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Focused Outreach Evaluation Report: Providence RI, and Western Maine Health District

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National Network of Libraries of Medicine New England Region

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Executive Summary

Recognizing the need to improve health information outreach to special populations, the National Network of Libraries of Medicine – New England Region (NN/LM NER) targeted its core outreach services in a focused geographic area. The purpose of the focused outreach approach was to increase access to accurate and reliable health information in communities experiencing health disparities; and to collect process and outcomes evaluation data for program improvement. The project was conceptualized in three phases: 1) Community Assessment: a systematic approach to understanding the community and connecting NN/LM NER with community-based organizations serving the targeted population; 2) Focused Outreach Implementation: a tailored approach using the existing promotional framework of NN/LM NER and its resources; and 3) Evaluation: a comprehensive approach to looking at and documenting the process of conducting focused health information outreach and assessing outputs and outcomes as a way of measuring the effectiveness of the model. Two communities were selected for focused outreach – Providence, Rhode Island’s Latino community and rural residents in Western Maine (Androscoggin, Franklin and Oxford Counties). At least five community-based agencies in each focused outreach area demonstrated support for the project by hosting trainings and distributing promotion materials. Immediately after participating in trainings, 93% of consumers indicated on post-evaluations knowledge of MedlinePlus as compared to 14% on pre-evaluations. Approximately eight weeks after training, 40% of consumers who responded to follow-up (N=15) indicated that they had used MedlinePlus since the training. Among service providers who responded to the follow-up (N=28), 69% said they shared information from the training with other health service providers and 56% said they had shared the information with a client or community member. This report describes in detail how focused outreach helped NN/LM NER achieve its goal of improved access to accurate and reliable health information in communities of need, and provides process details for program improvement and future replication of the model.
Purpose of the Project
The purpose of the project was to increase health information literacy and access to accurate and reliable health information in two distinct communities experiencing health disparities: Providence, Rhode Island’s predominantly Latino community and Western Maine’s predominantly rural community; and to collect formative and summative evaluation data related to a new focused health information outreach approach. The project was conducted by the National Network of Libraries of Medicine – New England Region (NN/LM NER) in an effort to enhance its services and improve its effectiveness within the region.

Background Information
Recognizing that the NN/LM NER needed to improve its health information outreach to special populations, outreach coordinators and directors discussed a new approach to offering core outreach services, including training of health care professionals, training of community members, and the distribution of promotional materials. The new approach would be NER-focused, rather than a modification of funded outreach projects; focus on populations experiencing disparities, rather than the entire region, and allow for the opportunity to collect and analyze evaluation data and report measureable results.

Discussion led to an approach in which NN/LM NER targeted its efforts on a specific population in a focused geographic area. Such an approach presented many interesting possibilities. A focused approach would allow for a systematic identification of community health assets and needs and key agencies with which to establish relationships. A focused approach targeting a specific population, in a specific geographic area would allow for the collecting of baseline and follow-up data on health information resources and needs. NN/LM NER’s traditional approach to health information outreach throughout the entire region does not lend itself to collecting this type of information at the community or regional level. In addition, these data could be used to inform future health information outreach efforts. Staff investigated populations in the region where little or no outreach had been conducted and selected two geographic areas, one urban and one rural. Providence, Rhode Island’s Latino community was selected for focused outreach because of NLM’s focus on Latinos to reduce health disparities. Three counties in Western
Maine (Androscoggin, Franklin, and Oxford), known as the Western Maine Health District, were selected because rural communities also experience health disparities and limited access to health information.

Another topic of discussion was how the work would be accomplished and who would take on the new effort. One approach was to have all outreach coordinators involved in the effort. A concern with this approach was the coordinators’ abilities to continue serving the needs of the entire region while developing and evaluating a new model in a focused geographic area. To address this concern NN/LM NER contracted with Sabrina Kurtz-Rossi, a health literacy consultant with health information outreach implementation and evaluation experience. Her role was to work with NN/LM NER staff to develop and evaluate the model. Specifically, she was contracted to conduct a community assessment, develop a tailored health information outreach plan based on findings from the community assessment, and implement a comprehensive evaluation plan using NLM Outreach and Evaluation Resource Center (OERC) methods.

Project Description

The project was conceptualized in three phases: 1) Community Assessment: a systematic approach to conducting community assessments and connecting NN/LM NER with community-based organizations and other agencies serving the targeted populations; 2) Focused Outreach Implementation: a tailored approach to health information outreach using the existing promotional framework of NN/LM NER and its resources; and 3) Evaluation: a comprehensive approach to looking at and documenting the process of conducting focused health information outreach and assessing outputs and outcomes as a way of measuring the effectiveness of the model.

**Phase 1: Community Assessment**

A community assessment was conducted in two communities selected for focused outreach – Providence, Rhode Island’s Latino community and rural residents in Western Maine (Androscoggin, Franklin and Oxford Counties).

**Purpose:**

To guide decisions related to tailoring health information outreach to meet the needs of targeted populations; and to identify community-based organizations that would partner with NN/LM NER to conduct health information outreach in their communities.

**Methods:**

Key informant interviews were conducted as an intensive data collection method to gain an understanding of the strengths and needs of each community. A review of the literature on the health information seeking behaviors of Latinos was conducted, as was a literature review on the health information seeking behaviors of rural populations. An inventory of health information outreach activities conducted in each of the targeted geographic areas over the past two years was also compiled. The Community Assessment Process Map documents step-by-step how Phase 1 of the project was accomplished (see Appendix A).

NN/LM NER members and other known community contacts were called or emailed regarding the focused outreach effort and asked to recommend possible key informants. Key informants were defined as those living or working within the focused outreach geographic area and directly serving the targeted population. Potential key informants were provided with a very brief description of the project and asked if they were willing to be interviewed. All interviews were conducted in-person and lasted approximately 45 minutes. The key informant’s place of work was the preferred location as this helped the interviewer / focused outreach coordinator better understand the context and community in which the key informant worked. Using a snowball sampling technique, key informants were asked to recommend others in the community who might be interested in the topic and willing to participate. A Key Informant Contact List was developed for each community (see Appendix B).
A semi-structured Key Informant Interview Protocol with open ended questions was designed and administered (see Appendix C). The interviewer took detailed notes during the interview and reviewed these notes immediately afterward the interview to insure completeness. Transcripts were read in order to generate a list of general themes. Once themes were recognized “units” of data (phrases, sentences or paragraphs) related to each theme was noted. Each theme was named and all data coded to that theme were organized together. In this way community patterns were identified and described.

Results:
A total of 19 key informant interviews were conducted: nine in Western Maine and 10 in Providence, Rhode Island. The following is a list of key patterns and recommendations identified as a result of the community assessment. A detailed description of processes and findings can be found in the Community Assessment mid-project report submitted July 27, 2010 (see Appendix D).

**Western Maine**

- The community is rural with a growing senior population. Consider focusing outreach efforts on meeting the health information and computer literacy needs of seniors.
- There is very little ethnic diversity in the region except for a small but growing Somali new immigrant community. Consider outreach efforts that address the language, culture and health information needs of the Somali community in Lewiston/Auburn.
- Community-based organizations are strong potential partners. Specifically, the four Healthy Maine Partnerships would be key allies in developing, implementing and sustaining any health information outreach in Western Maine.
- The school health program offers opportunities for partnership. Consider working with school health coordinators to integrate health information literacy into curricula.
- People use the Internet in their homes, schools, libraries and workplaces. Broadband is limited, however, so partnering with public libraries, adult education centers and other community agencies would provide public access and support.
**Providence, Rhode Island**

- When looking for health information, Latinos in this community begin by asking people they know. Be sure to engage community leaders in any Latino community health information outreach efforts.
- A program for foreign trained health professionals offers a unique partnering opportunity. Partner with The Welcome Back Center using a train-the-trainer model where participants would conduct outreach and train others in their community.
- The radio is an important source of health information for Latinos in the Providence area. Try connecting with local Latino radio stations to promote MedlinePlus in Spanish.
- Libraries and adult education programs offer computer training and support. Developing and integrating health information literacy lessons into computer training programs offered in Spanish would help develop skills and provide needed support.
- A Network of Minority Health Centers serves and supports the Latinos in Providence. Look to establish relationships with these centers individually or through the Rhode Island Department of Health Minority Health Program.

**Data Sources:**
- Community Assessment Process Map (Appendix A)
- Key Informant Interview Protocol (Appendix B)
- Key Informant Contact List(s) (Appendix C)
- Community Assessment Report (Appendix D)

**Phase 2: Focused Outreach Implementation**

A tailored health information outreach plan was developed and implemented to meet the needs and leverage the assets identified via the community assessment process in each of the focused outreach communities – Providence Rhode Island’s Latino community and rural residents in Western Maine (Androscoggin, Franklin and Oxford Counties).
**Purpose:**
To increase knowledge and use of National Library of Medicine (NLM) resources using a tailored health information outreach approach and partnering with community-based organizations in selected communities experiencing health disparities.

**Methods:**
The project team began by reviewing and discussing results from the community assessment in each of the focused outreach areas. Based on these results, the project team strategized how to tailor health information outreach efforts and which community-based organizations to partner with. The team decided on the following community specific health information outreach approaches. The Implementation Process Map documents step-by-step how Phase 2 of the project was accomplished (Appendix E).

**Providence, Rhode Island**
Partner with the Welcome Back Center in Providence, Rhode Island. The Welcome Back Center is a program at Dorcas Place Adult and Family Learning Center dedicated to helping foreign trained health professionals get the certifications they need to practice in the U.S. Implement a train-the-trainer model to train five Welcome Back Center participants to teach Spanish speakers in the community about MedlinePlus and MedlinePlus in Spanish. Work with the Rhode Island Department of Health, Office of Minority Health to explore long term opportunities with their network of Minority Health Promotion Centers. Promote NLM products and services via public libraries, adult education programs, health fairs, and Spanish language radio.

**Western Maine**
Partner with Healthy Maine Partnerships (HMPs) in the Western Maine Health District. HMPs are community-based organizations that receive support from the Maine CDC to address public health issues at the local level. Provide stipends to support HMP’s to conduct health information outreach targeting older adults. Work with Gold Leaf, SeniorsPlus and other agencies serving seniors to schedule classes and explore future training opportunities. Promote NLM products and services via public libraries, adult education programs, senior events, and local newspaper.
Once these general approaches were decided, the project team developed a detailed Implementation Table for each focused outreach area with specific steps to accomplish, tasks and a timeline (see Appendix F). These documents operationalized the approach and gave project team members a common understanding of what needed to be done, who needed to do it, and by when. For example, a key part of the approach in Maine was collaborating with the Healthy Maine Partnerships (HMPs). The tasks needed to make that happen included meeting with the directors of each of the HMPs to discuss the project and how we might work together. The next step, once a common interest was established, was to write up a document describing expectations and supports. We decided the HMPs would coordinate two service provider trainings in their area and NN/LM NER would supply the trainers and training materials. The focus of the trainings would be the NIHSeniorHealth.gov website and how the service providers could use this resource in their work with seniors. We also decided that HMPs would promote the site and conduct consumer trainings to reach a minimum of 25 seniors age 65 years and older. NN/LM NER would provide promotional materials and on-going support to assist the HMPs to accomplish the expectations described in the HMP Agreement Document (see Appendix G). NN/LM NER also agreed to set up exhibits at local events and conduct additional trainings upon request.

In Providence, Rhode Island a key part of the approach was the community partnership established with the Welcome Back Center. While we went through a similar process in terms of meeting with the program director and coming up with a collaborative effort that would meet common goals, the approach was very different than the approach in Maine and therefore the steps, tasks and timeline were also quite different. In Providence, the expectations were for NN/LM NER to train five Welcome Back Center participants how to use MedlinePlus and MedlinePlus in Spanish and they would then train all adult students and teachers at Dorcas Place (the majority of whom were Spanish speaking) during regularly scheduled computer lab time. They also agreed to conduct outreach to Latinos in the community with the goal of reaching 1,000 Spanish speakers. In addition, they would work with their local Spanish language radio personality to promote NLM resources in Spanish via the radio. These agreed upon ideas were
documented in the Welcome Back Center Agreement Document (see Appendix H). NN/LM NER also agreed to exhibit at local events and conducted trainings upon request.

**Results:**

The following describe what was accomplished as a result of tailored health information outreach efforts in the focused outreach communities – Providence Rhode Island’s Latino community and rural residents in Western Maine (Androscoggin, Franklin and Oxford Counties). Implementation Update(s) provide a detailed description of tasks and activities (see Appendix I).

**Western Maine**

**Community Partners**

**River Valley Health Communities Coalition (RVHCC)**

Located in Rumford, ME, RVHCC is one of two Healthy Maine Partnerships (HMPs) in Oxford County serving the Northern most part of the Western Maine Health District. RVHCC’s approach to health information outreach included working with their local adult education program. RVHCC conducted two service provider trainings. Participants were primarily community health educators and advocates. The first training was conducted in the Region 9 adult education program computer lab. The second training was held as part of the Tri-County Mental Health monthly meeting of staff, advocates and clients. Because of their connection to the community, they were very successful reaching seniors by working with preexisting groups such as the senior citizens group that met monthly at American Legion Hall in Dixfield, ME. See RVHCC Tables 1 and 2 below for training details.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/11/10</td>
<td>Region 9 Adult Education Computer Lab, Mexico, ME</td>
<td>Hands-on training of MedlinePlus and NIHSeniorHealth to mixed group of service providers</td>
<td>8</td>
</tr>
<tr>
<td>4/4/11</td>
<td>Tri-County Mental Health Rumford, ME</td>
<td>Presentation of MedlinePlus and NIHSeniorHealth to mixed group of service providers and consumers</td>
<td>7</td>
</tr>
</tbody>
</table>

**Service Providers Reached**

N=25
Table 2: RVHCC Consumer Trainings N=2

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/8/11</td>
<td>American Legionnaire Club, Dixfield, ME</td>
<td>Presentation of MedlinePlus and NIHSeniorHealth and distribution of materials</td>
<td>50</td>
</tr>
<tr>
<td>4/4/11</td>
<td>Tri-County Mental Health Rumford, ME</td>
<td>Presentation of MedlinePlus and NIHSeniorHealth to mixed group of service providers and consumers and distribution of materials</td>
<td>10</td>
</tr>
</tbody>
</table>

Consumers Reached N=60

Healthy Oxford Hills (HOH)

HOH is one of two HMPs in Oxford County in the Western Maine Health District. HOH’s approach to health information outreach included working with their local school and public libraries. HOH is affiliated with Stephens Memorial Hospital which has a consumer health library and is a NN/LM NER member. HOH conducted two services provider trainings. The first was a hands-on session at the Oxford Hills Comprehensive High School computer lab. The second was held during a monthly HOH Coalition meeting at Stephens Memorial Hospital. The health science librarians at Stephens Memorial Hospital participated in the local trainings and in general were quite supportive of the effort. See HOH Tables 3 and 4 below for training details.

Table 3: HOH Service Provider Trainings N=2

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/14/10</td>
<td>Oxford Hills Regional High School Computer Lab, Paris, ME</td>
<td>Hands-on training of MedlinePlus and NIHSeniorHealth at public librarians, school-based librarians, adult education teachers, and health educators</td>
<td>12</td>
</tr>
<tr>
<td>1/24/11</td>
<td>Stephens Memorial Hospital Norway, ME.</td>
<td>Presentation of MedlinePlus and NIHSeniorHealth to mixed group of service providers including hospital administrators</td>
<td>15</td>
</tr>
</tbody>
</table>

Service Providers Reached N=25
### Table 4: HOH Consumer Trainings N=4

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/7/11</td>
<td>Senior Social Group, South Paris, ME</td>
<td>Hands-on training at public library taught health information literacy, MedlinePlus, and NIHSeniorHealth</td>
<td>10</td>
</tr>
<tr>
<td>2/16/11</td>
<td>Senior Dining Site, South Paris, ME</td>
<td>Oral presentation</td>
<td>6</td>
</tr>
<tr>
<td>3/15/11</td>
<td>Paris Public Library, South Paris, ME</td>
<td>Hands-on training at public library taught health information literacy, MedlinePlus, and NIHSeniorHealth</td>
<td>2</td>
</tr>
<tr>
<td>3/29/11</td>
<td>Paris Public Library, South Paris ME</td>
<td>Hands-on follow-up training at public library on MedlinePlus and NIHSeniorHealth</td>
<td>1</td>
</tr>
</tbody>
</table>

**Consumers Reached**

N=19

### Healthy Communities Coalition (HCC)

HCC is affiliated with Franklin Memorial Hospital which has a consumer health library and is a NN/LM NER member. HCC’s unique and effective approach to health information outreach to seniors included one-on-one and small group tutoring at warming centers set up to help seniors keep warm and have a hot meal during the winter months. HCC conducted two services provider trainings. The first was a training of all HCC staff. The second took place at Franklin Memorial Hospital for a mixed group of service providers and was supported by the health science librarians there. See HCC Tables 5 and 6 below for training details.

### Table 5: HCC Service Provider Trainings N=2

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30/11</td>
<td>Healthy Communities Coalition, Farmington, ME</td>
<td>Presentation and live demonstration of MedlinePlus and NIHSenior Health to all HCC staff and distribution of materials</td>
<td>12</td>
</tr>
<tr>
<td>3/30/11</td>
<td>Franklin Memorial Hospital Farmington, ME</td>
<td>Presentation and live demonstration of MedlinePlus and NIHSenior Health to mixed group of service providers including hospital administrators and distribution of materials</td>
<td>10</td>
</tr>
</tbody>
</table>

**Service Providers Reached**

N=22
Table 6: HCC Consumer Trainings (N=5)

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/6/11</td>
<td>Livermore Food Pantry, Livermore, ME</td>
<td>Oral introduction to MedlinePlus and NIHSeniorHealth</td>
<td>4</td>
</tr>
<tr>
<td>1/13/11</td>
<td>Old South Church Warming Center</td>
<td>Oral introduction to MedlinePlus and NIHSeniorHealth</td>
<td>16</td>
</tr>
<tr>
<td>1/18/11</td>
<td>Henderson Memorial Warming Center</td>
<td>Oral introduction to MedlinePlus and NIHSeniorHealth</td>
<td>7</td>
</tr>
<tr>
<td>2/22/11</td>
<td>St. Joseph’s Warming Center</td>
<td>Oral introduction to MedlinePlus and NIHSeniorHealth</td>
<td>13</td>
</tr>
<tr>
<td>3/8/11</td>
<td>St. Joseph’s Warming Center</td>
<td>Oral introduction to MedlinePlus and NIHSeniorHealth</td>
<td>9</td>
</tr>
</tbody>
</table>

**Consumers Reached**

N=49

**NN/LM NER Support**

NN/LM NER staff offered a webinar on providing health information for older adults sponsored by the Maine Regional Library District of the Maine State Library. Librarians from around the state attended the program. SeniorsPlus, an area agency on aging, coordinated two trainings in Lewiston. SeniorsPlus used their own training facility and partnered with the Auburn Public Library to locate the training in the library computer lab. At the classes sponsored by SeniorsPlus, NN/LM NER staff taught older adults how to access NLM and other health information resources for complementary and alternative medicine. NN/LM NER staff also conducted the service provider trainings and some consumer trainings organized by the HMPs. In addition, NN/LM NER staff taught a session as part of the Workforce Investment Board’s Aging Workers Initiative computer training class also held in the Auburn Public Library computer lab. NN/LM NER exhibited at the SeniorsPlus Aging Well Conference in Newry and at the Lewiston Seniors Fair. See Tables 7, 8 and 9 for additional training and exhibit details.
Table 7: SeniorsPlus Consumer Trainings N=2

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/18/11</td>
<td>SeniorsPlus CAM Class, Lewiston, ME</td>
<td>Presentation and live demonstration of MedlinePlus and NIHSenior Health</td>
<td>15</td>
</tr>
<tr>
<td>5/19/11</td>
<td>SeniorsPlus CAM, Auburn Public Library, Auburn, ME</td>
<td>Hands-on training at Auburn public library on MedlinePlus and NIHSeniorHealth</td>
<td>4</td>
</tr>
</tbody>
</table>

Consumers Reached N=19

Table 8: Aging Worker Initiative Consumer Trainings N=2

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/8/10</td>
<td>Auburn Public Library Computer Lab, Auburn, ME</td>
<td>Hands-on training on health information literacy, MedlinePlus, and NIHSeniorHealth as part of computer training class</td>
<td>10</td>
</tr>
<tr>
<td>2/28/11</td>
<td>Auburn Public Library computer lab, Auburn, ME</td>
<td>Hands-on training on health information literacy, MedlinePlus, and NIHSeniorHealth as part of a computer training class</td>
<td>7</td>
</tr>
</tbody>
</table>

Consumers Reached N=17

Table 9: Exhibits N=2

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/1/10</td>
<td>Aging Well Living Well Expo Newrey, ME</td>
<td>A conference for seniors sponsored by SeniorsPlus</td>
<td>150</td>
</tr>
<tr>
<td>1/24/11</td>
<td>Maine Seniors Fair Lewiston, ME</td>
<td>An event organized for seniors sponsored by a number of local organizations</td>
<td>150</td>
</tr>
</tbody>
</table>

Exhibit Visits N=300

Summary

NN/LM NER working in partnership with the Health Maine Partnerships (HMPs), community-based public health organizations in Western Maine, conducted health information outreach activities reaching 98 service providers and 154 consumers. See Table 10 for a summary of outputs for Western Maine. These outputs were primarily achieved due to the connections and pre-established relationships the HMPs have with their local community. Each HMP holds
monthly meetings with local service providers which provided NN/LM NER with a venue for training service providers to use NLM resources in their work with community members. In addition, direct outreach to seniors was made possible by the HMPs local connections to formal and informal seniors group. The River Valley Healthy Communities Coalition, for example, organized a MedlinePlus and NIHSeniorHealth presentation to a senior citizens group reaching over 50 seniors at a local American Legion Hall. Another unique example was the outreach the Healthy Communities Coalition in Farmington conducted at warming centers where seniors go for warmth and a hot meal at various locations with central heating throughout their region.

<table>
<thead>
<tr>
<th>Table 10: Western Maine Summary of Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs</td>
</tr>
<tr>
<td>Community Partnerships</td>
</tr>
<tr>
<td>Service Provider Trainings</td>
</tr>
<tr>
<td>Service Providers Trained</td>
</tr>
<tr>
<td>Consumer Trainings</td>
</tr>
<tr>
<td>Consumers Reached</td>
</tr>
<tr>
<td>Exhibits</td>
</tr>
<tr>
<td>Exhibit Visitors</td>
</tr>
</tbody>
</table>

Older adults at health information and the Internet training in the Auburn Public Library computer lab
Providence, Rhode Island

Community Partners

Welcome Back Center

The Welcome Back Center supports foreign trained health professionals in getting licensed to practice their health profession in the U.S. Participants in the program are doctors, nurses, and other health care professionals trained in their own countries. The Center offers participants language classes, certification guidance, preparation for employment and other supports, and is affiliated with Dorcas Place Adult and Family Education Center. Dorcas Place offers English for speakers of other languages (ESOL) and other classes and serves a diverse although predominantly Spanish speaking community. Dorcas Place maintains two state of the art computer labs and all classes rotate through these labs for computer skills training. The Welcome Back Center offered NN/NL NER a unique opportunity for a train-the-trainer approach to health information outreach. The approach involved training five Welcome Back Center participants who then trained all Dorcas Place students how to use MedlinePlus and MedlinePlus in Spanish and conducted outreach training in the community. See Tables 11 and 12 below for training details.

<table>
<thead>
<tr>
<th>Table 11: Service Provider Trainings N=2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date</strong></td>
</tr>
<tr>
<td>2/23/11</td>
</tr>
<tr>
<td>March - May, 2011</td>
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</tbody>
</table>

Service Providers Trained

N=26
Table 12: Consumer Trainings N=37

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Training Notes</th>
<th># People</th>
</tr>
</thead>
<tbody>
<tr>
<td>March - May, 2011</td>
<td>Dorcas Place Computer Lab, Providence, RI</td>
<td>Dorcas Place Trainings: Hands-on health information literacy trainings on MedlinePlus, and MedlinePlus in Spanish during computer lab time</td>
<td>425</td>
</tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March - May, 2011</td>
<td>Variety of Community Settings, Providence, RI</td>
<td>Community Member Trainings: Presentations on MedlinePlus and MedlinePlus in Spanish. Locations:</td>
<td>426</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Progreso Latino - Genesis Center</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- International Institute - St Charles Church</td>
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<td></td>
<td></td>
<td>- Rio de Vida Church - Adamaris Salon</td>
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<td></td>
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<td>- El Eden Restaurant - RI College Outreach</td>
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<td>- Saint George Church - El Messiah Church</td>
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<td></td>
<td></td>
<td>- Scalabrini Health - Segue School</td>
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<td></td>
<td></td>
<td>- Club Juan Pablo Duarte - Highlander School</td>
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<tr>
<td></td>
<td></td>
<td>- Elmwood Adult Care - CHRI</td>
<td></td>
</tr>
</tbody>
</table>

Consumers Reached N=851

NN/LM NER Support

NN/LM NER staff offered an initial training of Welcome Back Center participants which in addition to a detailed demonstration of MedlinePlus included an introduction to PubMed. This was followed by an in-depth train-the-trainer session for the five participants who then served as community trainers. The train-the-trainer session included a review of various health information literacy curricula and lessons. For example, *Helping Older Adults Search for Health Information Online: A Trainer’s Toolkit* [http://nihseniorhealth.gov/toolkit/toolkit.htm](http://nihseniorhealth.gov/toolkit/toolkit.htm) and *Who Can You Trust? Health Information and Internet* [http://www.rvhcc.org/pdf/HIL_Sourcebook.pdf](http://www.rvhcc.org/pdf/HIL_Sourcebook.pdf) were reviewed. A one-hour lesson developed by the health literacy consultant for trainers to adapt was reviewed and later translated by one of the trainers into Spanish (see Appendix O).

NN/LM NER staff visited the Knight Memorial Library to introduce the project to the Director of two of the Providence Community Libraries and the Directors of Development for the eight community libraries. NN/LM NER also presented NLM resources were presented, distributed materials and described the project at a staff meeting for the directors of the Providence Community Libraries. Several of the Providence Community Libraries joined as Affiliate Members following the training. The Director of the Knight Memorial Library presented at the initial training for the Dorcas Place on how to use the local public library.
NN/LM NER staff met with the director of the Rhode Island Department of Health, Minority Health Program and discussed possibilities for collaboration. NN/LM NER also exhibited at two of the Back to School Celebration sites. This event reaches over 10,000 families many of whom are Latino. See Tables 13 and 14 below for training and exhibit details. NN/LM NER provided the Dorcas Place with a bulk subscription to the MedlinePlus and MedlinePlus Salud Magazines for their resource center and for classroom use.

<table>
<thead>
<tr>
<th>Tables 13: Community Libraries Service Provider Training N=1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date</strong></td>
</tr>
<tr>
<td>3/18/11</td>
</tr>
<tr>
<td><strong>Service Providers Trained</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 14: Exhibits N=2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date</strong></td>
</tr>
<tr>
<td>8/21/10</td>
</tr>
<tr>
<td>8/218/11</td>
</tr>
<tr>
<td><strong>Exhibit Visits</strong></td>
</tr>
</tbody>
</table>

**Summary**

NN/LM NER worked in partnership with the Welcome Back Center, a unique adult education program providing education and guidance to foreign trained health professionals, to conduct health information outreach activities that reached 851 mostly Spanish speaking consumers. See table 15 for a summary of outputs for Providence, Rhode Island. These outputs were achieved primarily due to the unique nature of the program (serving trained health professionals), its placement as part of a large community-based adult learning center, and participants’ relationships to the Latino community. The train-the-trainer model used in this community was especially effective because the five trainers were trained health professionals, spoke Spanish and were members of the local community. These trainers had access to adult education...
at the Dorcas Place adult learning center and the relationships they had with other local community organizations, enabled them to reach a large number of consumer and conduct their trainings in a wide range of local organizations and agencies including churches, salons, schools, adult care, and other. In addition to reaching Dorcas Place students, one of the trainers conducted trainings in her church while another taught classes as part of a health professional class at a local community college. The Welcome Back Center director knew a local radio personality and worked with him to conduct a live radio interview and podcast in Spanish where they discussed the use and value of NLM resources and fielded questions from the community.

Table 15: Providence, Rhode Island Summary of Outputs

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Numbers (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Community-based Partners</td>
<td>N=1</td>
</tr>
<tr>
<td>Number of Train-the-Trainers</td>
<td>N=5</td>
</tr>
<tr>
<td>Service Provider Trainings</td>
<td>N=2</td>
</tr>
<tr>
<td>Service Providers Trained</td>
<td>N=98</td>
</tr>
<tr>
<td>Consumer Trainings</td>
<td>N=37</td>
</tr>
<tr>
<td>Consumers Reached</td>
<td>N=851</td>
</tr>
<tr>
<td>Exhibits</td>
<td>N=2</td>
</tr>
<tr>
<td>Exhibit Visits</td>
<td>N=325</td>
</tr>
</tbody>
</table>

![Adult learners showing off their public library cards at health information and the Internet training in the Dorcas Place computer lab](image-url)
Data Sources:

- Implementation Process Map (Appendix E)
- Implementation Tables (Appendix F)
- HMP Agreement Document (Appendix G)
- Welcome Back Center Agreement Document (Appendix H)
- Implementation Updates (Appendix I)
Phase 3: Evaluation

A comprehensive evaluation plan using methods utilized by the NLM Outreach and Evaluation Resource Center (OERC) was conceptualized as an integral part of the focused outreach approach.

Purpose:
To determine the extent to which the model effectively achieved measurable objectives in the communities selected for focused outreach – Providence Rhode Island’s Latino community and rural residents in Western Maine (Androscoggin, Franklin and Oxford Counties) – and to document processes, identify barriers encountered, and recommend adjustments for replication of the model in areas selected for focused outreach in the future.

Methods:
A logic model was developed early in the project and was key to developing the evaluation plan. The logic model identified the supports we had to work with (resources) and the strategies we planned to use (activities), but most importantly it helped us to link our resources and activities to what we hoped to accomplish (outputs) and what impact we hoped to have on our target communities (outcomes). The logic model (see Appendix J) was a living document and while project objectives remained the same throughout the process, activities and outputs were adjusted as we engaged in the work and learned what worked and what didn’t.

We developed specific, measurable objectives related to each phase of the project. A first step to creating measurable objectives was to consider what information (data) would help us know if objectives were achieved. It was also important to identifying what kinds of evaluation tools we needed to develop.
In addition to the logic model, the thinking that went into developing both a process assessment and an outcomes assessment was critical to the model. Outcome assessment measures were designed to assess if the project achieved its outcomes. This meant clearly identifying outcomes, and indicators that would show whether these outcomes were achieved (see Table 16). Process assessment measures were designed to document the approach, determine what worked and what didn’t and identify how the approach could be improve for future application. This required clearly developing process assessment questions, methods and tools (see Table 17). The Evaluation Process Map presents a step-by-step description of how Phase 3 of the project was accomplished (Appendix K).

**Table 16: Outcomes Assessment**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health information outreach efforts tailored to the needs of the community</td>
<td>Project consultant and NER coordinators will identify in project reports community needs and specific efforts to meet those needs</td>
</tr>
<tr>
<td>Support for project among key agencies / community leaders</td>
<td>Key agencies will demonstrate support for the project by hosting trainings and distributing promotional materials</td>
</tr>
<tr>
<td>Increased confidence in Internet-based health information resources</td>
<td>Participants will indicate on training evaluations increased confidence in Internet-based health information resources</td>
</tr>
<tr>
<td>Increased knowledge of NLM resources</td>
<td>Participant will demonstrate on training evaluations increased knowledge of NLM resources</td>
</tr>
<tr>
<td>Increased use of NLM resources</td>
<td>Participants will show on follow-up questions increased use of NLM resources</td>
</tr>
<tr>
<td>More community experts to help others find resources</td>
<td>Identified innovators will indicate on story-based evaluation forms that they helped others use MedlinePlus to find health information</td>
</tr>
<tr>
<td>Better data on health information outreach efforts</td>
<td>Project consultant and NER coordinators will present at professional meetings findings from the evaluation</td>
</tr>
</tbody>
</table>
Table 17: Process Assessment

<table>
<thead>
<tr>
<th>Question</th>
<th>Method</th>
</tr>
</thead>
</table>
| 1. How closely was the approach implemented as planned, and how well?   | • Implementation Tables  
• Implementation Updates (# of community partners, trainings, participants, evaluations exhibits, materials distributed) |
| 2. What resources and supports were most useful to implementation as planned? | • Implementation Updates (# of community partners, trainings, participants, evaluations exhibits, materials distributed)  
• Community Partner Exit Interviews                                      |
| 3. What from the project will community partners continue to use and why? | • Community Partner Exit Interviews                                      |
| 4. What where the challenges and what changes might improve the process? | • Implementation Table  
• Implementation Update (# of community partners, trainings, participants, evaluations, exhibits, materials distributed)  
• Community Partner Exit Interviews                                      |
Data collection methods were both quantitative and qualitative. The following evaluation tools were developed for the project and used for data collection. All evaluation tools are available for review (see Appendix L).

Pre-/Post-evaluation. Training participants (both service providers and consumers) completed pre-/post-evaluations immediately before and after participating in MedlinePlus and NIHSeniorHealth trainings. Items were designed to assess changes in knowledge, attitudes and behaviors related to NLM resources.

Follow-up. Training participants (both service providers and consumers) received a follow-up email and/or phone call two to 12 weeks after their training session. Follow-up was designed to assess whether participants had used NLM resources since the training.

Story-based Evaluation. This tool was designed to capture hard to measure distal outcomes such as how participants used NLM resources to make informed healthcare decision and improve health. The story-based evaluation was not used as expected but was adapted and used as part of the Community Partners Exit Interview.

Community Partners Exit Interview. Community partners were asked to respond in writing to a series of questions regarding their experience with the project and then contacted via phone if additional detail was needed. They were also asked to write one or two stories of how the project and information presented was used by and helped someone.

**Results:**

**Quantitative Findings**
The following quantitative findings come from the pre-/post-evaluations completed by training participants immediately before and after participating in MedlinePlus and NIHSeniorHealth trainings; and from the follow-up questions distributed to consumers and service providers two to 12 weeks after participating in the training. All data are available in Data Summary Tables for review (see Appendix M).
Western Maine Consumers

A total of 85 participants in Maine responded to the training pre-evaluation. More than half of those respondents (57.3%) were age 65 years or older. Another 31.7% said they were age 50 to 64 years old. Combining these two response categories we could say a total of 89% of participating consumers were older adults, our target audience (see Figure 1). In terms of gender, 70% were female, 30% male.

Figure 1: Age of Respondents

A larger than expected percentage of participants (35%) reported on the pre-evaluation that they had never used the Internet (see Figure 2).

Figure 2: Use of the Internet
In terms of where people use the Internet, the majority said at home (52%). The second most common place to access the Internet among this sample was the library (14%). See Figure 3.

**Figure 3: Where Respondents Access the Internet**

Only 2.4% of respondents said they had ever used MedlinePlus and only 1.2% said they had ever used NIHSeniorHealth before participating in the training. Following the trainings 39% said they had used MedlinePlus and 29% said they had used NIHSeniorHealth (see Figure 4).

**Figure 4: Pre/Post: Ever Used NLM Resources**
Before the training 45% percent of respondents said they thought the Internet was not a useful source of health information or were not sure. After the training 80% said they thought the Internet was a useful source of health information (see Figure 5).

**Figure 5: Pre/Post: Considers the Internet a Useful Source of Health Information**

Thirty-three percent said they were confident or very confident in their ability to use the Internet to find health information before participating in the training. Following the training 79% said they were more confident in their ability to find health information on the Internet as a result of the training (see Figure 6).

**Figure 6: Pre/Post: Confidence in Ability to Find Health Information on the Internet**
Conversely, 52% said they were not or not at all confident in their ability to evaluate health information on the Internet before the training. After the training 46% said they were more confident in their ability to evaluate the health information on the Internet as a result of the training (see Figure 7).

**Figure 7: Pre/Post: Confidence in Ability to Evaluate Health Information on the Internet**

When asked how likely participants were to use NLM resources after the training (intention to act) 67.7% said they were likely to use MedlinePlus and 66.1% said they were likely to use NIHSeniorHealth (see figures 8 and 9). Fifty-nine percent of participants said they were likely to share these resources with someone in their family or community (see figure 10).

**Figure 8: Post-training:**
Likely to Use MedlinePlus in the Future

![Pie chart showing responses to the question: Likely to Use MedlinePlus in the Future.](image)

- Likely (67.7%)
- Not sure (16.1%)
- Not likely (16.2%)

**Figure 9: Post-training:**
Likely to Use NIH Senior Health in the Future

![Pie chart showing responses to the question: Likely to Use NIH Senior Health in the Future.](image)

- Likely (66.1%)
- Not sure (15.4%)
- Not likely (18.4%)

**Figure 10: Post-training:**
Likely to Share NLM Resources with Others

![Pie chart showing responses to the question: Likely to Share NLM Resources with Others.](image)

- Likely (58.9%)
- Not sure (9.6%)
- Not likely (21.4%)

N=62
N=65
N=56
Providence, Rhode Island

Consumers

A total of 851 participants in Providence, Rhode Island responded to the training pre-evaluation. This number was so great that the project team decided to use a random sample for analysis. OERC was consulted to determine the size needed for analysis. Using parameters suggested by OERC, a minimum of 474 per-/post-evaluations from the 851 was calculated to give a 95% confidence level and a confidence interval of 3 (plus or minus 3 percentage points). Adding 474 evaluations from the sample, to those already in the data base resulted in a total of 535 evaluations for analysis. Of those 535 respondents, 82% said they were Spanish speakers, our target audience (see Figure 11). Another 12% said they spoke a language other than English including Portuguese, Chinese, Cambodian, Laotian, Haitian Creole, Filipino, and Tigirgna. In terms of gender, 60% were female, 40% male.

Figure 11: Language(s) Spoken
Percentages do not add up to 100% because respondents may select more than one language.
Only 10% of participants said on the pre-evaluation they had never used the Internet, while more than half (52%) said they used the Internet every day (see Figure 12).

Figure 12: Internet Use

In terms of where people use the Internet, home was most often cited (79%), then school (36%), then work (27%), and then library (13%). See Figure 13.

Figure 13: Where Respondents Access the Internet
Only 12% of respondents said they had ever used MedlinePlus before participating in the training. Following the training 94% said they had used MedlinePlus (see Figure 14). We do not know from these data whether respondents used MedlinePlus in English, Spanish or both languages. Antidotal feedback from trainers indicated that training participants often went back and forth between MedlinePlus in English and MedlinePlus in Spanish.

**Figure 14: Pre/Post: Ever Used MedlinePlus**

Eighty percent of respondents said they thought the Internet was a useful source of health information before participating in the training. After the training 92% said they thought the Internet as a useful source of health information (see Figure 15).

**Figure 15: Pre/Post: Considers the Internet a Useful Source of Health Information**
Forty-seventy percent said they were confident or very confident in their ability to use the Internet to find health information before participating in the training. Following the training 88% said they were more confident in their ability to find health information on the Internet as a result of the training (see Figure 16).

**Figure 16: Pre/Post: Confidence in Ability to Find Health Information on the Internet**

Forty-six percent said they were confident or very confident in their ability to evaluate health information on the Internet before the training. After the training 88% said they were more confident in their ability to evaluate the health information on the Internet as a result of the training (see Figure 17).

**Figure 17: Pre/Post: Confidence in Ability to Evaluate Health Information on the Internet**
When asked how likely participants were to use NLM resources after the training (intention to act) 90.6% said they were likely to use MedlinePlus after the training (see Figures 18) and 91.5% said they were likely to share these resources with someone in their family or community (see Figure 19).

**Figure 18: Post-training: Likely to Use MedlinePlus in the Future**

- Likely 90.6%
- Not Sure 7.4%
- Not Likely 2%

N=500

**Figure 19: Post-training: Likely to Share NLM Resources with Others**

- Likely 91.5%
- Not Sure 5.3%
- Not Likely 3.2%

N=490
**Service Providers**

Of the service providers trained, a total of 91 responded to the training pre-evaluation and 94 to post-evaluation. Seventy-six percent (76%) of respondents said they provided health information to members of the community as part of their work and 92% said they used the Internet to search for health information for their work. Only 32.5% said they were very confident in their ability to find health information using the Internet and only 23% said they were confident in their ability to evaluate the health information they find. Among respondents from Western Maine (N=82), 81.5% said they served seniors age 65 and older in their work. Among respondents from Providence (N=9), all said they served Spanish speakers in their work.

Prior to the training, only 56% of service providers had ever used MedlinePlus. Following the training 78% reported having used it. Before the training, only 20% had used NIHSeniorHealth. Following the training 72% reported having used NIHSeniorHealth (see Figures 20).

**Figure 20: Pre/Post: Ever Used NLM Resources**

![Bar chart showing the use of MedlinePlus and NIHSeniorHealth before and after training. Pre N = 89 Post N = 92. Pre-training MedlinePlus: 56%, NIHSeniorHealth: 20%. Post-training MedlinePlus: 78%, NIHSeniorHealth: 72%.](image-url)
Eighty-five percent (85%) said they were confident or very confident in their ability to find health information on the Internet but only 73% said they were confident in their ability to evaluate that information. Following the training 95% said they were more confident in their ability to find health information on the Internet and 90% said they were more confident in their ability to evaluate that information they found (see Figure 21).

Figure 21: Pre/Post: Confidence in Ability to Evaluate Online Health Information
When asked how likely they were to use NLM resources in their work as a result of the training (intention to act) 89% said they were likely to use MedlinePlus and 83% said they were likely to use NIHSeniorHealth (see Figures 22 and 23).

Figure 22: Post-training: Likely to Use MedlinePlus in their Work

- Likely: 89%
- Not Sure: 9%
- Not Likely: 2%

N=92

Figure 23: Post-training: Likely to Use NIHSeniorHealth in their Work

- Likely: 83%
- Not Sure: 14%
- Not Likely: 3%

N=87
Follow-up

Consumers

Approximately eight weeks after participating in the consumer training, participants were sent an email asking them to answer five follow-up questions on Survey Monkey. The questions were designed to determine if participants had used NLM resources since the training. Phone calls were made to those who did not respond via email. Even with this labor intensive effort only 15 consumers responded to the follow-up questions. Thirteen (87%) were from Western Maine and two (13%) were from Providence. Neither of the two Providence consumers had used MedlinePlus since the training, one said it was because there was no need; the other said it was because they did not have access to a computer. Among the Maine consumers, six (46%) said they had used MedlinePlus since the training, and three (23%) said they had used NIHSeniorHealth (see Figure 24). Reasons for not using the resources included no need, no time, no access, and lack of skill. When asked if they had shared what they had learned with others, seven of the sample said yes and seven said no - one person skipped this question.

Figure 24: Consumer Follow-up: Used NLM Resources

Service Providers

Approximately eight weeks after participating in a training session, service providers were asked via email to answer five follow-up questions on Survey Monkey. The questions were designed to determine if participants had used NLM resources since the training. A total of 28 service providers responded to the follow-up questions. All respondents were from Western Maine.
Since taking the course, 82% said they had used MedlinePlus to search for health information; 41% said they had used NIHSeniorHealth (see Figure 25). Reasons for not using the resources since the training included no need or no time. When asked if they had shared what they learned with anyone since the training, 85% of respondents said yes. Thirteen (69%) said they shared the information with a co-worker or other health service providers and nine (56%) said they had shared the information with a client or community member (see Figure 26). Ninety-six percent (96%) of respondents said they planned to use MedlinePlus in the future; and 81.5% said they planned on using NIHSeniorHealth in the future.

**Figure 25: Service Provider Follow-up: Used NLM Resources**

![Figure 25](image1)

**Figure 26: Service Provider Follow-up: Shared NLM Resources with Others**

![Figure 26](image2)
Qualitative Findings

The following qualitative findings come from data collected via a community partner exit interview (see Appendix N) and reflect the experience community-based organizations had working in partnership with NN/LM NER and conducting health information outreach in their communities (N=4). Transcripts were read and a lists of themes related to project successes, challenges, supports and outcomes were generated. Once themes were recognized, units of data (phrases, sentences or paragraphs) related to each theme were noted. Below is a list of themes followed by the units of data (quotes from the interviews) supporting these findings.

Successes

• Training participants shared NLM resources with friends and neighbors.
  - “Quite a few people took extra handouts to bring back to their neighbors and friends to show them the online resources.”
  - “A few seniors who visited followed up with me to get more information and handouts to give to their friends and neighbors at their senior housing facility. They believed the information was very important and they wanted more people to know.”

• Partners will continue to promote NLM resources and distribute materials.
  - “Providing community members with health information is a core component of what we do. Knowing about MedlinePlus as an accurate and reliable source of health information designed for community people is and will be very helpful.”
  - “We will continue to use MedlinePlus and direct community members there to find accurate health information.”
  - “We are increasing our work with seniors. This is a good way to do more outreach to them. The websites can be offered on an on-going basis when we interact with seniors.”
  - “We will continue to distribute the bookmarks whenever there is an opportunity.”

Challenges

• The pre-and post-evaluations were hard to administer.
  - “The most challenging part of the project was getting the seniors to fill out the pre- and post- evaluations. The pre- and post-evaluations looked extremely similar and asked very
similar questions, this made participants think they were filling out the same survey twice and they didn’t really want to complete it.”

- “Collecting the pre-and post-evaluations was challenging when working with the community. They looked so similar that some participants thought they had already filled out the post when we passed it out after the training. My only suggestion would be to make the pre- and post-evaluations look different from each other.”

**Supports**

- **NN/LM NER staff training and support**
  - “NN/LM NER helped out greatly with the project by providing expertise and education skills for the service provider trainings. They were fantastic trainers and I think the community benefitted greatly by their expertise.”
  - “The health literacy consultant was extremely helpful and vigilant in offering suggestions, doing the service provider presentations and offering advice to me for my presentations.”
  - “The agreement document made it all very clear what we were to do and the support NN/LM NER would provide.”

- **NLM materials and support**
  - “NN/LM NER staff were prompt with sending more resources for me to hand out and willing to offer assistance at anytime.”
  - “Both the [MedlinePlus] brochure as well as the bookmark were useful because they have the website address written on them and it avoids the participant having to write the address down.”
  - “I thought the resources were very helpful. The small bookmarks are easy to keep track of for folks and they were colorful enough to be attractive to the eye when on display.”

**Outcomes**

- **Participants used MedlinePlus to search for accurate health information for themselves.**
  - “I recently wanted information on cholesterol and I went to MedlinePlus and sure enough, I found all kinds of information. I didn’t realize that one egg contains 300 mg of
cholesterol which is considered the daily allowance. I usually have two eggs, so I guess there is a place to make a change in my diet to reduce cholesterol.”

- **Health service providers used MedlinePlus to ensure they used accurate health information in their work.**
  - “We want to know we are providing safe and accurate health information to our community residents. Using MedlinePlus is a great way to educate and update ourselves on the latest health information before we deliver that knowledge to the community.”
  - “I’ve been working in public health for 20 years and I never knew about MedlinePlus. Like most people, when I wanted to find health information I would ‘Google’ it. Now, when I want health information the first place I go is MedlinePlus.”

**Data Sources**

- Logic Model (Appendix J)
  - Outcomes and Indicators
  - Measurable Objectives
- Evaluation Process Map (Appendix K)
- Evaluation Tools (Appendix L)
  - Consumer Pre-/Post-evaluation
  - Consumer Follow-up
  - Service Provider Pre-/Post-evaluation
  - Service Provider Follow-up
- Data Summary Tables (Appendix M)
  - Consumer Pre-/Post-evaluation
  - Consumer Follow-up
    - Service Provider Pre-/Post-evaluation
  - Service Provider Follow-up
- Community Partner Data Summary (Appendix N)
Discussion of Findings

The success of the focused outreach approach may be determined by comparing findings to the measurable objectives described in the logic model. This discussion of findings looks at objectives, findings and process issues for each phase of the project.

Phase 1: Community Assessment

Objective: At least five community needs per focused outreach area will be identified in the community assessment report and specific efforts to address those needs will be incorporated into tailored health information outreach implementation plans.

Findings: The community assessment report identified at least five community needs per focused outreach areas. In Maine, identified needs included: 1) a growing rural senior population; 2) poverty, unemployment and low levels of education; 3) low health literacy and low computer literacy skills; 4) local Healthy Maine Partnerships needed as allies; and 5) limited broadband. Tailored health information outreach efforts addressed identified needs by focusing on seniors and engaging Healthy Maine Partnerships. In Providence, identified needs included: 1) trust as a central issue; 2) radio a critical source of health information; 3) low health information literacy and language barriers; 4) limited computer access at home; 5) community-based organizations provide much needed support (e.g. Welcome Back Center, Network of Minority Health Centers) and are key allies. Tailored health information outreach efforts addressed identified needs by establishing a close working relationship with the Welcome Back Center, utilizing a train-the-trainer model and engaging Spanish language radio as an information outlet.

Process: The key informant interview methodology identified community needs and potential partners. The interview protocol was effective at soliciting valuable information. Conducting interviews in person was critical to getting to know the community and building relationships with community-based organizations. While conducting key informant interviews in person and transcribing interview data were labor intensive, the process was effective at identifying needs and establishing partnerships. The value of identifying key informants, conducting key
informant interviews, analyzing and using these data to tailored health information outreach efforts cannot be underestimated and is vital to the success of any future focused outreach efforts. The process of identifying key informants, conducting key informant interviews and analyzing the data is described in detail in the Community Assessment Process Map (see Appendix A).

**Phase 2 & 3: Focused Outreach Implementation and Evaluation**

**Objective:** At least five community-based agencies per focused outreach area will demonstrate support for the project by hosting at least one training and distributing promotional materials.

**Findings:** At least five community-based agencies per focused outreach areas demonstrated support for the project by hosting at least one training and distributing promotion materials. In Maine, five community-based organizations hosted a total of 10 trainings, conducted numerous one-on-one tutorials, and distributed promotional materials. NN/LM NER partnered with three Healthy Maine Partnerships in the Western Maine Health District. Each Healthy Maine Partnership hosted two service provider trainings, directly trained at least 25 seniors, and distributed promotional materials at all of these and other local events. Four additional trainings were held and materials distributed as a result of collaborations with SeniorsPlus and the Seasoned Workers Initiative. In Providence, Rhode Island, 18 community-based organizations hosted 38 trainings and promotional materials were distributed at each training. NN/LM NER partnered with the Welcome Back Center, and trained five Welcome Back Center participants (foreign trained health professionals) as trainers. These five trainers conducted 21 trainings with adult learners in the Dorcas Place Computer Lab and an additional 16 trainings at other organizations and agencies in the community.

**Objective:** Immediately after training sessions, 50% of participants will indicate on training evaluations increased confidence in internet-based health information resources

**Findings:** Immediately after training sessions, 91% of consumers indicated on post-evaluations that they were more confident in the usefulness of health information on the Internet. In Maine,
a total of 68 post-training evaluations were collected from consumers. Of the 55 consumers who answered the question, 80% said they were more confident in the Internet as a source of health information as a result of the training. In Providence, a total of 523 post-evaluations were collected from consumers. Of the 496 consumers who answered the questions, 92% said they were more confident in the Internet as a source of health information as a result of the training.

**Objective:** Immediately after training sessions, 80% of participants will demonstrate on training evaluations increased knowledge of NLM resources,

**Findings:** Immediately after the training sessions 93% of consumers indicated on post-evaluations knowledge of MedlinePlus as compared to 14% on the pre-evaluation. In Maine, a total of 85 pre-evaluations and 68 post-evaluations were collected from consumers. Of the 82 consumers who answered the question, 7.3% said they knew about MedlinePlus on the pre-evaluation. Of the 65 consumers who answered the question on the post-evaluation, 89% said they had learned about MedlinePlus as a result of the training. In Providence, a total of 535 pre-evaluations and 523 post-evaluations were collected from consumers. Of the 435 consumers who answered the question, 15% said they knew about MedlinePlus on the pre-evaluation. Of 501 consumers who answered the question on the post-evaluation, 93% said they had learned about MedlinePlus as a result of the training.

**Objective:** Between two to 12 weeks after training sessions, 25% of participants will report on follow-up questions increased use of NLM resources.

**Findings:** Approximately eight weeks after the training sessions 40% of consumers who responded to the follow-up questions (N=15) indicated that they had used MedlinePlus. In Maine, a total of 13 follow-ups were conducted with consumers. Of the 13 consumers who answered the question, 40% (N=6) said they had used MedlinePlus since the training. In Providence, two follow-ups were conducted with consumers. Of the two consumers who answered the question, neither said they had used MedlinePlus since the training.
**Objective:** Three months after the training, 50% of identified innovators will submit story-based evaluation forms describing how they helped others in their community use MedlinePlus to find health information.

**Findings:** This tool was not used as expected. The concept was adapted to collect follow-up feedback from community partners. In this way the following two stories about how NLM resources had changed people’s behaviors were collected.

“I recently wanted information on cholesterol and I went to MedlinePlus and sure enough, I found all kinds of information. I didn’t realize that one egg contains 300 mg of cholesterol which is considered the daily allowance. I usually have two eggs, so I guess there is a place to make a change in my diet to reduce cholesterol.”

“I’ve been working in public health for 20 years and I never knew about MedlinePlus. Like most people, when I wanted to find health information I would ‘Google’ it. Now, when I want health information the first place I go is MedlinePlus.”

**Process:** NN/LM NER established agreements with three community-based organizations in Maine and one in Providence. The agreement documents were very useful for clarifying expectations. Healthy Maine Partnerships (HMPs) agreed to host two service provider trainings, reach 25 seniors directly, and distribute materials. NN/LM NER worked with two other community-based organizations to offer trainings as a result of contacts made at the Aging Well Living Well Conference exhibit. The Welcome Back Center agreed to host two service provider trainings, engage five trainers to reach 1,000 Spanish speaking adult learners at Dorcas Place and community members, and work with local Spanish language radio to promote MedlinePlus in Spanish. The two service provider (teacher) trainings did not take place. Instead teachers were trained along with their classes. The Welcome Back Center trainers worked with another 16 community-based organizations as they offered trainings in the community. NN/LM NER provided trainers, training support, and promotional materials. The four partners with which NN/LM NER established agreement also received funding from NN/LM NER. HMPs received $3,000 each and the Welcome Back Center received $10,000. Incentives are very powerful motivators for community-based organization. If stipends are not offered in future replications
engagement by partnering agencies may end up being less of a priority. The process of establishing agreements and implementing the agreed upon health information outreach efforts is described in detail in the Implementation Process Map (see Appendix E).

One of the most effective tools was the project logic model. The Outreach Evaluation Resource Center (OERC) has numerous resources on how to develop and use a logic model to guide program implementation and evaluation. From our logic model we knew what we wanted to accomplish (objectives) and how to determine if we accomplished it (indicators). Based on this information new were able to determine the programmatic and evaluative activities that would accomplish these.

A number of evaluation tools were developed. Training pre- and post-evaluations for consumers and for health service providers were developed, and consumer evaluations were translated into Spanish for use in Rhode Island. There were many challenges to the pre- and post-evaluation. One of the challenges was that the two tools looked so similar that some participants thought they had already completed the post-evaluation and were frustrated at having to complete it “again”. Having a number of different versions of the pre-/post-evaluation was also problematic. For example, one training conducted by NN/LN outreach coordinators included an introduction to PubMed. For this reason PubMed was included on the pre- and post-evaluation used. Because all versions looked similar this evaluation with the PubMed question was inappropriately used in subsequent trainings even though PubMed was not presented.

Trainers also observed consumer confusion related to some of the questions. For example, on the post-evaluation it appeared from observation that some consumers did not distinguish between the questions that asked, “Which NLM resources did you learn about during this training as compared to which NLM resources did you use during this training?” Some consumers who did not have a hands-on training answered that they had used the NLM resource. In some cases, consumers who attended a presentation on the resources said they did not learn about NLM resources. Rewording some pre- and post-evaluation questions so they may be more directly compared; asking specifically if respondents used MedlinePlus in English and / or in Spanish; and adding a question on the provider pre-/post-evaluation to identify their work in the
community should be considered. These changes would allow for more useful data to be collected.

It was especially difficult to get consumers to complete the follow-up questions. Direct phone calling worked in some cases but this was too labor intensive. Much more success was seen with the service provider pre- and post-evaluations and follow-up. Service providers completed the pre- and post-evaluations immediately before and after trainings and responded to email requests to answer follow-up questions in Survey Monkey. All pre-/post-evaluations and follow-up questions were developed in Survey Monkey. Data were input into Survey Monkey by hand. This too was time consuming. In some cases the pre- and post-evaluations was completed online as part of the training when trainings were hands-on. This is a more sustainable approach. Lastly, the story-based evaluation form was not used as expected. The process of implementing the evaluation plan is described in detail in the Evaluation Process Map (see Appendix L).

**Objective:** At least two abstracts describing focused outreach results will be submitted for presentation at professional conferences

**Findings:** The project team submitted four abstracts for oral or poster presentations of focused outreach results to the MLA Annual Conference, Institute for Healthcare Advancement (IHA) Health Literacy Conference, and Health Literacy Research Conference. Abstracts were accepted for poster presentation at the IHA Health Literacy Conference and delivered in May 2011 and oral presentation at the Health Literacy Annual Research Conference (HARC) to be delivered in October 2011.

**Process:** Abstracts were written and submitted by Javier Crespo, NN/LM NER Associate Director, and Sabrina Kurtz-Rossi, Health Literacy Consultant. It was unclear why two of the four abstracts were not accepted. The poster session at the IHA Health Literacy Conference received approximately 75 visits. The project team gave an oral presentation on project results at the HARC conference and a Webinar on evaluation design during an Outreach Evaluation Resource Center (OERC), each with approximately 25 participants.
Limitations

Limitations to reported findings are numerous. Using the key informant methodology for the community assessment phase of the project provided an in-depth understand of the community from a limited number of individuals. For this reason results cannot be generalized and even within the community is biased to the perspectives of those who participated as key informants. In terms of the implementation phase, the health information outreach approach in each community was tailored to the needs of that community and would not necessarily be an effective or appropriate approach in other communities. In terms of the evaluation phase, process measures where effective in identifying strengths and challenges. Outcomes measures must be considered with caution. Some of the pre- and post-evaluation questions where misunderstood by consumers making these results questionable. In addition, the consumer follow-up response rate was so small that again conclusions cannot be drawn.

Finally, it must be acknowledged that the evaluation plan was designed and implemented by the same project team members that conducted outreach activities and therefore a certain amount of bias in favor of the approach may be assumed. It might also be assumed that there are impacts and outcomes related to the project’s focused efforts that have not been captured or fully documented in this report.

Conclusions/Recommendations

The following conclusions and recommendations are drawn from the data described earlier in this report and from the consultant’s personal experience implementing the focused outreach model. As the project team reviews and discusses these data additional insights may emerge and be added to this list of recommendation.

- The community assessment achieved its primary purpose to inform health information outreach efforts tailored to the needs of the community and helped NN/LM NER establish relationship with community organizations. The community assessment phase should be continued as a critical first step in the focused outreach model.
Focused outreach required a team approach, but also focused coordination. A focused coordinator keeps the team informed and engaged, is attentive to partner activities and needs, and continually looks to expand opportunities for collaboration. If working in two sites simultaneously consider assigning two focused outreach coordinators, one per site.

Working with community-based organizations helped achieve NN/LM NER’s goals for health information outreach and was critical to community outreach. While funding is not integral to the approach, stipends helped encourage and motivate partners and were greatly appreciated. The continued use of a stipend to incentivize future partners should be considered.

A number of tools were developed and used in the focused outreach effort. Logic Model, Process Map, Agreement Document, Implementations Table, and Data Summary Table, were effective tools that aided in tailored health information outreach planning, implementation and evaluation. Use of these tools is important to the success of future focused outreach efforts.

Evaluation activities assessed effectiveness, but partners found them hard to administer. The training pre- and post-evaluations achieved their purpose but adjustment should be considered. Namely, distinguish pre- post-evaluations so they look different, consider including knowledge of NLM resources or use but not both and reword confidence questions so pre- and post-evaluation responses may be directly compared.

Story-based evaluation and follow-up questions were attempts at capturing distal outcomes. But, these efforts were difficult to implement as part of an implementation and evaluation project. If documentation of distal outcomes is needed consider focusing on these activities through dedicated staff time and brainstorm strategies and incentives to increase consumer response rates.
• It was useful and necessary to inform and engage NN/LM NER Network members in focused outreach in their areas. Network members working at the statewide level and state departments of health were intrigued by the work and could present opportunities for focused outreach if more of an effort was made to engage them.

• An important lesson was the need to be flexible when working with community-based organizations, and to expect the unexpected. Dates for scheduled meetings and trainings were often changed and the level of skill and experience with the computers among consumers was often less than expected, and in Providence the level of English proficiency was also not what was expected.

• One of the greatest advantages of working with community-based organizations is their connectedness to the community. Their established relationships with community members and other local organizations and agencies exponentially further the reach of the project beyond what NN/LM NER staff could achieve with traditional outreach.
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Appendices

- Community Assessment Process Map (Appendix A)
- Key Informant Contact List(s) (Appendix B)
- Key Informant Interview Protocol (Appendix C)
- Community Assessment Report (Appendix D)
- Implementation Process Map (Appendix E)
- Implementation Table(s)/Timeline(s) (Appendix F)
- Healthy Maine Partnership (HPM) Agreement Document (Appendix G)
- Welcome Back Center Agreement Document (Appendix H)
- Focused Outreach Update(s) (Appendix I)
- Focused Outreach Logic Model (Appendix J)
  - Outcomes and Indicators
  - Measurable Objectives
- Evaluation Process Map (Appendix K)
- Evaluation Tools (Appendix L)
  - Consumer Pre-/Post-evaluation in English
  - Consumer Pre-/Post-evaluation in Spanish
  - Consumer Follow-up
  - Service Provider Pre-/Post-evaluation
  - Service Provider Follow-up
- Data Summary Tables (Appendix M)
  - Consumer Pre-/Post-evaluation
  - Consumer Follow-up
  - Service Provider Pre-/Post-evaluation
  - Service Provider Follow-up
- Community Partner Data Summary (Appendix N)
- One-hour MedlinePlus Lesson in English and Spanish (Appendix O)