Guide for Establishing a Hearing Assistance Program in Your Community

Created by the Hear Ye, Hear Me Project

Helping Older Minnesotans with Hearing Loss Stay Connected

LIVING AT HOME NETWORK

The *Hear Ye, Hear Me* project and this guide were supported in part by funding by a Community Services and Community Services Development (CS/SD) grant from the Minnesota Department of Human Services (DHS). Points of view or opinions expressed in this document do not necessarily represent official DHS policy.

Hear Ye, Hear Me

Helping Older Minnesotans with Hearing Loss Stay Connected.

Guide for Establishing a Hearing Assistance Program in your Community

LIVING AT HOME NETWORK

Highland Block Nurse Program
Keystone - West 7th Senior Services

Contact:
Living At Home Network
1376 Hoyt Ave.
St. Paul, MN 55108
651.649.0315

December 2011
(Revised 2020)

Preface

The ***Hear Ye, Hear Me*** project was the result of a perfect storm of events. In 2009, a Living at Home Network program director in St. Paul, MN suffered a temporary hearing loss due to a medical condition and realized first-hand how devastating hearing loss could be. Around that time, she learned of a one-day workshop on hearing loss sponsored by the Minnesota Department of Human Services - Deaf and Hard of Hearing Services Division (DHS-DHHS). Why not attend and see how this would help our clients?

Even though she was trained as a nurse, the program director gained new information about hearing loss and wanted to pass it forward. She mentioned the great training she had received to another Living at Home Network director, who coincidentally had been thinking about doing something on hearing loss for her program.

This made sense because Living at Home Network professionals conduct in-depth home visits to assess for needed services, and determine how to tailor these services to individual needs. They serve an average 2,000 individuals per year, and it is estimated that 50% of their nursing/care-managed clients have either a mild or severe hearing impairment.

Opportunity meets need. In 2009 four St. Paul Living at Home programs came together with hearing loss experts to form a program partnership. Funding was secured through Community Services and Community Services Development (CS/SD) grant of the Minnesota Department of Human Services (DHS).

This guide shares what was done and what was learned from this project, with the hope it can assist other community organizations in reaching out to seniors with hearing loss.

Contents

Hear Ye, Hear Me

Helping older Minnesotans with hearing loss stay connected.

Guide for Establishing a Hearing Assistance Program in Your Community

Project Partners

Living at Home Network Programs

Kathleen Arnesen, former Executive Director of Macalester-Groveland Seniors.

Maureen Davidson, former Director of West Seventh Senior Services.

Paula Fischer, Director of the Highland Block Nurse Program.

Julie Poupore, former director of the Summit Hill Living at Home/Block Nurse program.

University of Minnesota-Twin Cities

Department Of Speech-Language-Hearing Sciences

Mark DeRuiter, Director of Graduate Studies and Clinical Programs in the Department of Speech-Language-Hearing Sciences at the University of Minnesota–Twin Cities. He is dually certified in audiology and speech-language pathology, and is involved in professional activities at both the state and national levels.

Minnesota Department of Human Services

Deaf and Hard of Hearing Services (DHHS)

Mary Bauer, Deaf and Hard of Hearing Specialist, MN DHS - DHHS. She provides consultation, information & referral, technical assistance, and training to individuals who are deaf or hard of hearing, their families, and public and private agencies regarding issues related to hearing loss. She shares her experiences as a hard-of-hearing person during her presentations so people can better understand what it is like to have a hearing loss. She has a degree in elementary education and deaf education and has worked with deaf and hard of hearing persons and their families since 1980.

Introduction

What is the impact of hearing loss?

Hearing loss usually develops slowly, often worsens with age, and is generally permanent. It is typical for individuals with a mild to moderate hearing loss to be unaware of their problem, even though family and friends are quite aware of it. According to the Hearing Loss Association of America, hearing loss is the most common sensory impairment for those age 65 and over, with 30-40% of that population affected to some degree.

Hearing loss is invisible and almost always painless. There are no physical warning signs, except in some cases there may be ringing in the ear(s). But the real reason hearing loss "sneaks" up on a person is that the change is so gradual.

Most hearing losses develop over a period of 25 to 30 years. By age 50 or 60, there can be enough deterioration to interfere with conversations. But hearing loss can occur at any age due to factors such as noise exposure, trauma, genetics, illness, and certain medications.

People with a hearing loss who don't use hearing aids are more likely to feel sad or anxious, be less socially active and feel greater emotional insecurity than those who do use hearing aids. In some cases, untreated hearing loss can be misdiagnosed as dementia.

Untreated hearing loss can lead to withdrawal, isolation, heightened stress, fatigue, strained relationships, insecurity, emotional disorders and misdiagnosed emotional or physical disorders. Symptoms of hearing loss are similar to those presented with Alzheimer's disease, so it is easy to confuse the two, resulting in misdiagnosis and failure to treat. *(National Council for Better Hearing Study, 2000)*

Side effects of untreated hearing loss

- Isolation from family and friends
- Heightened stress
- Unnecessary fatigue
- Strain in relationships
- Emotional disorders
- Misdiagnosed emotional or physical diseases

SYMPTOMATIC SIMILARITIES OF ALZHEIMER'S DISEASE AND UNTREATED HEARING LOSS

Alzheimer's Disease	Untreated Hearing Loss
Depression, anxiety, disorientation	Depression, anxiety, feelings of isolation
Reduced language comprehension	Reduced communication ability
Impaired memory (esp. short-term memory)	Reduced cognitive input
Inappropriate psychosocial responses	Inappropriate psychosocial responses
Loss of ability to recognize (agnosia)	Reduced mental scores
Denial, defensiveness, negativity	Denial, heightened defensiveness, negativity
Distrust and suspicion regarding other's motives	Distrust and paranoia (e.g., belief that other may be talking about them)

NATIONAL COUNCIL FOR BETTER HEARING

Chartrand MS: Alzheimer's & Hearing Loss. Professional Education Course, International Institute for Hearing Instrument Studies, Livonia, MI, 2000.

Introduction *continued*

Project design

As program directors of four Living At Home/Block Nurse Programs who work closely with older adults, we have seen first-hand the isolation and frustration brought on by the losses of aging, especially those that limit communication with others. The Hear Ye, Hear Me project sought to overcome the barriers and denial so often associated with hearing loss and to improve the quality of life for families affected by hearing loss.

The project design focused on older adults who are experiencing hearing loss and their family members and caregivers. It involved reaching older adults in community-based settings (such as community centers) and through existing services such as home visits. Program options included direct service (screenings, home modifications), advocacy (access to assistive technology), education, and peer support. In addition, the project design included public awareness and outreach to community businesses and organizations.

It's important to remember what works in a single community may not work for all. This guide presents the "nuggets of truth" discovered in our community. Resistance to dealing with hearing loss is strong. Hopefully, community-based efforts such as this project will encourage more older adults with hearing losses to take steps to stay engaged and connected — including all those baby boomers who listened to "too much loud music" for so many years!

How to use this guide

This guide is designed to assist you in developing a hearing loss program in your community, based on a model designed for four neighborhoods in St. Paul. The guide describes the project's six objectives—Public Awareness, Hearing Screenings, Home Modifications, Education, Community Outreach, and Peer Support — and provides highlights of what we did, steps you might consider and lessons learned along the way.

"Older adults with hearing loss will usually fail a hearing screening. However, when they are questioned, 'How did the screening go?' they will typically say, 'Just fine.' There continues to be a challenge of accepting hearing loss for what it is and accepting it as a loss of communication."

–Dr. Mark DeRuiter, University of Minnesota

Steps to Establish a Community-Based Hearing Loss Assistance Program

STEPS	WHAT WE DID
1) Assess community needs/resources available to seniors with hearing loss and their families and identify gaps in services.	Through initial discussions among the four Living at Home program directors, it was recognized that local, community-based programming on hearing loss was not available in the neighborhoods served by the Living at Home programs.
2) Based on identified needs, set goals for a hearing loss assistance program.	Three goals were established to achieve the *Hear Ye Hear Me* project's overall mission — to develop hearing-friendly communities that help elders stay connected and help them make the transition to the use of assistive technology and community-based long-term care services. 1. Our primary goal was to reach and improve the lives of older adults and caregivers by providing or arranging any and all services needed to help seniors dealing with hearing loss. 2. Secondly, we wanted to alter the attitude toward accepting assistive technology through advocacy and bridging the informal and formal systems to truly benefit the consumer. 3. Thirdly, we wanted to pass on the knowledge gained to other service providers, thereby reaching more older adults and providing a more comprehensive service to them.
3) Determine objectives and scope of the program.	The scope of the *Hear Ye Hear Me* project was built around six main objectives, listed and described in more detail in this manual. **Objective #1** - Public Awareness: Develop and distribute promotional materials aimed at changing public attitudes about hearing loss and addressing the stigma associated with using assistive listening technology. **Objective #2** - Hearing Screenings: Make hearing screenings and otoscopic checks easily available to older adults. **Objective #3** - Home modification: Provide older adults, along with caregivers and family members, an easy way to assess the home environment for problem areas, and offer individualized community-based advocacy to help them stay connected to others and to access community-based long-term care services. **Objective #4** – Education: Educate older adults on new technologies available and how to access them, and educate volunteers, family members and care providers on techniques for improving communication, emphasizing their shared responsibility. **Objective #5** - Community Outreach: Develop hearing-friendly communities. **Objective #6** – Peer Support: Facilitate small groups of families/friends, including those with hearing loss and those who are close to them, to improve communication.

STEPS	WHAT WE DID
4) Identify partners, including local hearing loss specialists.	The project originated with four Living at Home/Block Nurse Programs in the southwest quadrant of St. Paul — Highland Park, Macalester Groveland, Summit Hill and West 7th. Each of these programs works directly with seniors in their homes and knows the challenges faced by clients with hearing loss. The University of Minnesota Speech-Language-Hearing Sciences Department was invited to be a partner to provide technical expertise. The University of Minnesota audiology department had previously participated in one of the Living at Home health fair hearing screenings. In addition, Deaf and Hard of Hearing Services (DHHS) was sought as a partner for expertise on living and coping with hearing loss.
5) Assign duties/roles for each partner.	The success of this project depended on the roles and duties assigned to each of the partners: • Role of project manager was assumed by a Living at Home program director who was responsible for overall project coordination and management. This individual was supported by a project assistant who handled a number of duties, including setting up educational seminars, ordering equipment and supplies, coordinating printing of project materials, and organizing a hearing loss display for one program's health fair. • The duties of the four Living at Home program directors included development of the community awareness materials, training of staff to conduct home modification assessments, coordinating with the audiologist and hearing loss specialist, recruiting trainers for the educational sessions, and developing the replication guide. • The University of Minnesota audiologist served as a consultant on technical matters and developed and conducted the volunteer speaker training for the *Demystifying Hearing Loss* community educational presentation. He also arranged for staff and students to conduct hearing screening in the four neighborhoods and to present the *Clear Speak* educational sessions. • The DHHS hearing loss specialist served as a consultant on community awareness and education aspects of the project. She conducted *Demystifying Hearing Loss* community educational sessions in the four neighborhoods, served as a resource at health fairs, developed and co-led volunteer speaker trainings, and advised on development of the peer model for hearing loss individuals and their caregivers.

STEPS	WHAT WE DID
6) Set budget and secure funding.	Each year the Minnesota Department of Human Services gives community services grants that require a 100% match by the recipients. The partners applied for and received a grant of $82,795. This amount was matched by funds from the United Way, the Stevens Square Foundation and Ramsey County. In addition, the project used in-kind matches of office space, secretarial assistance, volunteer time, phone, utilities, etc. Project funds were used to cover the following: • Staff time – four Living at Home Block Nurse program directors • Administrative assistant • Project assistant • Audiologist time • Desktop publisher/web formatter for replication guide • Equipment for volunteer training -- computer/projector and four amplification units • Education materials/outreach materials/printing • Office supplies A large part of this budget was for the project start-up, which would not be required in any replication. Materials and equipment are available for rental from the project partners.
7) Establish a schedule or timeline.	A two-year project work plan was developed: **YEAR ONE** • Develop community awareness materials. Distribute materials to community centers, hospitals, clinics, other block nurse programs and libraries. • Order equipment: laptop computer, projector, speakers, otoscopes, pocket talkers, etc. • Develop hearing screening protocol and conduct screenings. • Meet with home care agency for training nurses on otoscope procedure. Train nurses on otoscope use and protocol. • Develop curriculum on the educational sessions to train volunteer speakers. Recruit volunteer speakers to be trained in the curriculum. Plan and conduct two half-day training sessions for volunteers. Trained volunteer speakers present to community agencies. • Train staff on home modification assessment for older adults with hearing loss. Begin in-home modification assessment for all program clients. • Develop peer group model. **YEAR TWO** • Hire desktop publisher for replication guide. Write/edit replication guide. • Continue educational sessions and screenings in communities and with professional organizations. • Continue in-home modification for those with hearing loss.

STEPS	WHAT WE DID
8) Name the program.	To draw attention, the partners developed a marketing name for the project – *Hear Ye, Hear Me* – because it was positive and distinctive. The *Hear Ye, Hear Me* concept was built on two ideas — that town criers call out to the public on important issues, and, that everyone wants and deserves to be heard.
9) Meet regularly to plan and evaluate.	The project partners met frequently at the outset and then at least every two months to plan and evaluate progress. The project manager was essential to keep the partnership on task and on schedule. Flexibility and openness to new approaches by all partners was key. The project was strengthened by the synergy of working together on the overall approach, on collaboratively solving problems that emerged, and through sharing resources and knowledge.

OBJECTIVE #1

Public Awareness

Develop and distribute promotional materials aimed at changing public attitudes about hearing loss and addressing the stigma associated with using assisted listening technology.

What we did:

- The project team created a humorous poster of women talking and each hearing something different. Fifty copies were printed and distributed throughout the four neighborhoods at community centers, offices, coffee shops, clinics and stores.
- The project team also created bookmarks with hearing information and contact information for assistance. They were available at four libraries, given out at educational workshops and enclosed in Meals on Wheels lunch bags.
- Two local newspapers were contacted, and subsequently wrote stories about the importance of being screened for hearing loss.

Suggested action steps:

- Create and display posters, bookmarks and other materials to raise community awareness. Determine optimum distribution points.
- Prepare a news release about the program. Contact local media and request that they publicize the program.

Lessons learned:

- Although the poster was funny and eye-catching, it only featured older women. It is important create materials that are age-and gender-inclusive.
- It is difficult to evaluate the effectiveness of the materials that were distributed in the community.

Appendix:

- Poster and bookmark (pg. 24)

"I will go to see an audiologist now. I feel better prepared to know how to make an appointment and questions to ask and I feel better about myself."

OBJECTIVE #2

Hearing Screenings and Otoscopic Checks

Make hearing screenings and otoscopic checks easily available to older adults.

What we did:

- University of Minnesota Audiology students and their instructor conducted free community hearing screenings at locations such as community centers, churches and senior high-rise buildings. Each program partner conducted two screening sessions. Resources for hearing loss follow-up were distributed; hearing loss professionals were present at one location to meet with those screened. Participants received follow-up calls if requested.
- Older adults were sometimes viewed as having early dementia when in fact they could not hear due to earwax build-up. Living at Home/Block Nurse program nurses were trained by the audiologist on use of an otoscope, an instrument used to examine the ear to identify signs of ear infection and wax build-up, and to conduct an exam. Four otoscopes were purchased for each program partner at a cost of $150 per otoscope.
- Once trained, Living at Home/Block Nurse program nurses checked homebound older adults for earwax during home visits.

Suggested action steps:

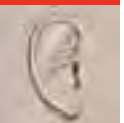
- Conduct hearing screenings at convenient locations such as community centers, churches and senior high-rise buildings and at events such as senior health fairs or “leisure age” group programs.
- At the hearing screenings, have a list of resources available if follow-up is required, such as visiting a physician or audiologist, learning new communication strategies, acquiring hearing aids, etc. If possible, invite hearing loss professionals to be present to discuss next steps with participants requiring follow-up.
- Confer with home nursing staff on how to incorporate otoscopic checks into home visits. Purchase otoscopes for home visit programs. Train nurses in their use to check for earwax. Include earwax checks during nursing home visits by the block nurse.

Lessons learned:

- Personal encouragement often helps in gaining an older adult’s consent to be screened. Some have difficulty accepting the possibility that they may have a hearing loss and also concerns about being able to afford hearing aids or other assistive equipment.
- If hearing screenings are conducted at a health fair or other larger event, make sure a quiet space is available for the tests.
- To successfully integrate otoscopic checks into home visits, nursing staff should be involved from the project’s outset. Sufficient time is needed to gain their buy-in and for orientation, training and incorporating the otoscope checks into their nursing practice.

Appendix:

- Otoscopic Exam Overview (pg. 25)
- Ototoxicity Presentation Overview for health professionals handout (pg. 26-28)



★ ★ ★ SUCCESS SNAPSHOTS ★ ★ ★

★ At least four low-income seniors received hearing aids at no cost due to the advocacy of Living at Home staff who located hearing aid financial resources for these clients.

★ A project partner colleague did not realize she had a hearing loss until she was checked at one of the program screenings. She now wears hearing aids.

★ An older man who was screened and referred to his physician reported back that his hearing loss was caused by earwax, and after its removal, his hearing returned to normal.

"I went to a *Hear Ye, Hear Me* hearing screening and found out I needed a hearing aid. After getting one, I actually could hear birds singing. I didn't realize how many sounds were out in the world that I had been missing."

OBJECTIVE #3

Home Modifications

Provide older adults and caregivers/family members an easy way to assess the home environment for problem areas, and offer individualized community-based advocacy to help older adults stay connected to others and to access community-based long-term care services.

What we did:

- The home environment was assessed using a simple, user-friendly checklist developed by DHHS. This checklist included a list of potential solutions to each question's response.
- Living at Home staff conducted home modification assessments for clients. Also, students from the University of Minnesota, School of Nursing and students from Macalester College's Global and Community Health course were recruited to conduct assessments.
- As part of the assessment checklist, a list of solutions – improvements and devices to adapt the home environment for people with hearing loss – were distributed to clients, along with a list of vendors who sell adaptive devices and equipment.
- The program staff assisted clients in filling out paperwork for adaptive equipment such as amplified phones provided by the state's Telephone Equipment Distribution Program at no cost to those who meet income guidelines.

Suggested action steps:

- Train staff and volunteers to conduct home modification assessments.
- Seek volunteers to assist in assessments, such as students from local colleges and universities.
    - Host presentations about home modification at senior high-rise buildings. Hand out the home modification checklist and instruct on use.
- Locate hearing loss resources to improve home environment, such as the Solutions and Vendors lists, and distribute list to clients.
- Assist clients in applying for government programs that provide hearing devices such as amplified phones.

> "After a home modification screening, my care manager provided me with a pocket talker. I'm 92 years old and couldn't believe what I was missing!"

Lessons learned:

- A valuable component to this effort was the training of local college students to conduct home assessments. Not only did this enable us to reach more older adults but students gained experience and insights about people living with hearing loss.
- Denial about hearing loss is common. To gain cooperation, it helps to present the assessment as a way to establish a baseline – e.g., "Let's just see where you are right now and then check every six months or so."

Appendix:

- Home Modification Checklist (pg. 29)
- Solutions list (pg. 30-34)
- Vendors list (pg. 35)

★ ★ ★ SUCCESS SNAPSHOTS ★ ★ ★

★ The home modification assessments resulted in changes for many clients. For example, we installed several amplified phones at no cost to the senior through the Minnesota Telephone Equipment Distribution (TED) program; one client reported being able to talk more frequently with family members because of the amplified phone.
See page 45 for TED contact information.

★ An 82-year-old woman with a profound hearing loss was given a home modification check by a Living at Home care manager. The care manager lent her a personal amplification device to try out for two weeks. When the care manager returned, the woman did not want to give up the device because it had helped her so much. She was then willing to be fitted for hearing aids. The care manager was able to assist her with getting a greatly reduced price through the Starkey Hearing Foundation Hear Now Program. This woman's success started with a low-cost personal amplifier. It is important to remember that sometimes a low cost alternative can be a gateway for an older person to realize just what they have been missing.

★ One partner agency was having trouble delivering meals on wheels to a client with a hearing loss. After a home modification assessment was done, it was determined that the client could not hear the meals volunteer knocking on the door. The program purchased a doorbell designed for people with hearing loss – a light now goes on near the client's chair when the doorbell is rung. The result has been no further delivery problems.

OBJECTIVE #4

Education

Educate older adults on new technologies available and how to access them, and educate volunteers, family members and care providers on techniques for improving communication, emphasizing their shared responsibility.

What we did:

- The DHHS hearing loss specialist developed and gave a one-hour community educational session on hearing loss for older adults, entitled *Demystifying Hearing Loss and Hearing Aids*, at various locations. The content centers on the barriers that keep older adults from acknowledging and addressing hearing loss.

  The number of community educational sessions was expanded by recruiting volunteer speakers, individuals with a health care background and public speaking experience. The volunteers underwent training using a curriculum developed by the University of Minnesota audiologist and DHHS hearing loss specialist. Following training, two volunteer educators presented the *Demystifying Hearing Loss* presentation to older adults at seven locations.
- The U of M audiologist gave four one-hour Clear Speech educational sessions aimed at hard-of-hearing adults and their caregivers, as well as professionals who work with hard-of-hearing adults. These presentations focused on the impact of hearing loss on speech understanding; the benefits and limitations of hearing aids; assistive technologies for hard-of-hearing adults; effective communications strategies; the role of speech reading in conversation; and Internet resources available for hard-of-hearing adults.
- A "hearing house" was set up at an annual senior health fair. Participants were able to try out various kinds of hearing loss technology.
- A partnership was set up with the State of Minnesota's Telephone Equipment Distribution (TED) program to help older adults gain access to amplified phones.
- After the project concluded, project partners presented a summary to health care professionals at the Minnesota Department of Health's annual Many Faces of Community conference in October, 2011.

Suggested action steps:

- Host community educational sessions on the barriers that keep older adults from acknowledging and addressing hearing loss. *(Demystifying Hearing Loss and Hearing Aids)*
- Recruit and train volunteers to present the sessions. Volunteers should have some health care and public speaking background.
- Host educational sessions to improve communication targeted at individuals with hearing loss and their caregivers and families. *(Clear Speech)*

> "This presentation helped me decide to be more patient with myself and others, and to use the help available out there."

Lessons learned:

- Promote the sessions generally, not just to older adults. Family members brought older adults because they thought their relative needed help.
- Attendees at the *Demystifying Hearing Loss* sessions often stayed afterward to speak with the presenter about their personal situation. Allow extra time for this. Consider having several experts on hand for private consultations.
- Dividing the volunteer speaker training into two half-day trainings with lunch provided time for participants to process information. This is also an opportunity to train volunteers on use of the project's laptop computer and projector.
- Conducting short pre- and post-session surveys of those in attendance gives valuable feedback on what participants learned.
- While the *Clear Speech* sessions were delivered by a licensed, certified audiologist, other professionals familiar with hearing loss and its effect on communication could present this material.

Appendix:

Demystifying Hearing Loss and Hearing Aids

- Presentation overview (pg. 36-37)
- Evaluation form (pg. 38)
- Assistive devices handout (pg. 39)
- Where to purchase devices developed for people with a hearing loss -- handout (pg. 40)
- Training curriculum on *Demystifying Hearing Loss and Hearing Aids* for volunteer speakers is available in Power Point.

Clear Speech

- Pre-test questionnaire (pg. 41)
- Post-test questionnaire (pg. 42)
- Communications Strategies handout (pg. 43)

Others:

- Regional Deaf and Hard of Hearing Services Offices handout (pg. 44)
- State and National Hearing Loss Organizations handout (pg. 45)

★ ★ ★ SUCCESS SNAPSHOTS ★ ★ ★

★ Survey results showed that 93% of participants found the *Demystifying Hearing Loss* educational session helpful; 99% said they would change something about their life related to hearing loss as a result of what they learned.

OBJECTIVE #5

Community Outreach

Develop hearing-friendly communities by supporting businesses and community organizations in making their facilities more accommodating to those with hearing losses.

What we did:

- The DHHS hearing specialist developed a checklist/survey to help businesses and community gathering places assess how "hearing friendly" their facilities are.
- Each partner decided on one organization to survey, choosing from such locations as recreation centers, churches and synagogues, and community centers. A list of assistive technology resources was offered to help the organization make helpful accommodations for individuals with hear loss.
- A number of area businesses and organizations were contacted by letter, asking if they would like to make portable amplification systems that had been purchased through the *Hear Ye Hear Me* grant. No responses were received.

Suggested action steps:

- Contact area businesses or organizations and invite their participation in the "How hearing friendly is your business?" survey. Conduct survey and assist with follow-up based on survey results.
- If portable amplification equipment is available for rental, send letter and needs survey to area businesses and organizations to let them know of its availability.

Lessons learned:

- Businesses and organizations may feel threatened by the idea they may need to change. It is important to explain how the suggested changes can benefit their customers or members. Many changes involve little or no cost.

Appendix:

- How "hearing friendly" is your business? Checklist handout (pg. 46)
- Cover letter to businesses (pg. 47)
- Survey of needs and request for amplification equipment (pg. 48)

SUCCESS SNAPSHOTS

★ ★ ★

★ Four organizations made changes to better accommodate people with hearing loss, including a church, synagogue, community center and business office.

OBJECTIVE #6

Peer Support

Facilitate small groups of families/friends, including those with hearing loss and those who are close to them, to improve communication and understanding.

What we did:

- A number of peer support models were considered, including a support group program in Illinois for people with hearing loss and their families.
- A six-week program, named *Sound Effects*, was designed by the state hearing specialist and project manager to include support, resources and problem solving skills, and the opportunity to discuss problems and frustrations related to hearing loss.
- Promotional flyers were distributed at high-rise buildings and churches and emailed to professionals working with older adults, drug stores and local clinics.

Suggested action steps:

- Consider offering a peer support group such as the *Sound Effects* model.

Lessons learned:

- Recruiting through promotional flyers posted at senior high-rises, community centers and non-profit agencies was not effective, even with offering incentives like lunch or free hearing aid batteries. A more effective approach might be to introduce the peer support program at either the *Demystifying Hearing Loss* or *Clear Speak* educational programs, which were well-attended.
- While several individuals indicated interest, the numbers were not sufficient to follow through with this offering.

Appendix:

- Sound Effects Caregiver Education promotional flyer (pg. 49)
- Sound Effectives Caregiver Group six-week agenda (pg. 50)

"I'm going to show my husband the handout I received from the educational workshop. I'm tired of him walking away from me when he talks and I can't hear him!"

Final Summary

Addressing a persistent problem

Hearing loss is prevalent among older adults and contributes to a diminished quality of life for many people in this large and growing segment of the population. The costs of untreated hearing loss are high, both to individuals and society, including isolation, depression, relationship issues and misdiagnosis of illness such as Alzheimer's Disease.

Although some older adults might be aware of their hearing loss, many more do not seek assistance with this loss of communication, for a variety of reasons. Some do not realize the extent of their loss and how it is affecting their lives. Others may be unwilling to ask for help because they feel embarrassed or ashamed about their impairment. Still others may worry about the use of hearing aids – their cost, appearance, care and operation. Many older adults are simply unaware of assistive technologies that could improve their daily life.

A community-based approach

The *Hear Ye, Hear Me* project sought to break through barriers by developing effective community-based strategies to reach and assist older adults with hearing loss. The model brought trusted community agencies that have wide access to older adults together with experts in hearing loss. Multiple strategies were developed to reach the target population recognizing that reducing long-held resistance to hearing loss takes time and persistence.

Effective strategies

In evaluating the project's results, the hearing screenings, otoscope checks, in-home modification assessments and educational sessions were highly successful. Many older adults were reached and dozens received help that undoubtedly improved their quality of life. In addition, the community agencies have integrated a number of these strategies into their ongoing programming and practice. Other strategies, including community outreach and peer group support, require further development but hold promise for the future.

In the end, this project clearly demonstrated that older adults will respond positively to hearing loss programs that are offered by agencies they know and trust, and in familiar and non-threatening settings such as community centers, senior high-rises and their own homes.

"My mother is very hard of hearing. Now I'm more patient with her. I also make sure I look at her when I speak."

Appendix

POSTER

BOOKMARK

The Otoscopic Exam

The Otoscope is a device used by physicians, audiologists, and other allied healthcare providers. It contains a bright light as well as a magnifying lens. Your healthcare provider can use the otoscope to look into your ears and identify whether there are obvious problems, along with other tests that they might conduct during your visit. Typically, the otoscopic exam is very brief - often lasting under a minute for both ears! Although not a test of your hearing, an examination with the otoscope can help your healthcare provider determine whether:

- the eardrum is intact and typical in appearance,
- there are obvious signs of infection in your ear canal or middle ear,
- there is a significant amount of wax in your ear that might be contributing to a problems with hearing.

The otoscopic exam is an important step on your path to healthy hearing!

Presentation on Ototoxicity for Health Professionals

Ototoxic Medications—Part One
Elizabeth A. VandeWaa, Ph. D.
Mark DeRuiter, MBA, Ph.D.
Virginia Ramachandran, Au.D.

Joint Commission—New Paths

- New Joint Commission document "Advancing Effective Communication, Cultural Competence, and Patient-and Family-Centered Care".
- Hospital staff must document patient communication and sensory needs upon admission
- Staff should be aware of changes in communication status during treatment and put in place accommodations.

Basics of Hearing

- External and middle ear transmit sound waves to the fluid-filled inner ear, amplifying the sound energy in the process. The cochlea in the inner ear converts the sound waves into nerve impulses. Hair cells are the receptors for sound.
- Human ears can detect frequencies from 20-20,000 cycles/sec, are most sensitive to frequencies at 1000-4000 cycles/sec.

Structures of the Ear

- Outer
- Middle
- Inner
- Eighth cranial nerve

What Parts of the Cochlea are Vulnerable to Ototoxicity?

- The hair cells, which are part of the inner ear.
  - Once damaged, these cells do not regenerate.

Structures of the Ear

- Vestibular apparatus

Basics of Balance

- The vestibular apparatus in the inner ear provides information for the sense of equilibrium and for coordinating head movements with eye and postural movements. Hair cells in the vestibular apparatus respond to movement.

Where Do These Drugs Cause the Most Damage?

- INNER EAR cochlea and vestibular apparatus
- As a result, BOTH hearing and balance

Why Does Ototoxicity Occur?

- The ear may be able to concentrate ototoxic agents in the fluid compartments that bathe the inner ear
- These drugs may affect the physiology of the ear (for example, the ability of the ear to make endolymph may be affected)
- The ear is uniquely susceptible to these agents

Incidence of Ototoxicity

- Difficult to determine because of differences in severity and onset
- May present as either hearing loss or vertigo
- Drug-induced deafness is estimated to occur in about 1.6 to 3 per 1000 medical patients

Patients Most at Risk for Ototoxicity

- Old age
- Infancy
- Renal or hepatic insufficiency
- Pregnancy
- Those in a noisy environment
- Those who are using combinations of ototoxic drugs
- Those without access to monitoring

Ototoxicity

- May encompass hearing
  - Deafness
  - Tinnitus
  - Difficulty with background noise
- May affect balance
  - Dizziness when performing a task such as driving, walking, etc.
  - Dizziness when at rest

The Consistent Related Factor is That There is None

- Not dose-dependent in all cases
- Not route-dependent in all cases
- Not age-dependent in all cases
- Not duration-dependent in all cases

But There ARE Risk Factors
- Dehydration
- Extremes of age
- Concomitant use
- Sometimes rapid infusion
- Sometimes dose escalation
- THESE PATIENTS WARRANT MONITORING

Common Ototoxic Agents – At least 96 have been identified!

- Antibiotics
  - – Aminoglycosides, Macrolides, Vancomycin, Minocycline
- Loop Diuretics
  - – Furosemide Ethacrynic acid
- NSAIDs
  - – Aspirin, Ibuprofen, Indomethacin, Phenylbutazone
- PDEs
- Cisplatin

Aminoglycosides

- Relatively narrow-spectrum
  - – Effective against gram negative aerobes
  - – Not absorbed from the GI tract, so usually used parenterally
- 7 are approved for use in the U.S.
- Most often used are: Gentamicin, Tobramycin, and Amikacin

Ototoxicity and Aminoglycosides

- All of these drugs are potentially ototoxic
- Best if administered once daily rather in divided doses
  - – Monitor trough dose
  - – If trough levels are high, the drug can not be cleared from susceptible cells in the ear
- Ototoxicity is increased if AGs are used with ethacrynic acid, or for more than 10 days, or in a patient with renal compromise

Trough Levels of AGs

- To minimize risk of ototoxicity, trough levels should be BELOW:
- Amikacin: 5-10 mcg/mL
- Gentamiiciin: 1-22 mcg//mL
- Tobramycin: 1-2 mcg/mL
- Draw trough level one hour before the next dose for patients receiving once-a-day dosing

Ototoxicity and AGs

- First sign is high-pitched tinnitus, followed by high-frequency hearing loss
  - – Audiometric testing is needed to detect this
  - Vestibular damage is first seen as a headache of 1-2 day duration, followed by dizziness, nausea, unsteadiness, vertigo
- Irreversible!
- d/c AGs at first sign

Rules for AGs

- Monitor trough levels
- No more than 10 days
- Do not use with ethacrynic acid. Other loop diuretics OK—but monitor.
- Watch in patients with renal impairment
- Monitor for cochlear damage
- Consider pre- or co-treatment with aspirin?

Macrolides

- Spectrum similar to penicillin; May be used in PCN-allergic patient
- Erythromycin may cause transient hearing loss in high doses
- Keep dose of Erythromycin less than 2-4 g/day
  - – Even lower in susceptible individuals

Vancomycin

- Used for CDAD, MRSA, and serious infections in patients who cannot take penicillins
- Usually administered parenterally
- May cause irreversible ototoxicity
  - – Usually when plasma level exceeds 30 mcg/mL
  - – Seen in patients getting high dose, or in renal impairment, or for long duration, or when other ototoxic meds are also used
  - – Monitor! Dose LESS than 45 mcg/mL at all times!!

Minocycline

- Tetracyclines are broad spectrum antibiotics, but due to resistance, their use is limited to certain niches.
- Minocyycline (Minocin, Dyynacin) showing some utility against rheumatoid arthritis
- Can cause vestibular damage including dizziness, vertigo, and lightheadedness
  - – More prevalent in females?

Loop Diuretics

- High-ceiling diuretics include Furosemide (Lasix), Ethacrynic acid (Edecrin), Bumetanide (Bumex), and Torsemide (Demadex).
- Are indicated for edema caused by HF, chronic renal disease, and cirrhosis. Furosemide and Torsemide are approved for HTN as well.
- Furosemide causes transient ototoxicity
- Ethacrynic acid may cause irreversible hearing loss
- Use caution especially when using with aminoglycosides (a common occurrence)
- Rapid infusion is most commonly associated with hearing loss and vertigo

Loop Diuretics—How Much is Too Much?

- Ethacrynic Acid: Doses of 50-100 mg IV cause ototoxicity (50 mg q 2 h is therapeutic range)
- Furosemide: Doses of 1-2 g IV (20-40 mg q 2 h is therapeutic); Doses of 160-800 mgg PO/day are ototoxic (20-80 mg q day or bid is therapeutic for most)
  - – Max daily PO dose is 600 mg

NSAIDs

- Aspirin is primary culprit for ototoxicity
- Indicated for arthritis, moderate pain, fever
  - Low-dose for inhibition of platelet aggregation
- Maximum daily dose is 8000 mg

Aspirin-Induced Ototoxicity

- Dose and concentration-related
- Daily doses of >2.7 g cause ototoxicity in 0.31.7% of patients. Doses of 4 g or more cause tinnitus in over 50% of patients and hearing loss in over 25%
- May affect cranial nerve function
- Considered reversible

PDE Inhibitors

- Sildenafil (Viagra), Vardenafil (Levitra) and Tadalfil (Cialis) are used to treat ED. Sildenafil is also approved for pulmonary arterial hypertension.
- Sudden hearing loss has been reported
  - Usually in one ear
  - Sometimes associated with dizziness, vertigo, tinnitus
  - May be partial or complete
  - Hearing returned in 1/3 of cases
- If hearing loss occurs, d/c the drug (unless it's for PAH)

Platinum Drugs

- Cisplatin is approved for metastatic testicular and ovarian cancer and advanced bladder cancer
  - Off-label use for lung cancer and head and neck cancers
- Ototoxicity presents as tinnitus and high-frequency hearing loss
- Carboplatin has less incidence of hearing loss

Dangerous Combinations

- Aminoglycosides or Macrolides + Loop diuretics or a noisy environment
- Cisplatin + radiotherapy, noise exposure, or other antineoplastic agents

Suspect Ototoxicity When...

- Hearing seems compromised
  - Patient does not respond to nurse or other health care workers
  - Family members indicate concern
  - Patient complains of "cotton in ear", "stuffy head" or "ringing in ears"
  - Patient is speaking in an elevated tone

Suspect Ototoxicity When...

- Vestibular problems present
  - patient feels dizzy when ambulating or sitting up quickly, or when eyes are closed
  - vomiting, nausea, lightheadedness, tinnitus ataxia, tinnitus, vomiting, nausea are seen
  - patient complains of feeling dizzy "all the time"
  - patient feels he/she cannot do activities of daily living (driving, work, self-care) without a risk

Nursing Considerations for the Patient with Ototoxicity

- Consider bedside hearing tests or audiologist consult
- Check electrolytes, blood pressure, fluid balance
- Check nutritional status
- Arrange for rails, support furniture, and a cane
- MONITOR DOSES OF POTENTIALLY OTOTOXIC DRUGS

Home Modification Checklist

The goal of the *Home Modification Checklist* is to provide those with a hearing loss, their caregivers, family members or other interested persons an easy way to assess the home environment for problem areas. Once the problem areas are identified, solutions are suggested to help the person with a hearing loss feel safe and independent in their home. For more information or further assistance, contact your local Deaf and Hard of Hearing Services (DHHS) office.

Does the person with hearing loss have	Circle one		If yes,
Difficulty hearing the doorbell or knocking at the door?	Yes	No	Go to pg. 30
Difficulty hearing the smoke detector?	Yes	No	Go to pg. 31
Difficulty hearing the carbon monoxide detector?	Yes	No	Go to pg. 31
Difficulty hearing weather warning sirens?	Yes	No	Go to pg. 31
Difficulty hearing the existing security system alarm?	Yes	No	Go to pg. 31
Difficulty hearing appliance buzzer/timer?	Yes	No	Go to pg. 32
Difficulty hearing the alarm clock?	Yes	No	Go to pg. 32
Difficulty hearing the telephone ring?	Yes	No	Go to pg. 32
Difficulty hearing well on telephone?	Yes	No	Go to pg. 32
Difficulty hearing the television, radio or stereo? Or, is the television, radio or stereo too loud for other members of the household?	Yes	No	Go to pg. 33
Difficulty hearing people trying to get his/her attention?	Yes	No	Go to pg. 34
Difficulty hearing running water?	Yes	No	Go to pg. 34
Difficulty hearing well in certain rooms?	Yes	No	Go to pg. 34

The current Home Modification Checklist can be found on the MN DHS Deaf and Hard of Hearing Services website:
https://mn.gov/deaf-hard-of-hearing/learning-center/publications/

Home Modifications Solutions

The Door (see vendor list on page 35)

Alerting systems use the existing doorbell, a transmitter and a receiver. The alert can be a flashing light or a vibrating signal. Manufacturers of alerting systems include Clarity, Silent Call and Sonic Alert. Alerting systems can be used for numerous environmental sounds, such as a doorbell, smoke detector, telephone, crying baby, etc.

Special doorbells that flash a light or activate a vibrating pager are available. Other devices specifically designed to work with the intercom- type doorbell found in many apartment buildings are also available.

Visual door knock alert devices activate a flashing light when someone knocks at the door (they are sensitive to the vibration). For this to work, the resident must be able to see the door from where she or he sits.

Where to buy: See Vendor list on page 35.

Doorbell extenders can be used with the home's existing doorbell system. They offer adjustable volume and different sounds, and can be placed anywhere in the home (although most must be within 150 feet of the doorbell).

Wireless doorbell systems that includes volume control. Adjustable volume is an important feature for most people who are hard of hearing. Many wireless doorbell systems allow you to add more receivers as needed, so you can place them throughout the house. For best results, place a receiver near where the person with hearing loss prefers to sit.

Where to buy: Electronics and Home Improvement Stores
Chime and Chime Extender can be purchased at many of the national hardware chain stores.

Smoke Detector (see vendor list on page 35)

There are smoke detectors that use a flashing strobe light, an extra loud audible alarm, or a pillow vibrator to alert the deaf or hard of hearing person that the detector has been activated.

Alerting systems work with existing fire and smoke alarms. Alerting systems use transmitters and receivers to alert the user to various environmental sounds such as a smoke detector, telephone, doorbell, crying baby, etc. Manufacturers of alerting systems include Clarity Alertmaster, Silent Call and Sonic Alert.

Hardwired smoke detectors with strobe lights or extra loud alarms need to be installed by an electrician. This is especially important when installing in condominiums or apartment buildings.

Plug in smoke detectors activate a strobe light and/or loud alarm when smoke is detected. They plug into a standard electrical outlet (no electrician needed).

Where to buy: See Vendor list on page 35.

Carbon Monoxide Detector

There are specially modified carbon monoxide detectors that activate a strobe light when carbon monoxide is detected.

Where to buy: See Vendor list on page 35.

Weather Warnings

Some weather radios are designed to allow the user to connect attention-getting devices like strobe lights and bed-shakers. Check with electronics stores, electronics catalogs or one of the vendors.

Where to buy: Electronics stores, electronics catalogs or one of the vendors on the Vendor list.

Security System Alarm

It is best to contact the company that installed the existing security system. Most major companies are able to augment the existing system with strobe lights in one of two ways: hardwiring strobe lights in specified areas or using a plug-in unit that you can add a strobe light (or a bed-shaker) and then plug the unit into an electrical outlet. Silent Call manufactures a voltage input fire alarm transmitter that can be used with an existing home security system.

It may be possible to use the existing security system with an alerting system. Alerting systems allow the purchase of transmitters that will alert the user to environmental sounds such as an alarm, carbon monoxide detector, smoke detector, telephone, etc. Examples of alerting systems include Alertmaster, Silent Call, and Sonic Alert. These alerting systems can only be purchased from vendors who specialize in products for people who are deaf or hard of hearing.

Where to buy: See Vendor list on page 35.

Appliance Buzzer/Timer

Instead of relying on the appliance buzzer or timer, some people use vibrating wristwatches or portable alarm clocks that also function as timers. Many people also use their smartphones for this purpose. Use these solutions when you start the microwave, oven or dryer.

Where to buy: Electronics Stores or see the Vendor list.

Alarm Clock

Alarm clocks designed for people with a hearing loss come in a wide variety of styles, sizes, and various features. These clocks have various features including vibration, strobe lights or extra loud alarm sounds.

Where to buy: Electronics Stores or see the Vendor list.

Telephone

The Telephone Equipment Distribution (TED)
Program provides specialized telephone equipment, such as **amplified phones, amplifiers, ringers and signalers** that make it easier to use the telephone. You can use this equipment on a long-term basis at no cost. To qualify, you must
have a hearing loss, speech impairment or physical disability that limits the use of a standard phone (including being able to hear it ring) and meet income guidelines. Contact us or visit our website to learn more!

Captioned phones are popular with people who have a hard time hearing on the phone, but use their voice to communicate. Calls are captioned through a free relay service. Spanish speakers can connect with a Spanish-speaking relay
operator. You can also download apps so that your smartphone can function as a captioned phone.

Where to buy (if you do not meet the income guidelines): See the Vendor list

Cell phones have a number of useful features for people with hearing loss. Contact a local store that sells cell phones and ask about these features. If you use your hearing aids in the microphone setting when using the phone, look for a cell
phone that has an M3 or M4 rating. If you use your hearing aids in the telecoil setting when using the phone, look for a cell phone with a T3 or T4 rating.

Video calling apps, such as FaceTime, Skype, Google Duo and WhatsApp are way people with and without hearing loss see and talk with friends and family members. Anyone can install these apps on their computers, smartphones or tablets. People with hearing loss who use lip- reading often find it helpful to see the person talking.

People who use sign language to communicate can also use videophone apps, such as Convo, nTouch or Purple. These apps connect to a video relay interpreter, so the person can make calls to people who do not know sign language.

Where to buy: The Google Play Store (Android), the App Store (Apple) or the developer's website. Some apps are free.

Television, Radio or Stereo

Assistive listening devices are a popular and effective solution to this problem, as they reduce or eliminate background noise and amplify speech. There are different types of assistive listening devices, with different earphone and headphone styles. People using hearing aids equipped with a telecoil can use a neckloop with assistive listening devices. For more information about how to use assistive listening devices with hearing aids, contact your local DHHS office (see page 8).

Bluetooth technology sends wireless signals from a microphone or device either directly to the hearing aid, or to a receiver paired with the hearing aid. Many different devices — microphones, smartphones, tablets, hearing aids and more —
have Bluetooth technology.

FM systems use a radio signal to send sound from the transmitter (which includes the microphone) to the receiver. FM systems can transmit sound from as far away as 100-200 feet. The transmitter can be placed near the television, radio or audio speaker for easier listening. FM systems are portable and easily moved around. The FM system is used in classrooms, at workshops, in places of worship, and many other places and situations.

Induction loop systems use a wire installed around the listening area, a microphone and an amplifier. Hearing aids or cochlear implants with a telecoil can pick up the signal directly, or listeners can use a special receiver with headphones.

Infrared systems use light waves to send sound from a transmitter to a receiver. The infrared transmitter can be placed near the television, radio or stereo speaker for easier listening. Infrared systems are often used in concert halls, courtrooms, movie theaters and theatres.

Personal amplifiers are portable and easily moved. Wireless systems are available that allow you to place the microphone near the sound source, and the speaker/receiver near your ear. Personal amplifiers are also useful for one-on-one conversations, especially in noisy environments such as inside a vehicle or restaurant.

Where to buy: See Vendor list.

Closed captions can be accessed on most TVs through the television's menu. Closed captioning is a **free** service: all televisions manufactured after July 1993 have a built-in decoder chip, and you do not have to call anyone to activate it for you. On some televisions, the captions are simply turned on or off. On other televisions, you may be asked to choose from a list: select CC1 for English captions; select CC2 for Spanish captions (available on some television programs). To watch a DVD with captions, you often need to turn on captions through the DVD menu, where they are listed as "Subtitles for the Deaf and Hard of Hearing."

Getting Attention

A personal pager can be useful in situations where a member of the household has an illness or physical disability and needs to get the attention of the hard of hearing or deaf person. This has also been useful for outdoor activities such as hiking or biking to get the attention of the deaf or hard of hearing person. Personal pagers for people who are Deaf or hard of hearing are **not** activated through a paging service or company, so there are **no monthly fees** associated with these pagers.

Where to buy: See Vendor list.

Running Water

One solution to this problem is to visually check and double-check to make sure the water has been turned off. Making little reminder signs to check the faucets before leaving the room or house may also be helpful.

Another solution is to contact a local plumbing supply company for information about spring-loaded handles or electronic eye activated faucets or foot/knee controlled faucets (developed for those with physical disabilities).

Room acoustics solutions

Most people with a hearing loss discover that they are able to hear and understand speech much better in particular rooms of their home. This is because of room acoustics: when sound travels less distance and there are fewer hard surfaces, acoustics are better. Here are some ways to improve room acoustics.

Acoustic wall panels and tiles can be installed on the wall with double-sided tape or hook-and-loop fasteners. With creative use of paint or fabric, acoustic tiles could be an artistic addition to the room!

Home décor can also help in absorbing sound. Tapestries and other wall hangings, and large, plush sofas and chairs will absorb some sound in the room. Carpeting or rugs with cut-loop pile and sound-absorbing padding may also improve acoustics.

Examine windows and doors, if outside noise is a factor. Weather gaskets on the windows may need replacing. Foam gaskets around the frame and/ or a drop seal at the bottom of the door may be needed. Heavy draperies may help reduce outside noise as well as indoor noise.

Where to buy: Home improvement stores.

Home Modification Product Vendors

This is a partial list of commonly used mail order companies for home modification products. You can call them to request a catalog be sent to your home or access their website for an on-line catalog.

Clarity
800-426-3738 (voice)
800-772-2889 (TTY)
Website: clarityproducts.com

HARRIS COMMUNICATIONS, INC. (Eden Prairie, MN)
1-800-825-6758 (Voice)
1-800-825-9187 (TTY)
1-952-906-1099 (FAX)
Website: www.harriscomm.com
E-mail: mail@harriscomm.com

Hear-More (Farmingdale, NY)
800-881-4327 (Voice)
800-281-3555 (TTY)
631-752-0689 (FAX)
Website: www.HEARMORE.com
E-mail: sales@hearmore.com

HITEC Group International, Inc.
(Burr Ridge, IL)
800-288-8303 (Voice)
800-536-8890 (TTY)
Website: www.hitec.com
E-mail: customersolutions@hitec.com

LS & S (Buffalo, NY)
800-468-4789 (Voice)
866-317-8533 (TTY)
877-498-1482 (FAX)
Website: www.LSSproducts.com
E-mail: info@LSSproducts.com

Teltex, Inc.
888-515-8120 (voice/TTY) sales@teltex.com
Website: www.teltex.com

Hearing Equipment and Repair (H.E.A.R.)
(Grand Rapids, MN)
800-370-4327 (voice)
Hibbing: 800-390-4327 (voice)
Website: www.hearmn.com

CapTel
800-233-9130 (voice/TTY)
Website: www.captel.com

BestBuy.com
Search “hearing”

Amazon.com
Search for product by name

NOTE: Since prices vary from company to company, you may want to check prices of more than one company.

This not an endorsement by DHHS for any specific vendor, product, company or manufacturer.

Demystifying Hearing Loss & Hearing Aids Workshop

The following was developed by Deaf and Hard of Hearing Services–Metro Office

Possible consequences of untreated hearing loss

- Loss of independence
- Less social activity
- Changes/problems in relationships
- Increased worry and anxiety
- Depression

One of the biggest problems is denial of the hearing loss

- "Hearing loss may change your life, but your life need not be any less rewarding and fulfilling because you have a hearing loss."–Neil Bauman, Ph.D.
- "But you have to address the hearing loss in order to move on to live that rewarding and fulfilling life." –Mary Bauer

The audiologist

- They are specialists that are trained to test your hearing.
- If a hearing test is conducted in a regular room or in your home, it is a hearing screening. The only time it is okay to do this is at a health fair or when the person cannot leave his/her home.
- You may want to contact the Minnesota Department of Health to see if your audiologist is licensed with the State. Call 651-201-3729 or go to the Minnesota Department of Health website: https://hopverify.web.health.state.mn.us/loginAction.do;jsessionid=38545DDF88BA5659D37CAAB05882110A and type in the name—in the Occupation Type box, choose "Licensed Audiologist."
- Upon your request, the audiologist must give you a copy of your audiogram—free of charge. Keep a file of your hearing test results.

When purchasing a hearing aid, it is recommended that you find an audiologist or hearing instrument dispenser that has several brands of hearing aids to choose from.

Types of hearing aids

- Analog/Conventional—hard to find
- Programmable Analog—discontinued
- Digital

Hearing aid styles

- Behind-the-Ear (BTE)
- In-the-Ear (ITE)
- In-the-Canal (ITC)
- Completely-in-the-Canal (CIC)
- Open Fit or Open Ear
- Canal Receiver Technology (CTR)

What's available in hearing aids

- Adaptive Feedback Management
- Automatic Program Selection
- Automatic Telecoil
- Binaural Wireless Connectivity
- Built-in FM Receiver with Remote Microphone
- Channels and Bands
- Data Logging
- Directional Microphones
- Multiple Programs
- Remote Control
- Wide Dynamic Range Compression
- And More!

How to choose a hearing aid (from Dr. Mark Ross)

- Can You Hear Better With the Hearing Aid(s)?
- What Are Your Communication Needs?
- What is Your Lifestyle?
- Is It Worth the Cost?
- Consider Hearing aids Labeled as:
  - "Entry Level"
  - "Basic"
  - "Mid-level"

Hearing aid laws

- To sell hearing aids in Minnesota, a hearing instrument dispenser must be certified. You may want to contact the Minnesota Department of Health to see if s/he is certified with the State. Call 651-201-3729 or go to the Minnesota Department of Health website: http://pqc.health.state.mn.us/hopVerify/loginAction.do and type in the name—in the *Occupation Type* box, choose "Certified Hearing Aid Dispenser."
- You have 45 days to try out your hearing aid(s). At the end of that time, you can return them to the audiologist or hearing instrument dispenser for a refund. They are allowed to keep up to $250 of the total cost of the hearing aid(s) *per contract,* but the rest must be returned to you.
- If you have a complaint with your hearing aid dispenser or audiologist, you can file a complaint with the Minnesota Department of Health. Call 651-201-3729 or go to the Minnesota Department of Health website: http://www.health.state.mn.us/facilities.html and scroll down until you see "Professions" and Complaints." Click on "Audiologist" or "Hearing aid dispenser."

Assistive Listening Devices (ALDs)

- Are "binoculars" for the ears.
- Can be used with hearing aids or without hearing aids. If using with a hearing aid that has telecoils, you will need a neckloop, silhouettes, or headphones that are telecoil compatible.

Types of ALDs

- Personal Amplifiers
- FM Systems
- Infrared Systems

Telephones

- Contact the Telephone Equipment Distribution (TED) Program for more information. Call 651/431-5945 or if you use a TTY, call 1-888-206-6555.

Purchasing a cell phone if you have hearing aids

- Look for a M3 or M4 rating if you will use it with your hearing aid on the microphone setting.
- Look for a T3 or T4 rating if you will use it with your hearing aid on the telecoil setting.
- It is recommended that you try out the phone in the store before buying it.
- http://www.fda.gov/cellphones/hearingaids.html
- http://www.accesswireless.org/files/pdf/HACBrochure.pdf

Alerting devices

- Doorbells
- Clocks
- Fire Alarms
- All-In-One Alerting Systems

Developing communication strategies

People need to inform others of their communication needs.

- See handout on communication strategies.
- See Clear Speech booklet.
- See Good Communication Habits booklet.

Don't give up!

- See Resources List

Demystifying Hearing Loss & Hearing Aids Evaluation Form

Photocopy this page and cut out forms to hand out.

Demystifying Hearing Loss and Hearing Aids

1. This presentation met my needs (please circle one):

   Very Much Yes Somewhat Not Really Not at All

2. Write down one device mentioned during the presentation that might be beneficial to you or someone you know:

   _____

3. Comments:

   _____

   _____

   _____

THANK YOU IN ADVANCE FOR FILLING OUT THIS FORM.

Demystifying Hearing Loss and Hearing Aids

1. This presentation met my needs (please circle one):

   Very Much Yes Somewhat Not Really Not at All

2. Write down one device mentioned during the presentation that might be beneficial to you or someone you know:

   _____

   _____

3. Comments:

   _____

   _____

   _____

THANK YOU IN ADVANCE FOR FILLING OUT THIS FORM.

Assistive Devices

Check the devices you think might be beneficial for you or for someone you know with a hearing loss.

- ☐ Personal Amplifier Listening Device
- ☐ FM Listening Device
- ☐ TV Listening Device
- ☐ Music LInks and Neckloop Used with Electronic Devices (Hearing Aid must have a T-Coil)
- ☐ Amplified Telephone
- ☐ CapTell Telephone
- ☐ Phone Signaler
- ☐ Doorbell with Amplified Chime
- ☐ Door Chime and Chime Extender
- ☐ Alarm Clock with Extra Loud Audio and Bed Shaker
- ☐ Alarm Clock with Strobe Light
- ☐ Smoke Alarm with Bed Shaker
- ☐ Smoke Alarm with Strobe Light
- ☐ All-in-One Alerting System
- ☐ Other:_____

Where to Purchase Devices Developed for People with a Hearing Loss

This is a partial list of commonly used mail order companies. You can call them to request a catalog be sent to your home or access their website. Since prices vary from company to company, you may want to compare prices among the vendors.

Clarity

800-426-3738 (voice)
800-772-2889 (TTY)

Website: clarityproducts.com

HARRIS COMMUNICATIONS, INC.
(Eden Prairie, MN)

1-800-825-6758 (Voice)

1-800-825-9187 (TTY)

1-952-906-1099 (FAX)

Website: www.harriscomm.com

E-mail: mail@harriscomm.com

HEAR-MORE
(Farmingdale, NY)

1-800-881-4327 (Voice)

1-800-281-3555 (TTY)

1-631-752-0689 (FAX)

Website: www.HEARMORE.com

E-mail: sales@hearmore.com

HITEC GROUP INTERNATIONAL, INC.
(Burr Ridge, IL)

1-800-288-8303 (Voice)

1-800-536-8890 (TTY)

Website: www.hitec.com

E-mail: info@hitec.com

LS & S
(Northbrook, IL)

1-800-468-4789 (Voice)

1-866-317-8533 (TTY)

1-847-498-1482 (FAX)

Website: www.LSSproducts.com

E-mail: info@LSSproducts.com

Teltex, Inc.

888-515-8120 (voice/TTY)
sales@teltex.com
Website: www.teltex.com

Hearing Equipment and Repair (H.E.A.R.) (Grand Rapids, MN)
800-370-4327 (voice)
Hibbing: 800-390-4327 (voice)
Website: www.hearmn.com

CapTel
800-233-9130 (voice/TTY)
Website: www.captel.com

BestBuy.com
Search “hearing”

Amazon.com
Search for product by name

Clear Speech Questionnaire - Pre-Test

1. I am confident in my abilities to communicate with people with hearing loss.

(Strongly Disagree) 1 2 3 4 5 (Strongly Agree)

2. I have enough techniques to satisfactorily communicate with people who have hearing loss.

(Strongly Disagree) 1 2 3 4 5 (Strongly Agree)

3. I find communicating with people who have hearing loss to be stressful.

(Strongly Disagree) 1 2 3 4 5 (Strongly Agree)

Clear Speech Questionnaire – Post-Test

1. After this course, my confidence in working with patients with hearing loss has increased.

(Strongly Disagree) 1 2 3 4 5 (Strongly Agree)

2. I have learned at least one technique that will help me communicate with people who have hearing loss.

(Strongly Disagree) 1 2 3 4 5 (Strongly Agree)

3. After completing this course, I anticipate that my stress-level around interacting with people who have hearing loss will be decreased.

(Strongly Disagree) 1 2 3 4 5 (Strongly Agree)

What I learned most about was:

What I would like to learn more about is:

Clear Speech Communications Strategies

The following was developed by Deaf and Hard of Hearing Services–Metro Office

For those of us who have a hearing loss, there are things we can do that may help us when we are having difficulty understanding a conversation. Even for those who wear hearing aids, use assistive listening devices or have a cochlear implant, these communication strategies are useful. The latest technology is wonderful, but it still doesn't solve all the problems hard of hearing people encounter.

Here are some strategies that I have found helpful. You don't have to use all of them, just the ones that work best for you:

1. Ask people to change how they talk to you. Be patient–you'll probably have to remind them a few times (or many times!) to change how they talk with you. They're not being mean; they just forget and go back to their old habits. Here are some examples of what you can ask:
   - "Could you please talk just a little slower?"
   - "Could you please talk a little louder? You don't need to shout, but a little louder would help me a lot."
   - "Could you please look at me when you're talking? It helps me understand you a bit better."

2. Don't be afraid to ask for help.
   - "I won't hear you if you just call my name, so could you please come over and tap me on the shoulder when the doctor is ready to see me? "
   - "It's going to be tough hearing here in this large room; will you let me know when we're talking about a new topic?"

3. Clarify what you've heard.
   - "Is that 'B' as in the word 'butterfly'?"
   - "We're going to meet at the front of the building at 10 AM on Wednesday, May 4th. Is that correct?

4. Change what you can in the environment or move to another location.
   - "My, it's noisy in here! Could we go out into the hallway so I can hear you better?"
   - "I'm having a hard time understanding what you're saying with the radio playing. Would you be able to turn off the radio while we visit?"
   - "The sun is shining in my eyes, let's move over here."
   - "I'm having trouble hearing you with the dishwasher running–let's take our coffee into the living room so I can hear you better."

5. And finally, don't be afraid to rely on paper and pencil.
   - "I don't' understand what you're saying. Could you write that (word, number, name) down on this paper?"

Some final thoughts:

- Say "thank you" when someone makes it easier for you to understand what is being said—I guarantee you they will continue to try and make it easier for you to hear and understand them.
- Try not to bluff (or at least try not to do it ALL the time)–it usually lands you in trouble!

Minnesota Regional Deaf & Hard of Hearing Services (DHHS) Offices

800-657-3663 voice or your preferred relay service,
or 651-964-1514 videophone

Locations

Metro

Golden Rule Building
85 East Seventh Place, Suite 105
St. Paul, MN 55101

Northeast

Duluth Technology Village
11 E. Superior Street, Suite 220
Duluth, MN 55802

Northwest

Family Service Center of Clay County
715 11th Street North, Suite 200
Moorhead, MN 56560

Central

3400 First Street North, Suite 302
St. Cloud, MN 56303

Southern

12 Civic Center Plaza, Suite 1670
Mankato, MN 56001

Web: https://mn.gov/deaf-hard-of-hearing/

Online DHHS training for family, professionals and people experiencing hearing loss:

Supporting Seniors with Age-Related Hearing Loss

Other Resources

Minnesota Telephone Equipment Distribution (TED) Program

651/431-5945 (Voice Phone)
800-657-3663 (Voice Phone)
888-206-6555 (TTY)
651-431-7587 (Fax)

Website: https://mn.gov/deaf-hard-of-hearing/communication-access/ted/

American Academy of Audiology

800-AAA-2336
703-790-8466
703-790-8631 (Fax)

Website: www.audiology.org

American Speech-Language-Hearing Association (ASHA)

800-638-8255 (Voice Phone/TTY)

Website: www.asha.org

American Tinnitus Association

800-638-8255 (Voice Phone/TTY)

Website: https://www.ata.org/

Dr. Mark Ross

Website: www.hearingresearch.org/ross/

Hearing Loss Association of America
(formerly SHHH)

301-657-2248 (Voice Phone)
301-657-2249 (TTY)
301-913-9413 (Fax)

Website: www.hearingloss.org

Center for Hearing and Communication
(formerly the League for the Hard of Hearing)

917-305-7700 (Voice)
917-305-7999 (TTY)
917-305-7888 (Fax)

Website: www.chchearing.org

AARP

Hearing information

Website: https://www.aarp.org

How "Hearing Friendly" is Your Business?

With the aging population in the United States, there are more and more people with acquired hearing loss. It is estimated that the current number of people who are hard of hearing (28 million) will at least double by the Year 2030 to reach at least 56 million Americans.

Checklist:

- If your customers are allowed to use the phone, there is at least one amplified telephone that is hearing aid compatible.
- If your business/agency has an automated phone menu, you have a paper copy of what is said.
- If you have audiovisual materials that you share with your customers, the materials are closed-captioned or you have a script of the audio available.
- If you meet with your customers, you have an enclosed room that is free from background noises.
- You have minimized harsh lighting
- You avoid having employees who are speaking face-to-face with customers having their back to windows or bright lights.
- You have access to an assistive listening device (personal amplifier) that, if requested, a customer could use while conducting business in your facility.
- Staff has received either training or information about Clear Speech.

Community Outreach Letter

December 16, 2009

Dear Local Business Owners:

The West 7th Community Center has been a vital force in the West 7th neighborhood for over 35 years. Within the center, the Living at Home/Block Nurse Program has been helping seniors remain independent in their homes for over 20 years.

Recently, the West 7th Community Center's Living at Home/Block Nurse program was awarded a grant that focuses on seniors who are hard of hearing. The goal of this project is to reach and improve the lives of elders and caregivers by providing or arranging services needed to help seniors dealing with hearing loss. One way to achieve this goal is to involve local businesses and places of worship, also vital forces in our neighborhood, in our efforts.

We will soon be purchasing a few small amplification systems for use in our center. Our hope is that by using this system, we can make sure participants who are hard of hearing are able to enjoy the many varied programs we make available to our community.

We would like to offer this system to area businesses and places of worship as well. For now, we are trying to get a sense of what the needs in the community are. We would greatly appreciate any feedback you have. Please fill out the survey below and return with the enclosed envelope.

Thank you for your time, we look forward to hearing from you!

Jeannie Farrell
Senior Activities Coordinator

Community Outreach Survey

Please return this survey in the self-addressed, stamped envelope that is enclosed. Thanks again for your time!

Organization/Business Name (Optional, unless requesting additional information):

_____

Please Circle Yes, No, or N/A:

Do you work with persons who are hard of hearing?	YES	NO	N/A
Do you have an amplification system in your facility?	YES	NO	N/A
If yes, do you have personal assistive hearing technology for persons who are hard of hearing?	YES	NO	N/A

What types of events are held at your facility? (Check all that apply)

___Banquets ___Worship Services ___Workshops

___Entertainment ___Presentations ___Classes

___Other (Please Specify)_____

Please Check All That Apply:

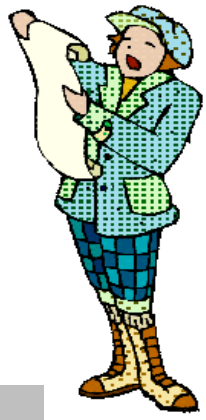
_____I am interested in learning more about renting an amplification system from the West 7th Community Center Living at Home/Block Nurse Program.

_____I am interested in learning more about renting personal assistive hearing technology from the West 7th Community Center Living at Home/Block Nurse Program

_____I am interested in learning more about my community's Living at Home/Block Nurse Program.

In the space provided below, please let us know what your specific needs, if any, are.

_____
_____
_____



Hear Ye! Hear Me!

A program of the West 7th, Summit Hill, Macalester/Groveland and Highland Park Block Nurse Programs

Presents

SOUND EFFECTS (sfx)

Peer Connections Caregiver Education

6 week session

When:	May 4-June 8, Tuesdays
Time:	10:30-12:00
Where:	West 7th Community Center, 265 Oneida Street, St. Paul, MN
Register:	651-298-5493

The Sound Effects peer connections group is a small group of people with hearing loss. This group is also for their caregivers, spouse, friend or significant other. The purpose of the group is to learn more about hearing loss, coping strategies, communication techniques, new technology, available resources and work toward positive changes. Group members will also be able to discuss problems and frustrations related to hearing loss as well as discoveries and successes in addressing hearing loss.

Peer Support Group Agenda

Peer Connections

6 WEEK AGENDA ITEMS

Week 1

- Group rules
- Review structure of group.
  - – Select Topic of the Day
  - – Discussion of Topic
  - – Problem Solving/Sound Effects—ideas and discussion on how to handle situations
- Have them bring their audiogram next week

Week 2

Set up room that isn't hearing loss friendly

- Review Group rules
- Topic of the Day—Environment
- Discussion of topic
- Sound Effects—ideas and discussion on how to handle situations

Week 3

- Topic of the Day—Communication
- Discussion-Clear Speech
- Sound Effects—ideas and discussion on how to handle situations

Week 4

Topic-Technology

- Discussion of topic
- Sound Effects—ideas and discussion on how to handle situations

Week 5

Topic—Self-Care

- Discussion of Topic
- Sound Effects—ideas and discussion on how to handle situations

Week 6

Topic—Hearing Loss resources

- Discussion of Topic
- Sound Effects—ideas and discussion on how to handle situations
- Wrap-up of topics covered during the 6-week course

LIVING AT HOME NETWORK

1376 Hoyt Ave
St. Paul, MN, 55108
http://lahnetwork.org/