals looking to work in their field in the U.S. Partner with this program. Offer training on resources for health professionals and for consumers. Provide stipends for a train-the-trainer model where participants then train others in their community.

3.  *The radio is an important source of health information for the Latino community.* Work with local radio stations to promote MedlinePlus in Spanish. Specifically, contact Dr. Pablo Rodriquez who has a radio show every morning, called Nuestras Salud 88.1 AM. Develop public service announcement, speak on his show, work with other Spanish radio stations as well.

4.  *Libraries and adult education programs offer computer training and support.*
    Develop and integrate health information literacy lessons into computer training
    programs in Spanish.  Work with libraries and adult education programs.
    Participate in their health fairs and give general presentations on Spanish health
    information on the Internet.  Immediate opportunity is Back-to-School Celebration
    in August.  They give out 10,000 backpacks.  NN/LM NER could be a co-sponsor
    and get information into the backpacks.

5.  *Network of Minority Health Centers serves and support the Latino community in
    Providence.*  These programs are funded by the Department of Public Health
    Minority Health Program.  Work with these centers individually or through the
    Minority Health Program to integrate health information literacy as a priority in
    the next funding cycle.

# References

Apodaca, JX, Woodruff,SI, Candelaria, J, Elder, JP & Zlot, A (1997) Hispanic Health Program Participant and Nonparticipant Characteristics. *American journal of health behavior, 21,* 353-363.

Britigan, D., Murnan, J.,& Rijas-Guyler, L. (2009) A Qualitative study examining Latino functional health literacy levels and sources of health information. *Journal of community health*, *34*:222-230.

Chang, et al (2004). Bridging the Digital Divide: Reaching Vulnerable Populations. *J Am Med Inform Assoc.* 11:448-457.

Chu, A., Huber, J., Mastel-Smith, B. & Cesario, S. (2009) Partnering with senior citizens for better health: Computer use and Internet health information retrieval among older adults in a low socioeconomic community. *Journal of the medical library association*, *97*(1) np.

Elder, J., Ayala, G., Parra-Medina, D., Talavera, G. (2009). Health communication in the Latino community: Issues and approaches. *Annual review of public health,* 30, 277-251.

Flaherty, MG and Roberts L (2009).  Rural Outreach Training Efforts to Clinicians and Public Library Staff: NLM Resource Promotion.  *Journal of Consumer Health on the Internet.* 13:14-30.

Horrigan (2010). Broadband Adoption and Use in American OBI Working Paper Series No.1. Federal Communication Commission.  Retrieved on July 10, 2010, from http://online.wsj.com/public/resources/documents/FCCSurvey.pdf

Livingston, G., Parker, K., & Fox, S. (2009).  Pew Latinos online, 2006-2008: Narrowing the gap report.

Maine DHHS, CDC (2010) Maine State Profile of Select Public Health Indicators. Retrieved on July 13, 2010, from http://www.maine.gov/dhhs/boh/phdata/2010-Maine-Public-Health-District-Indicator.pdf

Marin, G, & Triandis, HC. 1996. Perceptions by Hispanics of channels and sources of health information regarding cigarette smoking. Tobacco Control 5(1):30-36.

McKeehan N, Trettin L, & May J (2008). Improving Access to Health Information in Rural South Carolina. *Journal of Health Care for the Poor and Underserved.* 19:484-492.

Office of Data, Research, and Vital Statistics, Maine DHHS. Fast Facts – Maine Health Data. Retrieved on July 12, 2010, from www.maine.gov/dhhs/boh/phs/odrvs/data/fast2002.htm …

Olney, C., Wood, F., Hansen, L., & Bowden, V. (2005). High school peer tutors teach MedlinePlus: A model for Hispanic outreach. *Journal of medical library association*, *93*(2), 243-252.

Pena-Purcell, N. (2008). Hispanics' use of Internet health information: An exploratory study. *Journal of medical library association*. *96*(2) p101-107.

Pew Internet & American Life Project (2009). Trend Data December 2009. Retrieved on July 10, 2010, from http://www.pewinternet.org/Trend-Data/Whos-Online.aspx

Rainie L, Reddy P, & Bell P (2004). Pew Internet & American Life Project, Rural Areas and the Internet. Retrieved on July 10, 2010 from www.pewinternet.org/Reports/2004/Rural-Areas-and-the-Internet.aspx

Rhode Island Department of Labor and Training. (n.d.) Latino and Hispanic Culture and Health. Retrieved on February, 21, 2010, from: http://www.dlt.state.ri.us/

Rhode Island Department of Health: Department of Minority Health. Retrieved on February, 3, 2010, from: http://www.health.ri.gov/chic/minority/lat_cul.php

U.S. Census Bureau. 2006-2008 American Community Survey 3-Year Estimates Retrieved on July 12, 2010 from http://factfinder.census.gov/servlet/ACSCWSfacts?_event=ChangeGeoContext&geo_id=0...
U.S. Census Bureau. Rhode Island. Retrieved on 2/21/2010: http://quickfacts.census.gov/qfd/states/44000.html

United States Census, Hispanic Origin Information, 2000. Retrieved on May 1, 2010 from: http://quickfacts.census.gov/qfd/meta/long_68188.htm

United States Census, Urban and Rural Classification, 2000. Retrieved on July 17, 2010 from http://www.census.gov/geo/www/ua/ua_2k.html