

A Self-Help Guide to Nonvisual Skills

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This publication has been enhanced with invisible
explanatory text for the benefit of those using
electronic screen readers.

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**Supporting research may be accessed from
www.mdsupport.org/sensory.pdf**

What This Guide Can Do For You

If you are in the intermediate to late stage of vision loss, you may be considering making the transition from visual to nonvisual practices in some of your daily activities. Low vision rehabilitation is designed to address those challenges, but if such services are unavailable to you, this guide may be helpful.

Twenty-one categories of daily activities are recognized as important to independent living. They are listed in a self-evaluation beginning on page 3, along with activities specific to them. Next to those are listed the nonvisual senses (touch, hearing, smell, and taste) that can be enlisted to accomplish each activity. To show how, brief lessons introduce helpful devices, technology, software, and assistive procedures.

You may want to use the self-evaluation checklist solely for determining your needs and goals and learning about some options. You are encouraged, however, to share your checklist with a trained low vision rehabilitation therapist. Professional support can be invaluable for putting your options into practice and keeping your motivation high.

The self-evaluation and lessons are the main purpose of the guide. Before beginning, please take some time to familiarize yourself with the concept of low vision rehabilitation by reading “Jim’s Story”. After doing so, turn to the evaluation and begin checking off the activities that could benefit from you learning about alternatives to sight. Note which senses can substitute for sight in each instance, and then consult the lessons to learn how those senses can be utilized. Finally, consider seeking professional support for help in reaching your desired level of achievement.

As many who have gone before will tell you, learning new ways of doing things requires tenacity and adaptability. Maintaining a high quality of life, however, is worth every effort. Congratulations on taking this important step.

Self-evaluation

Independent Activities of Daily Living

Activities	Alternate senses	Lesson Page
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(Check those activities needing intervention.)

1. Managing health and personal hygiene. 11.

- a: Cleaning teeth or dentures touch, smell, & taste.
- b: Filling the tub and sink touch.
- c: Washing skin and hair touch, & smell.
- d: Identifying and applying deodorant touch, & smell.
- e: Brushing, combing, and styling hair touch.
- f: Trimming and shaving facial and body hair touch.
- g: Identifying and applying lotions, creams, and scents touch, & smell.
- h: Identifying and applying makeup touch, & smell.
- i: Manicuring and pedicuring touch, & smell.
- j: Cleaning ears and nostrils touch.

2. Dressing. 14.

- Identifying, donning, and storing clothing, accessories and footwear touch, & hearing.

Activities	Alternate senses	Lesson Page
3. Eating.		16.
<input type="checkbox"/> a: Locating and using dishes, utensils and glassware	touch.	
<input type="checkbox"/> b: Cutting food	touch.	
<input type="checkbox"/> c: Applying condiments	touch, smell, & taste.	
4. Moving about the home (functional mobility).		18.
<input type="checkbox"/> a: Locating and identifying furniture and appliances	touch.	
<input type="checkbox"/> b: Negotiating steps	touch.	
<input type="checkbox"/> c: Passing through entryways	touch.	
<input type="checkbox"/> d: Closing and securing doors and windows	touch.	
<input type="checkbox"/> e: Opening and shutting cabinets and drawers	touch.	
5. Toileting.		20.
<input type="checkbox"/> a: Operating the toilet	touch, & hearing.	
<input type="checkbox"/> b: Personal cleansing	touch.	
6. Managing Personal Finances.		22.
<input type="checkbox"/> a: Paying bills	touch, & hearing.	
<input type="checkbox"/> b: Making deposits and withdrawals	touch, & hearing.	

Activities	Alternate senses	Lesson Page
7. Practical writing.		24.
<input type="checkbox"/> Writing reminders, lists, labels, etc.	touch, & hearing.	
8. Cleaning the house.		26.
<input type="checkbox"/> a: Cleaning floors	touch, & hearing.	
<input type="checkbox"/> b: Washing windows, mirrors, and walls	touch.	
<input type="checkbox"/> c: Cleaning and dusting furniture, shelves, and appliances	touch.	
<input type="checkbox"/> d: Organizing clutter	touch.	
<input type="checkbox"/> e: Arranging decorative items like knick-knacks and pictures	touch.	
<input type="checkbox"/> f: Making beds	touch.	
9. Taking medications.		28.
<input type="checkbox"/> Identifying & organizing	touch, & hearing.	
10. Shopping.		30.
<input type="checkbox"/> a: Locating, and identifying products	touch, hearing, & smell.	
<input type="checkbox"/> b: Identifying prices	hearing.	
<input type="checkbox"/> c: Identifying currency	touch, & hearing.	
<input type="checkbox"/> d: Identifying colors	hearing.	

Activities	Alternate senses	Lesson Page
11. Operating the telephone.		32
<input type="checkbox"/> a: Direct dialing	touch, & hearing.	
<input type="checkbox"/> b: Finding and recalling phone numbers	touch, & hearing.	
12. Reading.		34.
<input type="checkbox"/> a: Leisure, such as books, magazines, and music	touch, & hearing.	
<input type="checkbox"/> b: Practical, such as instructions, appliance controls, labels, calendars, and schedules	touch, & hearing.	
<input type="checkbox"/> c: Telling time and temperature	touch, & hearing.	
13. Participating in games and hobbies.		36.
<input type="checkbox"/> a: Playing electronic and table games	touch.	
<input type="checkbox"/> b: Working word puzzles	touch, & hearing.	
<input type="checkbox"/> c: Needlework	touch.	
<input type="checkbox"/> d: Crafting and woodworking	touch.	
<input type="checkbox"/> e: Participating in individual and team sports	touch, & hearing.	
<input type="checkbox"/> f: Caring for and repairing machinery	touch, & hearing.	

Activities	Alternate senses	Lesson Page
<input type="checkbox"/> g: Sculpting, painting, drawing, and photography	touch, & hearing.	
14. Experiencing, or participating in, live or electronic, entertainment.		39.
<input type="checkbox"/> a: Playing an instrument alone or with others.	touch, & hearing.	
<input type="checkbox"/> b: Attending a live event	hearing.	
<input type="checkbox"/> c: Dancing	touch, & hearing.	
<input type="checkbox"/> d: Singing	hearing.	
15. Socializing and communicating with others.		41.
<input type="checkbox"/> a: Recognizing others	touch, hearing, & smell.	
<input type="checkbox"/> b: Conversing in person	touch, & hearing.	
<input type="checkbox"/> c: Participating in electronic social media	touch, & hearing.	
16. Traveling away from home.		43.
<input type="checkbox"/> a: Passengering	touch, & hearing.	
<input type="checkbox"/> b: Operating a vehicle	none yet.	
<input type="checkbox"/> c: Walking and hiking	touch, & hearing.	
17. Responding to emergencies.		47.
<input type="checkbox"/> a: Locating exits	touch, & hearing.	

Activities	Alternate senses	Lesson Page
<input type="checkbox"/> b: Getting help through Medic Alert, 9 1 1, etc.	touch, & hearing.	
<input type="checkbox"/> c: Locating and using first aid supplies	touch.	
<input type="checkbox"/> d: Identifying danger	touch, hearing, smell, & taste.	
<input type="checkbox"/> e: Locating gas, electricity, and water shutoffs	touch & hearing.	
18. Preparing meals.		49.
<input type="checkbox"/> a: Locating, identifying, and using food products	touch, hearing, smell, & taste.	
<input type="checkbox"/> b: Locating, identifying, and using utensils and cookware	touch, & hearing.	
<input type="checkbox"/> c: Using kitchen appliances	touch, & hearing.	
<input type="checkbox"/> d: Measuring & pouring	touch.	
<input type="checkbox"/> e: Setting the table	touch.	
<input type="checkbox"/> f: Cleaning up	touch.	
19. Following safety procedures.		53.
<input type="checkbox"/> a: Plugging and unplugging electrical cords	touch.	
<input type="checkbox"/> b: Operating controls, such as thermostats, appliances, and heaters	touch.	
<input type="checkbox"/> c: Using tools	touch.	

Activities	Alternate senses	Lesson Page
20. Doing laundry.		56.
<input type="checkbox"/> a: Separating and sorting clothing	touch, & hearing.	
<input type="checkbox"/> b: Operating the washer and dryer	touch, & hearing.	
<input type="checkbox"/> c: Locating, identifying, and measuring soaps and chemicals	touch, & smell.	
21. Maintaining and caring for home and property.		58.
<input type="checkbox"/> a: Locating, identifying and organizing tools and equipment	touch.	
<input type="checkbox"/> b: Locating, identifying, organizing, and measuring lawn & garden chemicals	touch, & smell.	
<input type="checkbox"/> c: Making minor repairs	touch, & hearing.	
<input type="checkbox"/> d: Mowing, trimming and weeding	touch.	
<input type="checkbox"/> e: Painting and refinishing	touch.	
<input type="checkbox"/> f: Sweeping and raking	touch.	
<input type="checkbox"/> g: Watering	touch.	

Activity Lessons

This section lists each of the 21 independent activities of daily living, including information about the following assistive procedures for maintaining them:

- 1. Labeling**
- 2. Modifying or developing techniques**
- 3. Using Braille**
- 4. Using high technology devices or software**
- 5. Modifying objects or environment**
- 6. Using orientation and mobility skills**
- 7. Utilizing a public service**
- 8. Using low vision materials and non-optical devices or equipment**

In each case, the alternate senses are repeated, and related assistive procedures are outlined. These lessons will introduce you to a number of nonvisual alternatives. They do not, however, offer in-depth information or training opportunities that should follow in many cases.

For more information, or for assistance in putting the procedures into practice, ask your eye care specialist for a referral to a professional low vision therapist. Or, you may contact your state agency for the visually impaired for assistance.

A directory of phone numbers and web sites may be found in this guide.

1. Managing health and personal hygiene

Alternate senses contributing to this activity are: touch, hearing, smell, and taste.

Assistive procedures helpful for maintaining this activity are:

- Labeling.
- Modifying or developing techniques.
- Using low vision materials and non-optical devices or equipment.

Labeling

Similar-shaped items may be distinguished from one another by applying tactile stickers, or by wrapping them with rubber bands in different patterns.

Similar-shaped items may also be labeled with a product called “Hi-Marks”, a three-dimensional plastic liquid available in pen form. Marks may be applied in Braille or any coding system of dots or lines. Hi-Marks is sold by many low vision dealers.

An option to Hi-Marks is “Puff Paint”, sold at fabric and craft shops. Or make your own by mixing equal amounts of flour, salt, and water, and pour into a squeeze bottle.

Modifying or developing techniques

Here are suggestions for applying makeup and styling hair:

Use compact foundation, and apply with fingers, rather than an applicator.

To apply highlight and blush, use a finger, rather than a brush.

To apply mascara, keep your eyes fixed and move the brush toward you. Once lash and brush meet, swipe upward.

Omit eye liner, or consider having it permanently applied.

After applying makeup, use a finger to carefully wipe around your eyes to remove any signs of powder or slight touches of mascara.

About makeup in general? Keep it subtle.

Visit a hairdresser for advice about an easy cut to manage.

A dab of mousse or handcream run through the final style will smooth out flying hairs.

Finally, feel through your hairbrush regularly for buildup.

Continuing with suggestions for modifying or developing techniques, here are some miscellaneous ideas.

Feel for the water level when filling the tub or sink.

Identify toothpaste by smell, and confirm by taste.

Apply toothpaste to your teeth with a finger, rather than a brush.

Identify soap, deodorant, lotions, creams, scents, and makeup by the shape of the container, then confirm by sniffing them.

Nail polish and remover can be easily identified by smell.

Shaving is tactile, whether with a razor or an electric shaver. A mirror isn't really necessary.

Manicuring and pedicuring can be accomplished by touch, but consider the possibility that professional foot care might be covered by your insurance. Also, don't hesitate to ask for a manicure for a birthday or holiday gift.

Purchase an electronic hair trimmer for ears and nostrils.

Normal cleansing of ears and nostrils is quite possible with touch only, but again, don't overlook professional ear care. Wax buildup is a potentially debilitating condition that is easily treated and may be covered by your insurance.

Put your hair dryer, curling iron, brush and other related supplies in a one-handled basket that fits under the sink.

In a washable open container place a clean face cloth, toothbrush, etc. This can be washed and cleaned by a visual caregiver on a very regular basis.

Make, and keep, health and teeth care appointments.

**Using low vision materials and
non-optical devices or equipment**

Use talking devices for self-monitoring health. Such devices available from dealers are:

- **Weight scales.**
- **Blood pressure monitors.**
- **Blood glucose level monitors.**
- **Thermometers.**

2. Dressing

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Modifying objects or environment.**

Labeling

Create labels inside your clothes to identify colors. To the label that already exists, apply Braille dots, or your own special codes, with a Hi-Marks pen, available through low vision dealers. Once it dries, you can feel the raised bumps.

Put "key tags" or clothespins on the hanger with the same label. Or you can fold an index card in half, cut a small hole for the hanger, and label it. When re-storing the clothing, read the label and return it to the proper hanger.

Identify the color of an item with a safety pin in the hem. Turn the pin at different angles to represent different colors.

If you have a large number of shoes, keep them in their original boxes, labeled for identification and stored alphabetically.

Some low vision dealers offer an inexpensive voice labeling system called "Pen Friend." This allows you to easily record, and re-record, information onto self-adhesive labels. It also works as a note taker.

Modifying or developing techniques

Keep coordinated outfits on the same hanger.

Keep all black items together, all blues together, etc. Consider keeping different colors on different types of hangers.

Have a trusted individual tell you honestly how you look.

If you doubt the cleanliness of an item, launder it.

Place accessories in a bag and hang them with the appropriate outfit.

To tell front from back, feel for the tag. Or, if there are hanger loops, tie a knot in the left or front loop. Or, sew a spare button in the left front hem. Be consistent.

Periodically feel the toes of your shoes for separation. Low vision people tend to trip and bang their shoes, causing the soles to deteriorate faster than normal.

When storing shoes, tie them together in pairs, or slip one inside the other.

Using high technology devices or software

Talking “color identifiers” are available in several models from low vision dealers. Point them at an object or piece of clothing, and they will speak the color.

Modifying objects or environment

Buy rubber soled shoes. Slippery leather soles are an unnecessary hazard.

3. Eating

Alternate senses contributing to this activity are: touch, smell, and taste.

Assistive procedures helpful for maintaining this activity are:

- Labeling.
- Modifying or developing techniques.
- Modifying objects or environment.

Labeling

Identify similar-shaped containers, like salt and pepper shakers, with tactile stickers or raised marks. You can make these yourself with a Hi-Marks pen or with a Braille label maker, both available from low vision dealers.

Modifying or developing techniques

To avoid knocking over a glass, curl your fingers under, and slide your hand slowly on the table toward it.

Shake seasonings into the palm of your hand, then apply in pinches at a time to your food.

Pour ketchup, mustard, sauces, and liquid seasonings in small side bowls or on the side of your plate for dipping or spooning as needed.

To cut meat, stab it near the edge with your fork and cut around the fork with your knife. Keep your place by leaving the knife in place while you take the bite.

Modifying objects or environment

To locate utensils, plates, and glasses, use a place mat, and set items on it as if on a grid.

For every day meals, consider using disposable plates, cups, and utensils.

When setting the table, place the main dish, side dishes, seasonings, and condiments in a semi-circle or straight line just outside of your place setting area. Place them in the same order every time.

Patronize restaurants that offer Braille or audible menus.

4. Moving about the home (functional mobility)

The alternate sense contributing to this activity is: touch.

Assistive procedures helpful for maintaining this activity are:

- **Modifying or developing techniques**
- **Modifying objects or environment.**
- **Using orientation and mobility skills**

Modifying or developing techniques

When approaching an entryway without a cane, use the back of your hand to guide yourself through. This could prevent you from hurting your fingers.

When moving from one place to another, a basket is good for keeping necessary items handy.

Modifying objects or environment

Key all door locks identically so you need only one key to get in and out. Give a second key to a trusted person nearby.

Be simple and consistent with types of window coverings for ease of closing.

Keep entry doors and shuttered windows fully open or closed, and keep all cabinet doors and drawers closed when not in use. If in doubt, assume a “defensive posture,” with one arm extended and fingers turned toward you.

Using orientation and mobility skills

Learn cane or animal guide training from an orientation and mobility, or “O & M” specialist. Skills such as safe street crossings, negotiating stairs and curbs, and utilizing public transportation would be learned. Cane use is also important for familiarizing yourself with new environments and moving safely about your home and property.

5. Toileting

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- **Modifying or developing techniques.**
- **Modifying objects or environment.**

Modifying or developing techniques

When entering a public restroom or the first time, get your bearings by first pausing to listen for the unique sounds made by the sinks, toilets, fixtures, and stall doors.

A visually impaired person may rightfully use the handicap facilities, especially if accompanied by a guide animal.

To ensure that the lids are in proper position, feel one edge.

Guys: Unless a urinal is available, sit down.

To ensure cleanliness, use wet wipes or some other cleanser in addition to toilet paper. When away from home, carry a few in a sealed plastic bag.

Many public toilets flush automatically. If you don't hear the sound when you move away, you will find a flush handle on the left side as you face the fixture, or a button centered above on the wall.

Modifying objects or environment

A bidet (pronounced “bidday”) toilet or toilet seat bidet conversion unit, can be purchased in many countries including the United States. Bidet toilets, which clean with a jet of water, are preferred by many as a more thorough and hygienic method of cleansing.

The law requires that public restrooms be identified with Braille signage on the door or on the wall next to the door opening.

6. Managing Personal Finances

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Modifying objects or environment.**
- **Utilizing a public service.**
- **Using low vision materials and non-optical devices or equipment.**

Modifying or developing techniques

Give a copy of all documents and bank cards to a friend or family member in case you lose yours.

When dealing with your bank, phone first, and make an appointment with the same person every time.

Using Braille

Braille checks and stickers for checks are available, as are Braille check registers and deposit slips.

Using high technology devices or software

Several accessible software programs can be purchased to help with personal finances.

Modifying objects or environment

To fill out checks, make a template from heavy paper, plastic, or cardboard. Cut it to the size of the check and cut out where you need to write. Such templates can also be purchased from low vision dealers.

Utilizing a public service

Sign up for automatic bill payment.

Pay bills and conduct bank business by phone or Internet.

Using low vision materials and non-optical devices or equipment

Purchase a talking calculator.

7. Practical writing

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- Using Braille.
- Using high technology devices or software.
- Using low vision materials and non-optical devices or equipment.

Using Braille

Braille is a system of digital writing incorporating patterns of six raised dots that represent characters. It is a highly useful method of nonvisual written communication that should be learned, at least on a basic level, by all low vision people. Braille may be produced in several ways.

Using high technology devices or software

Produce Braille with:

- A Braille embosser attached to a computer.
- A refreshable Braille display.
- An accessible computer-based word processor
An accessible personal digital assistant, or PDA.

You can let a computer do your writing for you with dictation software.

**Using low vision materials and
non-optical devices or equipment**

Produce Braille:

- **With a slate and stylus to create each dot from the back of the page.**
- **By writing in mirror image by hand.**
- **With a Braille typewriter or Perkins Braille.**

Write by hand using paper embossed with raised lines.

Learn to touch type.

8. Cleaning the house

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- Modifying or developing techniques.**
- Modifying objects or environment**

Modifying or developing techniques

To avoid accidents and frustration, give yourself the gift of time.

Hang a sign reminding anyone who moves something to replace it to its original location. Consistency is critical to both safety and sanity.

Keep a dust mop or “Swiffer” handy in the kitchen to swipe over the floor before and after meals. Wash it or change it often.

Put cleaning supplies in a bucket to carry from room to room.

Use a feather duster for small objects.

To vacuum a carpet or wash a surface efficiently, mentally divide the area into sections, and clean one section at a time.

Put the cleanser on the applicator, rather than on the surface to be cleaned.

Buy lots of bins, baskets, and boxes. Label them with tactile stickers, Hi-Marks or Puff Paint.

Use a different container for each category of items:

- **Receipts.**
- **Office supplies.**
- **Personal papers.**
- **Magazines.**
- **Computer supplies.**
- **Bridge game supplies, such as a light, an extension cord, large playing cards, tissues, money, and other necessities.**
- **Membership cards.**
- **Instructions, padlock and shoes for exercise class.**
- **Toys and books for going to "quiet " places with a child.**
- **Extra house keys.**
- **Things to do while sitting and waiting, such as needlework, an audio book player, and earphones.**

Modifying objects or environment

Remove scatter rugs and loose carpets. If you have a favorite rug with a design you just love, hang it on the wall for decoration.

Avoid clutter by getting rid of things you don't use. This applies especially to under the sink and in medicine cabinets.

The same goes for decorative items. Keep those that are more tactile than visual.

9. Taking medications

Alternate senses contributing to this activity are: touch, hearing, and smell.

Assistive procedures helpful for maintaining this activity are:

- Labeling.
- Modifying or developing techniques.
- Using Braille.
- Using high technology devices or software.
- Modifying objects or environment.

Labeling

Mark the lids with Hi-Marks (available from low vision dealers) or Puff Paint (from hobby and craft shops). Use Braille or codes of your own. Braille label makers are also available from low vision dealers.

Modifying or developing techniques

You can identify the pills in a container by either shaking or sniffing them.

Remove the safety cap if you have no small children in the house. Just pry out the inner cap, and that becomes the lid. Your pharmacist will do this for you if you ask.

Using high technology devices or software

Attachments to pill bottles allow you to record and play back information about the contents, including when and how much to take.

Modifying objects or environment

Replacement lids for pill bottles act as timers to remind you when the pill should be taken.

Pill organizers and dispensers with or without alarms will help keep track of proper dosages. These are available in several models.

10. Shopping

Alternate senses contributing to this activity are: touch, hearing, and smell.

Assistive procedures helpful for maintaining this activity are:

- **Modifying or developing techniques.**
- **Using high technology devices or software.**

Modifying or developing techniques

Patronize smaller shops. They might be a little more expensive, but the staff is usually more helpful.

Shop at times of the day and week when the store is not so busy.

Consider going with a friend and making it a social event.

Look on the back of US currency. The numbers are bigger there.

Put receipts in little baggies to ensure that they don't get lost in your purse or pocket.

Fold currency in different ways to indicate the values.

Practice identifying coins by feel. They are each unique.

Keep different values of currency in different compartments of your billfold for easy identification.

Use a debit or credit card instead of cash.

Buy clothes that are color-coordinated, but then mix and match.

Buy same-colored socks that can be matched easily.

Using high technology devices or software

Purchase a talking bar code identifier.

Purchase a talking color identifier.

11. Operating the telephone

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- Labeling.
- Modifying or developing techniques.
- Using Braille.
- Using high technology devices or software.
- Modifying objects or environment.
- Utilizing a public service.

Labeling

Tactile stickers, available through low vision dealers, make phone buttons easier to identify.

Modifying or developing techniques

The numbers on every standard phone are easy to memorize and find by touch. The number 5 usually has a raised bump on it for getting your bearings.

Using Braille

Several companies feature cell phones with Braille touch pads.

Using high technology devices or software

Some cell phones are equipped with voice recognition software, which eliminates the need for dialing.

Phone can be purchased that include alerts, and name announcing for caller identification.

Cell phones can also be purchased that include a talking global positioning system, or GPS, for finding your way.

Modifying objects or environment

Several phones are available with larger and fewer buttons.

Utilizing a public service

Most phone companies offer free, directory assistance and connection for those who qualify. Call your business office for information about applying for the service.

Here are free, Internet-like, telephone search services for making reservations, accessing weather reports, finding businesses, etc.:

For “Tell Me”, dial 1 - 800 - 5 5 5 - 8 3 5 5

For “Google Voice Local Search”, dial 1 - 800 - 4 6 6 - 4 4 1 1

12. Reading

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- Using Braille.
- Using high technology devices or software.
- Utilizing a public service.
- Using low vision materials and non-optical devices or equipment.

Using Braille

If you use a computer, you can attach a refreshable Braille display or Braille terminal displays characters by raising dots through holes in a flat surface. This will allow you to read text output in lieu of a monitor.

A Braille personal digital assistant serves the same purposes as a regular PDA, but it features a Braille display and keyboard. Several models are available.

Using high technology devices or software

Basic text-to-speech software is built into most computer systems that will read your screen to you. More advanced software can be purchased from low vision dealers.

Other software is available that can use a scanner and computer to read printed hard copy material to you.

Stand-alone text-to-speech systems are also available, which do not require a computer to operate. Called “electronic readers”, these can quickly scan printed material and read it back to you, all in one operation. They come in desktop and portable models.

Utilizing a public service

Books on tape are supplied by your State Library for the Blind and Visually Handicapped or by the Talking Books program of the Library of Congress. The service, equipment, and tapes are provided free for those who qualify. Ask your public librarian for more information.

For faster access to audio books, download electronic books from commercial distributors on the Internet, or purchase them off the shelf from nearly any bookstore.

Using low vision materials and non-optical devices or equipment

Non-optical devices available for reading are:

- Talking books on analog or digital tape.**
- Digital players.**
- Talking or Braille watches and clocks.**
- Talking or Braille dictionaries.**
- Talking currency identifiers.**
- Talking calculators.**
- Braille slates and styluses.**

13. Participating in games and hobbies

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Modifying objects or environment.**
- **Using low vision materials and non-optical devices or equipment.**

Labeling

Identify game pieces and board layouts with tactile marks or Braille. You can do these yourself with a Hi-Marks pen or with a Braille label maker, both available from low vision dealers.

Apply Braille labels to tools and their locations in your workshop.

Modifying or developing techniques

If others who are sighted are playing a game that is not accessible to you, partner with someone.

Activities such as swimming, running, skiing, bowling, golf, and skating can be done with assistance from a sighted guide.

Bicycling can be enjoyed in tandem with a sighted partner.

Working with tools is still possible, but you would be wise to get professional training in special techniques that have been developed for visually impaired people.

Using high technology devices or software

Many accessible computer games can be found on line, including audible word puzzles and Sudoku.

Portable accessible electronic games are available from low vision dealers.

Modifying objects or environment

Make checkers and other such game pieces tactile by applying embossed or textured stickers.

Some jogging tracks have been modified with rails or guide wires.

Using low vision materials and non-optical devices or equipment

Knitting, rug hooking, and crocheting are already nonvisual activities.

To help with needlework, buy an inexpensive needle threader from a low vision dealer.

Talking and tactile tape measures are available from low vision dealers.

Purchase Braille playing cards.

Keep score with a peg board. This can be purchased, or make it yourself out of cardboard and golf tees.

Most popular board games are sold in tactile or Braille versions. This includes bingo, Scrabble, chess, Monopoly, and checkers.

Traditional dice are already tactile.

14. Experiencing or participating in live or electronic entertainment

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Utilizing a public service.**

Modifying or developing techniques

Low cost or free live entertainment includes children's music concerts, talks, and music in the park. Every community has a list of activities that deserve support.

Listen to music, sports, and discussions on radio, TV, and the Internet.

Learn to sing, dance, or play an instrument, alone or with a group. Vision is not necessary for performing music.

Using Braille

Musical scores are being produced in a special kind of Braille.

Using high technology devices or software

A whole world of entertainment is available on the Internet. Learn to use a computer. If you have a teenager in the family, you already have a teacher.

Some popular sites are:

- **YouTube.**
- **MySpace.**
- **Rhapsody.**

Utilizing a public service

The Descriptive Video Service (DVS) is a major United States producer of video description, which makes television programs, feature films, and home videos more accessible to people who are blind or otherwise visually impaired.

15. Socializing and communicating with others

Alternate senses contributing to this activity are: touch, hearing, and smell.

Assistive procedures helpful for maintaining this activity are:

- **Modifying or developing techniques.**
- **Using high technology devices or software.**

Modifying or developing techniques

You can identify acquaintances with senses other than eyesight. Some of the ways are:

- **The scent of their hair, perfume, or lotion.**
- **The sound of their voice.**
- **The sound of their footsteps.**
- **Their handshake.**

Don't be embarrassed to ask people to identify themselves. Just say, "I'm sorry, but you need to tell me who you are. I'm visually impaired."

You need to let some people know that you are visually impaired. A white cane is the universal symbol of visual impairment. You may not always need a cane to get around, but it can be a very effective way to identify yourself.

Using high technology devices or software

Some of the most popular communication tools and social media opportunities on the Internet are:

- Email discussion and support groups.
- Web message boards.
- Chat rooms.
- Instant messaging.
- Twitter.
- Facebook.
- Skype.
- Gmail phone.
- Live conferencing.
- Dating websites.
- Blogs.
- Caring Bridge.
- Classmates.com.
- MySpace.

16. Traveling away from home.

Alternate senses contributing to this activity are: touch and hearing.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Modifying objects or environment .**
- **Using orientation and mobility skills.**
- **Utilizing a public service.**

Labeling

Tag your bag with a ribbon, strap, or Braille ID you can feel.

Pack clothing items and jewelry in individual bags labeled with tactile or Brailled ID tags. You can make these yourself with a Hi-Marks pen or with a Braille label maker, both available from low vision dealers.

Modifying or developing techniques

Consult a travel agent. It's a free service.

Book direct flights when possible.

Pre-board.

Take carry-on luggage.

Ask ahead about guide animal restrictions.

Take advantage of guided tours.

Never bring more than you can carry.

To avoid having to make the exchange or change, use a credit or debit card whenever possible.

If alone, count the doors from the elevator to the room. Have a porter take the time to show you the elevator buttons and note them verbally, out loud.

If eating in restaurants is a nuisance, room service can be a great option.

In case you get separated from your companion, prearrange a meeting point.

Remember sounds and memories from the trip by narrating into your recorder. This can be as good as photographs.

Don't hesitate to communicate your questions and needs. Most people are happy to help.

Modifying objects or environment

Pack a low vision travel kit in its own bag (preferably a belt pack), and keep it with you at all times. It should include:

- **a travel alarm.**
- **an MP3 or CD player.**
- **self-recorded itinerary and emergency contact information.**
- **medical information about you and your guide animal.**
- **written directions.**

- a portable, talking, global positioning system, or GPS.
- your passport and identification.
- traveler's checks, credit and debit cards.
- a personal digital assistant, or PDA.
- a cell phone pre-programmed with important numbers.
- emergency cash.
- extra medication.

So your belongings are easily found, put out your morning needs on a place mat. Take along another place mat to set your watch and other night needs on.

Thieves may see you as an easier target if they note your low vision. Keep your valuables on your person, such as in a fanny pack. To carry important items out of sight, sew a square pocket with a velcro flap on the inside waist area of your travel outfit.

Identify matching outfits and reduce wrinkles, too, by layering with tissue between.

Put travel documents in a folder, then in your bag.

Using high technology devices or software

Several manufacturers offer a personal digital assistant, or PDA, that combines accessible cell phone technology, a camera, and a tactile or auditory global positioning system, or GPS, for finding your way. You can also purchase each of these technologies individually.

Voice recognition capability is also included in some cell phones, which eliminates the need for dialing.

Use the Internet to check in prior to going to the airport.

Using orientation and mobility skills

Carry your white cane for mobility, safety, and identification.

Utilizing a public service

Let your travel carrier know you have low vision.

Check ahead of time to make sure your transportation accommodations are acceptable, to include:

- **Accessible, identifiable, and safe waiting areas.**
- **Verbal identification of stops and destinations.**
- **Tickets and schedules in Braille.**
- **Door-to-door service.**
- **Employees trained in needs of visually impaired people.**
- **Assistance in boarding and unboarding.**
- **Availability.**
- **Reliability.**
- **Reasonable fares and fees.**

17. Responding to emergencies

Alternate senses contributing to this activity are: touch, hearing, smell, and taste.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Modifying objects or environment.**
- **Using orientation and mobility skills.**

Labeling

Identify fire extinguishers, shut-off valves, etc. with tactile marks or Braille embossed stickers. You can make these yourself with a Hi-Marks pen or with a Braille label maker, both available from low vision dealers.

Modifying or developing techniques

Call for help immediately if there is the slightest possibility that you or your home is in danger. Don't try to take care of dangerous situations yourself unless there is absolutely no help available. And then, remember that material possessions can be replaced. You can't. So escape the personal danger as soon as possible.

Make a habit of listening to, and smelling, your environment. Your ears and nose are designed for warning you of potential problems or dangers, even while you are asleep.

Using high technology devices or software

Program 9-1-1 and other emergency numbers into your phone, or purchase a phone with voice recognition dialing. Keep the phone near you at all times.

Acquire a medical alert system, such as “Life Alert” or “Medic Alert”.

Modifying objects or environment

Place fire extinguishers within easy reach, especially in the kitchen, work area, and garage.

Purchase several ready-made first aid kits, and place them within easy reach in the kitchen, bathroom, and work area.

Using orientation and mobility skills

If you use a cane, keep it with you at all times. For this reason, folding canes are most convenient.

If you have a guide animal, trust it to help you in emergencies. That’s what it was trained for.

18. Preparing meals

Alternate senses contributing to this activity are: touch, hearing, smell, and taste.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Using high technology devices or software.**
- **Modifying objects or environment.**
- **Using low vision materials and non-optical devices or equipment.**

Labeling

Use a magnetized tape labeler to identify canned goods.

Mark appliance controls marked with tactile stickers, Hi-Marks or Puff Paint.

Store food in different types of containers marked in Braille. Small adhesive bumpers for cabinet doors can be used for this.

Attach Brailled cards to the containers with rubber bands. As the contents are consumed, the cards become useful as reminders to restock.

Modifying or developing techniques

Use a wooden spoon like a small cane to find pan handles and the center of the pot when pouring.

A small food chopper can substitute for a knife, and it stops when you remove your hand.

Record recipes on a tape recorder, and use the pause button between tasks.

Put sweet baking supplies in one container and spicy in another, so you don't mix them up.

Shop online, or have groceries delivered.

Cook prepared foods or frozen vegetables. Ask the butcher to quarter the chicken or cube the beef for you.

Don't hesitate to touch the food with your hands, as long as they are clean. Or, wear latex gloves.

To pour a liquid, use your finger to align the edges of the containers. Raise the edge of the pouring container slightly over the edge of the receiving container. Listen for the sound as the container fills, feel the weight, estimate the time.

When pouring a hot liquid, place your finger inside the cup or pan at the level you want and feel for the heat as the liquid rises.

Use a second utensil to locate meat in the pan before flipping.

When cooking, maintain even heat and consistency in portion size and timing.

Use a slow cooker and a microwave oven. They are safer and easier than a stove.

You can press meat with your finger to tell how well it is cooked. Well done, for example, feels like the back of your clenched fist.

Cooked vegetables are done when you can easily pierce them with a fork.

Cake springs back when it's done. You can also test it by piercing with a clean tooth pick. If the toothpick comes out dry, the cake is ready to eat.

Using high technology devices or software

Download audio recipes from the Internet.

Purchase audio or Braille recipe books.

Modifying objects or environment

For easy cleanup and neatness, use a cookie tray for a surface to prepare food on.

Paper plates and cups will make cleanup easier.

Purchase pre-measured tablets of dishwasher soap.

Grate or chop directly into a bowl.

Use stackable measuring cups.

Keep measuring spoons on the ring.

Store everything in the same place every time.

Use bowls with non-slip bases or lay a non-slip mat or damp cloth on the counter top.

Store food products alphabetically in the cupboard.

Store sharp knives in a holder, not in drawers or lying loose in the sink. Be sure to turn them point down in the dishwasher.

**Using low vision materials and
non-optical devices or equipment**

Non-optical devices are available from low vision dealers for almost every task in the kitchen. Some of them are:

- **A liquid level indicator that beeps when the container is nearing full.**
- **A tactile or talking timer.**
- **A liquid boil alert.**
- **A talking food thermometer.**
- **An automatic electric pot stirrer.**

19. Following safety procedures

The alternate sense contributing to this activity is: touch.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Modifying objects or environment.**
- **Using low vision materials and non-optical devices or equipment.**

Labeling

Identify hazardous chemicals with tactile marks or tactile stickers. You can make these yourself with a Hi-Marks pen or with a Braille label maker, both available from low vision dealers.

Modifying or developing techniques

For good visibility, wear a light weight, white windbreaker in spring and summer, and a red or yellow jacket in winter.

Cross streets only at crosswalks, and don't hesitate to ask for assistance.

Wear long, insulated mitts when opening the oven.

Before leaving the kitchen, always check your stove for heat by waving your hand slowly over it.

If you have a guide animal, remember to not allow it to be distracted while on duty.

If your guide animal disobeys your command, it is probably trying to keep you safe. Respect its opinion.

Fire is one of your worst enemies, and the kitchen is the likeliest place for it to start. Take every precaution to protect yourself from it, and don't try to fight a fire if you have poor functional vision. Escape and call 9-1-1 immediately.

If you have functional vision, and a fire is small enough, do your best to put it out with an extinguisher, baking soda, or a pan lid. Never throw water on an electrical fire.

Your best approach is to avoid situations that can cause a fire in the first place. Here are some safety ideas:

- **Avoid wearing loose clothing or long hair while cooking.**
- **Unplug cords from all small appliances when not in use.**
- **Do not use electrical appliances near water, and keep cords away from heat sources.**
- **Turn pot handles inward on the stove.**
- **Keep cooking areas clear.**
- **Keep work surfaces clean.**
- **Remove large debris before starting a self-cleaning oven.**
- **Keep appliances in good working condition.**

Modifying objects or environment

To avoid injury, keep cabinet doors closed or fully-open, keep drawers closed, and keep chairs pushed in under tables.

Remove or tape down scatter rugs that can cause tripping.

Wear comfortable and supportive shoes.

Trade your sharp-cornered coffee table for one with rounded corners.

Have furnace pilot lights shut off during warm seasons.

Tell your neighbors or neighborhood watch organization that you are visually impaired.

Insist that family members pick up after themselves.

Have a ground fault interruptor (GFI) installed on every outlet exposed to water. These are inexpensive and easy to connect, and they will shut off the outlet immediately if the electrical circuit is interrupted.

Keep electrical cords out of walkways.

Don't lock yourself in the bedroom or bathroom.

Install and use handrails and grab bars.

Use nonskid products to clean and polish floors, and place non-skid mats where necessary.

Plug all devices with outdoor power lines into power surge adaptors.

To safely plug a cord into a socket, touch one hole to guide the prong. Remove your finger before inserting the plug.

Replace or refill fire extinguishers as labeled.

Take a self-defense course.

**Using low vision materials and
non-optical devices or equipment**

Install smoke and carbon monoxide detectors. Test them regularly, and replace batteries if necessary.

Acquire a home protection system.

20. Doing laundry

Alternate senses contributing to this activity are: touch, hearing, and smell.

Assistive procedures helpful for maintaining this activity are:

- Labeling.
- Modifying or developing techniques.
- Using Braille.
- Using high technology devices or software.
- Modifying objects or environment.

Labeling

Mark your washer and dryer controls with tactile stickers or Braille dots. “Hi-Marks” is a three-dimensional plastic liquid in pen form created for this purpose. Marks may be applied in Braille or any coding system of dots or lines.

Mark chemicals, iron settings, and laundry baskets in the same way.

Modifying or developing techniques

To keep socks together from washer to dryer to drawers, use safety pins. Or, buy “sock aids” or “sock locks” from a low vision dealer.

Place socks in a mesh bag for washing all together.

Drag your laundry in a bag. It’s easier and safer than carrying.

Remove clothes from the dryer as soon as possible and hang them to avoid ironing. This will work for most materials. Don't buy clothing made of material that wrinkles easily.

Purchase pre-measured packets and tablets of laundry soap, softener, and bleach.

Using high technology devices or software

Yes, there are some high-tech washing machines and dryers that might make life easier. They may even come out with voice activated models, but the money you save by not buying them will afford you a lot of laundry service delivered right to your door.

Modifying objects or environment

Use a sectional laundry sorter to keep whites and colors apart from the time you remove them.

21. Maintaining and caring for home and property

Alternate senses contributing to this activity are: touch, hearing, and smell.

Assistive procedures helpful for maintaining this activity are:

- **Labeling.**
- **Modifying or developing techniques.**
- **Using Braille.**
- **Modifying objects or environment.**

Labeling

Label tools and locations with tactile or Braille tags.

Label chemicals in the same way.

Modifying or developing techniques

Confirm the identity of chemicals by their scent.

When sweeping, raking, mowing, trimming, watering, or weeding, mentally divide the area into sections, and do one section at a time.

A burnt out motor has a distinct smell. Replace it.

Wear safety goggles. It's easier to wipe off a plastic lens than it is to pull metal filings out of your eyeball.

Modifying objects or environment

Hang similar tools together on a peg board, or keep them together in the same box, and always return them to the same place.

Avoid hand weeding by applying chemicals or by laying down weed barrier fabric.

Buy premixed lawn chemicals.

When doing small repairs, keep track of screws and bolts by laying them on strips of masking tape or double sided carpet tape.

Lay out parts on the work surface in alphabetical order.

Jim's Story

**Adapted from the audio/visual presentation,
"Learning to Live With Low Vision," published at:**

www.mdsupport.org/tutorials.html

Introductory Comment

This is a first person account of the experiences of "Jim," a fictional participant in a low vision rehabilitation program. The intent is to introduce as many of the varied types of tests and interventions as possible. For simplicity, a single character has been used to show many possible approaches. It does not, therefore, necessarily represent a typical case. Since individual programs will be geared to each person's unique capabilities and goals, evaluation and training may be expected to include some, but not all of the options presented here.

I noticed it after my last class on a Friday. While writing Monday's assignment on the board, I got some chalk in my right eye. I closed it for a second and couldn't see the letters I'd just written. I actually thought I'd accidentally erased them. That's what it looked like. Like I'd smudged them out with my hand or something. Then I opened my other eye, and the letters were there again.

I thought maybe there was a smear on my glasses, so I took them off. But that smudge was still there, right in the middle of my left eye. And when I looked at the frame around the board, it was all out of shape...distorted. I don't know why I hadn't noticed it before. I couldn't blink that spot away, or rub it away, or anything. It was just "there", and I didn't know what was going on.

I was supposed to attend a staff meeting that afternoon, but I didn't. I just left. I had to find out what was going on, so I went straight home and called my optometrist. He made time for me that afternoon. To make a long story short, I knew in a few hours that I had an eye disease I never heard of, and couldn't even pronounce. I had become one of the vision-impaired, and I was off on a trip I had never in my life expected to take.

This essay will take you with me as I retrace that journey. It will show you how a program of low vision rehabilitation training can help you to live successfully with sight loss. My hope is that, by having this information early on, you will not have to experience the emotional distress and sense of helplessness that I did when I first faced a future with vision impairment.

What Is Vision Impairment?

Vision impairment is generally any interference with sight that hinders the performance of daily activities. More specifically, vision impairment is a term which describes varying degrees of vision loss caused by disease, trauma, or a congenital disorder.

Vision impairment may appear as one or more of three general conditions:

- 1. Blurriness, where visual acuity with best spectacle correction is still reduced or blurred.**
- 2. Narrowing of peripheral or side vision.**
- 3. Defects within the field of vision, such as distortion or blind spots, loss of contrast, sensitivity to glare or light, and loss of color perception.**

The term “vision-impaired” should not be confused with the term “legally blind”. Legal blindness is defined as acuity of 20/200 or worse in the better eye with correction, or a visual field of 20° or less in the better eye. A person who meets one of these criteria might still have usable vision, but he would not be able to read without training on an assistive device. Also, he would not be able to meet the requirements for obtaining a driver’s license. This person would be described as vision-impaired, but another person who is vision-impaired may not necessarily be legally blind.

Strategies for individuals with total blindness must be non-visual. Many times, vision-impaired individuals will also benefit from non-visual solutions for improved accuracy and efficiency with a variety of tasks. The worse the vision, the greater will be the reliance on non-visual techniques and devices.

With diseases that affect the peripheral, or side field, mobility is more seriously affected. Glaucoma, retinitis pigmentosa, and stroke, for example can constrict the visual field to as little as 10 to 15 degrees. Even with this severe limitation, however, rehabilitation can successfully reinforce the individual with training in low vision devices and technology.

What Is Low Vision Rehabilitation?

Low vision rehabilitation is like physical therapy for someone who has lost a limb. Its purpose is to develop strategies to maximize, or substitute for, diminished sight in order to maintain independence and a sense of self-worth. This rebuilding and reinforcement of the visual foundation is accomplished through identification of goals, introduction to assistive devices and technology, and training of alternate senses in accomplishing independent daily living skills.

Rehabilitation is not just an introduction to low vision devices. Actually, that may not occur until some time into the program, after the patient has gone through evaluation and training. Only then can appropriate recommendations for low vision devices be made.

Depending upon the patient's needs, a good program might also provide education, support groups, and individual counseling. It would help the patient to realize that using such devices and techniques is a sign of tenacity and courage, not weakness or defeat.

People with a constricted visual field might expect to be introduced to scanning therapy and devices such as visual field awareness prisms and reverse telescopes. People with loss of central vision will learn how to make their world "bigger, brighter, and bolder". People with severe vision loss should expect to receive orientation and mobility training, occupational therapy, and information about animal guides.

In addition to these skills, vision rehabilitation specialists teach how to manage every day activities, such as personal hygiene.

Why Did I Need Low Vision Rehabilitation?

There are some very good reasons for low vision rehabilitation training, the most important being increased physical and psychological health. Research has shown that people with low vision tend to have more emotional difficulties and a higher risk of accidents than “normally sighted” individuals. Patients who have undergone rehabilitation, however, have reported significant improvements in their functional abilities, a high rate of continued use of low vision devices and technology, and general satisfaction with their quality of life.

When my right eye went bad, I couldn't read, and I couldn't drive. I couldn't work in my wood shop, which bothered me a lot. I thought I was going totally blind. I became very depressed, and pretty much decided that life as I had known it was pretty much over.

There was more stress at home. The family couldn't accept the fact that I couldn't see well, and I just couldn't help out, couldn't do the carpentry, and couldn't help my kids with building their houses. My wife, Marie, was very understanding, but it was difficult for her.

I tried to continue teaching. The students and staff were very supportive in the beginning, but they seemed to “forget” after a while. Writing lesson plans and grading papers was difficult. I particularly had problems with reading textbooks and journals.

Step 1: Evaluation

The first step in the rehabilitation process is working one-on-one with a counselor or specialist who will assess your needs and identify which programs are best suited to meet them.

My eye doctor referred me to the optometrist at the low vision clinic for evaluation. After my appointment was scheduled, a low vision therapist called me and asked me questions about my health, eye condition, and what she called my visual goals--the things I wanted to do, but couldn't, because of my impairment.

Then, when Marie and I went to the clinic, the therapist talked with us about the problems I had that were caused by my poor vision. She explained how I could improve my quality of life through training, low vision devices, technology, and services.

She said that together, she, the low vision team, and I, would lay out a rehabilitation plan to help me meet my goals, and that my doctors would get reports as we went along. She told me that the program could take several visits over a few weeks, and that I would have to really want to succeed for it to work. Well, I wanted to succeed--not just for myself, but for Marie and the kids--so I said, "Go for it."

My initial visit was not what I expected. Rather than the kind of eye exam I had received from my medical eye doctor, the therapist put me through a battery of questions and tests to determine my functional needs, my visual capabilities and limitations, and any history of health problems and related treatment requirements that might affect my visual recovery.

Together, we developed a complete case history to determine how I was functioning and what my needs might be. I had to answer many questions about such things as my ability to care for myself, the nature of my home environment, problems caused by my vision impairment, my employment situation, my relationships with family and friends, ways in which I have adapted to vision loss, and how well I'm doing mentally and emotionally.

I thought the questions would never end, but I knew how important they were. The rehab therapist didn't leave any stones unturned, that's for sure. I think, by the time she was through, she probably knew more about me than my own wife, and after 36 years of marriage, that's saying a lot.

After analyzing the results of my initial evaluation, the vision team agreed that I was a good candidate for success through rehabilitation, and they began to devise a plan to fit my needs and goals.

Step 2: Vision Assessment

The next step was for the low vision optometrist to assess my visual functions through tests and techniques which were adapted to fit my visual impairment. My "visual acuity" and "refractive status" were tested using special low vision refractive techniques. My "ocular motility" was also evaluated. This was to determine if I had any problems with impaired eye movement.

My visual field was analyzed in order to predict how I might function in day-to-day activities and how well I might respond to various rehabilitative approaches.

Finally, to ensure that there were no other ocular diseases or complications, I was given an external eye health evaluation. My eyes were also tested for intra-ocular pressures, and they were dilated for an internal examination.

Step 3: Rehabilitation Training

I agreed to attend weekly training at the center. My rehabilitation therapist and I established a list of personal visual goals that would give direction to my training. These goals were in the areas of activities of daily living (often called independent living skills), computer use, and counseling.

Vocational rehabilitation might have been part of the program, but I was fortunate. Before my rehabilitation training began, I was able to retire early with full benefits. If I had needed to remain employed, several psychometric assessments would have been made to evaluate my current skills as they related to my teaching assignment or other areas of interest.

My training began with learning safe cooking strategies, labeling techniques, and how to use adaptive-equipment, followed by an evaluation of the safety of my home. Most of the training took place in a supervised program of selfcare using a specially-designed apartment at the center.

With the help of Marie, who handled most of the domestic responsibilities at home, my level of visual functioning was determined to be safe and sufficient to support my daily living activities. I was trained and evaluated specifically in every important facet of daily living. Sometimes, I even practiced while wearing a sleep shade.

I had to learn how to do some things all over again, this time without depending so much on my eyesight. It wasn't easy. I trained twice a week for six weeks, and each session lasted for one or two hours.

Personal adjustment counseling and marital counseling were undertaken to help my family and me deal with my loss of vision. Counseling was a daily part of the team approach to my visual rehabilitation.

In general, I handled my vision loss well. The most difficult part was dealing with the changed dynamics within my family and with problems of communication with my children. Gradually, my self-esteem and confidence in my ability to overcome my vision impairment greatly improved.

During my training, weekly team meetings were held, with Marie in attendance. My progress was discussed, and program plans were reviewed. Direct lines of communication were constantly maintained between the rehabilitation center's staff, the state sponsoring agency, my family, and me.

Low vision management was another important part of my rehabilitation. This centered around two areas: modification of my environment and possible treatment options with devices.

For patients with mild vision loss, simple environmental modifications may be enough to perform daily living tasks. Patients such as me, however, will also need non-optical low vision devices to help supplement or replace our vision. I eventually found the low vision devices most suitable to my needs. Then came careful training in the correct usage of the devices.

The specialists at the center keep up on the latest technology, so I knew I was receiving the best information and training available for my unique needs. In order to select the most appropriate low vision devices, the specialists had to identify exactly what tasks I wanted to accomplish, and analyze my fine and gross motor skills to confirm my ability to operate my devices. They figured out exactly what I need to live an almost normal life again.

There are all kinds of non-optical devices. Marie and the kids went shopping for my birthday out of one of those catalogs, and I actually use everything I got. Even stuff I didn't know I needed, like a talking watch. And a gadget that actually tells me when my cup is getting full so I don't pour coffee all over the table any more. It's good to know, that if I get to the point where my eyes just can't do the job, I will still be able to do almost "everything" I do now.

Finding a Low Vision Rehabilitation Center

I was fortunate to have an outstanding rehabilitation center near my home. The center offered comprehensive programs with teams of doctors, occupational therapists, and specialists. Such teams can be found in some university centers and large private clinics. Rehabilitation services may also be provided by charitable organizations.

All state governments in the United States fund an agency to coordinate the visual rehabilitation of its vision-impaired citizens. They take care of most of the rehabilitative efforts, either directly or through subcontractors. These organizations can be found listed by state in the “Directory of Rehabilitation Agencies” in this guide.

In cases where a person might not meet the eligibility requirements of the state blindness agency, but the person’s employment is being adversely affected, they can go for help to the state’s vocational rehabilitation agency, also listed in the directory.

Paying for Low Vision Rehabilitation

How did I get the help I needed, and how was it paid for? The referral mechanism differs slightly with each state, but generally, a referral can be requested by any individual, family, friend, eye care professional, rehabilitation specialist, or social worker.

State statutes specify the minimum levels of vision loss for entry into the program, but there is also some flexibility in the acceptance standards. A doctor must provide documentation of the best-corrected visual acuity and/or the visual field in each of the patient’s eyes.

State agencies will usually cover the costs of rehabilitation for people who are registered. Those who are not qualified for government assistance might expect to pay their own expenses. Also, at this time, the cost of low vision devices is not reimbursed by the government, but there are efforts underway to change that policy.

Conclusion

Since my initial low vision assessment and training, my confidence and independence have rocketed. Vision rehabilitation isn't easy, and it isn't a cure for low vision. It's an educational process that requires patience, practice, flexibility, and motivation. With good resources available, much can be accomplished individually, but the guidance and support of professionals is highly recommended.

Most important, the specialists and doctors at my rehab center were good, but they could be only as good as I would let them be. As I always told my students, if a person doesn't have a real reason to want to learn--a ton of self-motivation--then there isn't anyone who is going to be able to teach them.

It was a long road, but I don't even want to think how long the rest of this road would be without the knowledge and skills I've gained. Rehabilitation gave me the tools, taught me how to use them, and showed me that my life can be just as good as it always was. Different maybe--not like I thought it was going to be--but it's ... good.

The Optimum Low Vision Rehabilitation Delivery Model

On August 10, 2007, the Optimum Low Vision Rehabilitation Delivery Model was unveiled. This is the continuum of care recommended by most practitioners for patients diagnosed with progressive diseases of the eye.

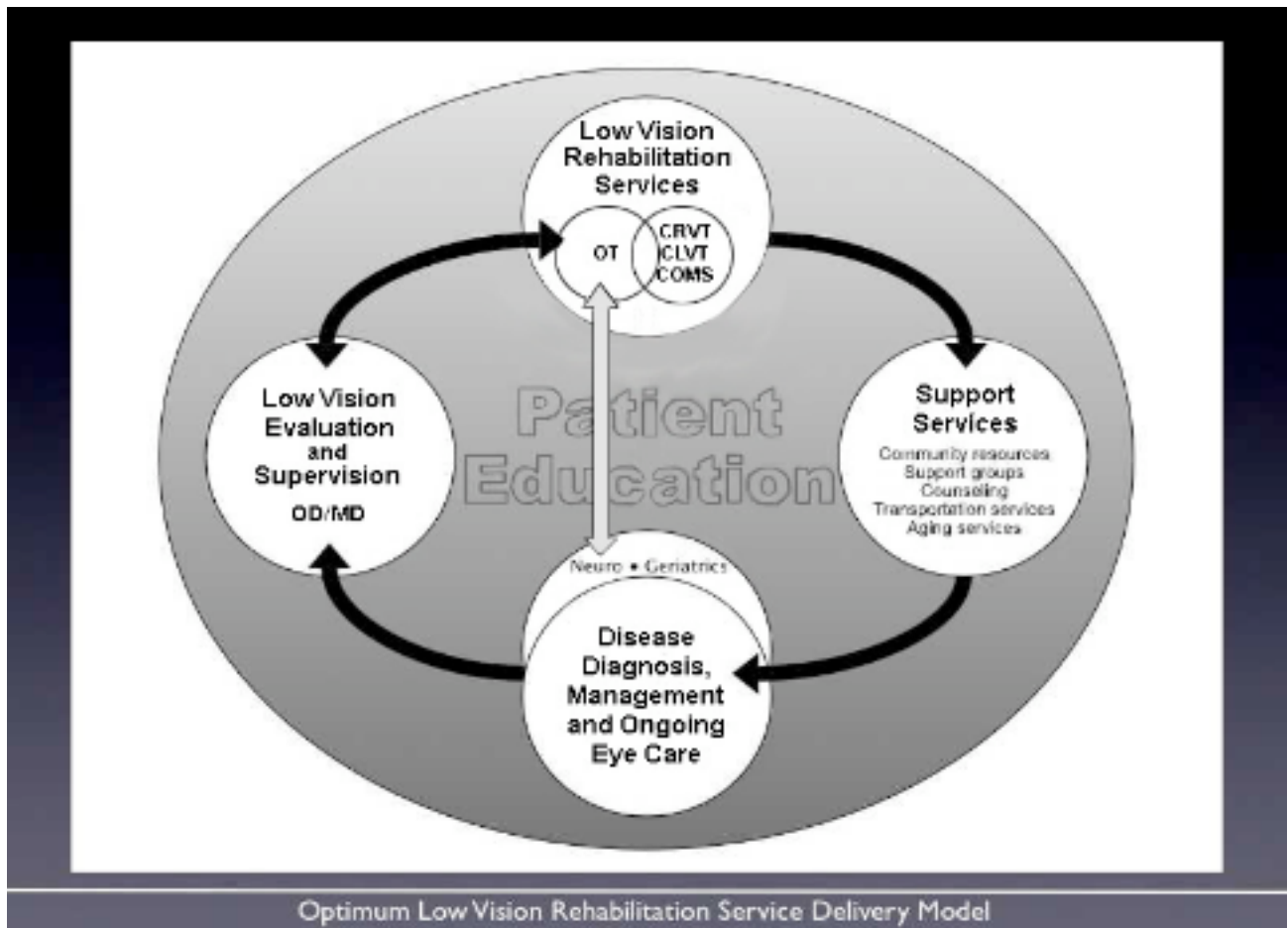
The model was developed by a committee of professionals from ophthalmology, optometry, occupational therapy, and certified low vision therapy, and it included a representative of the low vision community. The committee members were Lylas Mogk, M.D., R. Tracy Williams, O.D., Mary Warren, O.T., Jim Deremeik, CLVT, and Dan Roberts, Consumer Representative.

The end result demonstrated that the eye care professions can work together in the best interests of people with vision loss. The meetings demonstrated a healthy level of respect, cooperation and sharing of resources to meet the current epidemic of people in America with vision loss.

On the next page is a flow chart representing the model. Beneath the chart is a description of each step in the continuum. For more information about this project and low vision rehabilitation in general, see:

www.mdsupport.org/lvrehab.html

Graphic of the Low Vision Rehabilitation Delivery Model



Description

The four service teams are joined in a circle by arrows, representing the paths to follow for optimum low vision rehabilitation. These images overlay a background labeled “Patient Education,” which is the driving force behind the model.

Here are the steps you should expect to take along this road to low vision rehabilitation:

1. The continuum of care may be entered at any point in the circle. The process actually begins, however, when your diagnosing physician (usually an optometrist or ophthalmologist) refers you to a low vision physician for evaluation.

2. The low vision physician (a specially-trained medical doctor or optometrist) will evaluate your needs and refer you, if necessary, to the most appropriate rehabilitation professionals. You may be referred to one or more of the following:

- Certified Low Vision Therapist, or CLVT.**
- Certified Vision Rehabilitation Therapist, or CVRT.**
- Certified Orientation and Mobility Specialist, or C O M S.**
- Occupational Therapist, or OT.**

It could be that you do not need to move further through the system at this time. If not, you will at least know what is available to you if your vision declines further.

3. If you are referred on, rehabilitation professionals will consult and collaborate to provide multi-disciplinary care to meet your needs and goals. At the same time, they should refer you to appropriate ancillary and support services, including:

- Community resources**
- Support groups**
- Counseling**
- Transportation services.**
- Aging services**

The support services will provide you with ongoing assistance once formal rehabilitation services have ended. They will ensure that you have the resources to continue the gains made in therapy.

4. If your vision declines, the physician may reinitiate the referral process, beginning with a new low vision examination, and the model will progress forward.

Your care providers should be putting this protocol into practice wherever possible. Sufficient manpower and physical resources, however, may not be available in some geographical areas. Hopefully, that situation will improve, as more professionals realize the increasing importance of such care to the quality of life and the health of our low vision community.

If services are not yet available in your area, and you are not able to travel, this guide should help you through the rehabilitation phase (Step 2) that follows your diagnosis and vision evaluation (Step 1). For information about additional support services (Step 3), contact your state's agency for the Blind or Visually Impaired, listed in the following directory.

Directory of Rehabilitation Agencies

Alabama

Alabama Department of Rehabilitation Blind Services.

Telephone: (3 3 4) 2 8 1 - 8 7 8 0.

Web site: www.rehab.state.al.us

Alaska

Alaska Division of Vocational Rehabilitation, Visual Impairment or Blindness.

Telephone: (9 0 7) 4 6 5 - 2 8 1 4 or (800) 4 7 8 - 2 8 1 5.

Web site: www.labor.state.ak.us/dvr/home.htm

Arizona

Arizona Center for the Blind and Visually Impaired.

Telephone: (6 0 2) 2 7 3 - 7 4 1 1.

Web site: www.acbvi.org

Arizona Services for Rehabilitation and Visually Impaired.

Telephone: (6 0 2) 5 4 2 - 6 2 8 9.

Web site: www.de.state.az.us/rsa/blind.asp

Arkansas

Arkansas Division of Services for the Blind.

Telephone: (5 0 1) 6 8 2 - 5 4 6 3 or (800) 9 6 0 - 9 2 7 0.

Web site: www.arkansas.gov/dhhs/dsb/NEWDSB/index.htm

Arkansas Division of Vocational Rehabilitation.

Telephone: (5 0 1) 2 9 6 - 1 6 6 1.

Web site: www.arsinfo.org

California

California Department of Rehabilitation Services.

Telephone: (9 1 6) 2 6 3 - 8 9 8 1.

Web site: www.rehab.cahwnet.gov/

The Center for the Blind & Visually Impaired

Telephone: (6 6 1) 3 2 2 - 5 2 3 4.

Web site: www.cbvi.org

Colorado

Colorado Division of Rehabilitation Services.

Telephone: (3 0 3) 4 4 4 - 2 8 1 6.

Web site: bcn.boulder.co.us/human-social/center.html

Connecticut

Connecticut Board of Education and Services for the Blind.

Telephone: (8 6 0) 6 0 2 - 4 0 0 0.

Web site: www.besb.state.ct.us

Connecticut Rehabilitation Services.

Board of Education and Services for the Blind.

Telephone: (8 6 0) 5 6 6 - 5 8 0 0.

Web site: www.ct.gov/dss/site/default.asp

Delaware

Delaware Division for the Visually Impaired.

Department of Health and Social Services.

Telephone: (3 0 2) 5 7 7 - 4 7 3 1.

Web site: www.dhss.delaware.gov/dhss/dvi/index.html

Delaware Division of Vocational Rehabilitation.

Telephone: (3 0 2) 7 6 1 - 8 2 7 5.

Web site: www.delawareworks.com/dvr/

District of Columbia

**District of Columbia Rehabilitation Services.
Department of Human Services.
Telephone: (2 0 2) 7 2 7 - 1 0 0 0.
Web site: www.disabilityresources.org/DC.html**

Florida

**Florida Division of Blind Services.
Rehabilitation Center for the Blind.
Telephone: (9 0 4) 2 5 8 - 4 4 4 4 or (800) 7 4 1 - 3 8 2 6.
Web site: <http://dbs.myflorida.com>**

Georgia

**Georgia Division of Services for the Blind and Visually Impaired.
Telephone: (4 0 4) 6 5 7 - 3 0 0 5.
Web site: www.vocrehabga.org/**

Hawaii

**Vocational Rehabilitation and Services for the Blind Department of
Human Services
Telephone: (8 0 8) 5 8 6 - 5 3 6 6.
Web site: hawaiiivr.org/main/**

Idaho

**Idaho Commission for the Blind and Visually Impaired.
Telephone: (2 0 8) 3 3 4 - 3 2 2 0.
Web site: www.icbvi.state.id.us/**

**Idaho Division of Rehabilitation Services.
Telephone: (2 0 8) 3 3 4 - 3 3 9 0.
Web site: www.vr.idaho.gov**

Illinois

**Illinois Division of Rehabilitation Services for the Blind.
Bureau of Blind Services.**

Telephone: (2 1 7) 7 8 2 - 2 0 9 3 or (800) 2 7 5 - 3 6 7 7.

Web site: www.dhs.state.il.us/page.aspx?item=29727

Indiana

**Indiana Family and Social Services Administration.
Blind and Visually Impaired Services.**

Telephone: (3 1 7) 2 3 2 - 1 4 3 3.

Web site: www.in.gov/fssa/ddrs/2638.htm

Indiana Vocational Rehabilitation Services.

Telephone: (8 1 2) 3 3 2 - 7 3 3 1 or TDD (8 1 2) 3 3 2 - 9 3 7 2.

Web site: www.in.gov/fssa/2328.htm.

Iowa

Iowa State Department for the Blind.

Telephone: (5 1 5) 2 8 1 - 1 3 3 3 or (800) 3 6 2 - 2 5 8 7.

Web site: www.blind.state.ia.us

Iowa Division of Vocational Rehabilitation Services.

Telephone: (5 1 5) 2 8 1 - 4 3 1 1.

Web site: <http://www.ivrs.iowa.gov/index.html>

Kansas

Envision Vision Rehabilitation.

Telephone: (3 1 6) 4 4 0 - 1 6 0 0.

Web site: www.envisionus.com/Rehab

Kansas Association of the Blind and Visually Impaired.

Telephone: (800) 4 2 4 - 8 6 6 6.

Web site: www.kabvi.com

Kansas Department of Social and Rehabilitation Services.
Telephone: (7 8 5) 2 9 6 - 3 9 5 9.
Web site: www.srskansas.org

Kansas Division of Vocational Rehabilitation Services.
Division of Services for the Blind.
Telephone: (9 1 3) 2 9 6 - 4 4 5 4.
Web site: www.srskansas.org/rehab/text/VR.htm

Kentucky

Kentucky Office for the Blind.
Telephone: (800) 3 2 1 - 6 6 6 8 or (5 0 2) 5 6 4 - 4 7 5 4.
Web site: <http://blind.ky.gov>

Kentucky Office of Vocational Rehabilitation.
Telephone: (5 0 2) 5 6 4 - 4 4 4 0 or (800) 3 7 2 - 7 1 7 2.
Web site: ovr.ky.gov

Louisiana

Louisiana Center for the Blind.
Telephone: (3 1 8) 2 5 1 - 2 8 9 1 or (800) 2 3 4 - 4 1 6 6.
Web site: www.lcb-ruston.com

Louisiana State Division of Blind Services, Department of Rehabilitation.
Telephone: (2 2 5) 9 2 5 - 4 1 3 1; (2 2 5) 9 2 5 - 3 5 9 4.
Web site: www.laworks.net/WorkforceDev/LRS/LRS_BlindServices.asp

Louisiana Division of Vocational Rehabilitation Services.
Web site: www.dss.state.la.us

Maine

Maine Division of Services for the Blind and Visually Impaired.
Telephone: (2 0 7) 6 2 4 - 5 3 2 3.
Web site: www.maine.gov/rehab

Maine Department of Special Education Services.

Telephone: (2 0 7) 2 8 7 - 5 9 5 0.

Web site: www.maine.gov/education/speced/stateinfo.htm

Maine Rehabilitation Center for the Blind and Visually Impaired.

Telephone: (2 0 7) 7 7 4 - 6 2 7 3 or (800) 7 1 5 - 0 0 9 7.

Web site: www.maine.gov/rehab

Maryland

Blind Industries and Services of Maryland.

Telephone: (4 1 0) 2 3 3 - 4 5 6 7.

Web site: www.bism.com

Maryland Division of Rehabilitation Services.

Telephone: (4 1 0) 3 3 3 - 6 1 1 9.

Web site: www.dpscs.state.md.us/rehabservs

Maryland Guide of Rehabilitation Services for the Blind and Visually Impaired.

Telephone: (4 1 0) 5 5 4 - 9 4 0 8.

Web site: www.dors.state.md.us

Massachusetts

Lowell Association for the Blind.

Telephone: (9 7 8) 4 5 4 - 5 7 0 4.

Web site: www.lowellassociationfortheblind.org

Massachusetts Association for the Blind and Visually Impaired.

Telephone: (800) 852-3029.

Web site: www.mabcommunity.org

Massachusetts Commission for the Blind.

Telephone: (6 1 7) 7 2 7 - 5 5 5 0 or (800) 3 9 2 - 6 4 5 0.

Web site: www.mass.gov/mcb

Massachusetts Rehabilitation Commission.**Telephone: (Voice or TDD) (800) 2 4 5 - 6 5 4 3 or (6 1 7) 2 0 4 - 3 6 0 0.****Web site: www.mass.gov/mrc****Michigan****Greater Detroit Agency for the Blind and Visually Impaired.****Telephone: (3 1 3) 2 7 2 - 3 9 0 0.****Web site: www.gdabvi.org****Michigan Association for the Blind and Visually Impaired.****Telephone: (6 1 6) 4 5 8 - 1 1 8 7 or (800) 4 6 6 - 8 0 8 4.****Web site: www.abvimichigan.org****Michigan Rehabilitation Services.****Telephone: (5 1 7) 2 4 1 - 4 0 0 0 or (8 8 8) 6 0 5 - 6 7 2 2.****Web site: www.michigan.gov****Minnesota****Minnesota Division of Vocational Rehabilitation Services.****Telephone: (6 5 1) 2 9 6 - 5 6 1 6 or (800) 3 2 8 - 9 0 9 5;.****TTY (6 5 1) 2 9 6 - 3 9 0 0.****Web site: www.deed.state.mn.us/rehab/vr/main_vr.htm****Minnesota State Services for the Blind.****Telephone: (6 5 1) 2 8 4 - 3 3 0 0 or (800) 6 5 2 - 9 0 0 0.****Web site: www.mnssb.org****Mississippi****Mississippi Department of Rehabilitation Services for the Blind.****Telephone: (6 0 1) 8 5 3 - 5 1 0 0 or (800) 4 4 3 - 1 0 0 0.****Web site: www.mdrs.state.ms.us**

Missouri

Alphapointe Association for the Blind.

Telephone: (8 1 6) 4 2 1 - 5 8 4 8.

Web site: www.alphapointe.org

Missouri Division of Vocational Rehabilitation Services.

Telephone: (5 7 3) 5 2 6 - 7 0 0 4 or toll-free (8 7 7) 2 2 2 - 8 9 6 3.

Web site: www.dss.mo.gov/fsd/rsb/vr.htmv

Missouri Rehabilitation Services for the Blind.

Telephone: (800) 5 9 2 - 6 0 0 4.

Web site: www.dss.mo.gov/fsd/rsb

Montana

Montana Blind and Low Vision Services

Telephone: (4 0 6) 4 4 4 - 2 5 9 0 or (8 7 7) - 2 9 6 - 1 1 9 7

Web site: www.dphhs.mt.gov/vocrehab/blvs

Nebraska

Nebraska Department of Services for the Visually Impaired.

Telephone: (4 0 2) 4 7 1 - 8 1 0 0.

Web site: www.hhs.state.ne.us

Nebraska Division of Vocational Rehabilitation.

Telephone: (4 0 2) 4 7 1 - 3 6 4 4.

Web site: www.vocrehab.state.ne.us

Nevada

Nevada Council of the Blind.

Telephone: (800) 4 2 4 - 8 6 6 6.

Web site: www.acb.org/nevada

Nevada Division of Vocational Rehabilitation Services.

Telephone: (7 0 2) 6 8 7 - 4 4 4 0.

Web site: <http://detr.state.nv.us>

Nevada Services for the Blind and Visually Impaired.**Telephone: (7 0 2) 6 8 7 - 4 4 4 0.****Web site: http://detr.state.nv.us/rehab/reh_bvi.htm****New Hampshire****New Hampshire Division of Services for the Blind and Visually Impaired.****Telephone: (6 0 3) 2 7 1 - 3 5 3 7.****Web site: www.nhbvi.com****New Hampshire Vocational Rehabilitation Services.****Telephone: (6 0 3) 2 7 1 - 3 4 7 1 or (800) 2 9 9 - 1 6 4 7.****Web site: www.ed.state.nh.us****New Jersey****New Jersey Commission for the Blind and Visually Impaired.****Telephone: (9 7 3) 6 4 8 - 2 3 2 4.****Web site: www.state.nj.us/humanservices/cbvi/index.html****New Jersey Division of Services for Vocational Rehabilitation.****Telephone: (6 0 9) 2 9 2 - 5 9 8 7.****Web site: lwd.dol.state.nj.us/labor/dvrs/DVRIndex.html****New Mexico****Las Luminarias of the New Mexico Council of the Blind.****Telephone: (5 0 5) 2 4 7 - 0 4 4 1****New Mexico Commission for the Blind.****Telephone: (5 0 5) 4 7 6 - 4 4 7 9 or toll-free (8 8 8) 5 1 3 - 7 9 6 8.****Web site: www.state.nm.us/cftb/Introduction.html****New Mexico Division of Vocational Rehabilitation Services.****Telephone: (5 0 5) 4 7 6 - 4 4 7 9 or toll-free (8 8 8) 5 1 3 - 7 9 6 8.****Web site: www.state.nm.us/cftb/VocationalRehabilitation.html**

New Mexico State Commission for the Blind.

Telephone: (5 0 5) 8 2 7 - 4 4 7 9 or (8 8 8) 5 1 3 - 7 9 6 8.

Web site: www.state.nm.us/cftb

New York**New York Division of Services for the Blind and Visually Impaired.**

Telephone: (2 1 2) 6 2 5 - 1 6 1 6 / Fax: (2 1 2) 2 1 9 - 4 0 7 8.

Web site: www.visionsvcb.org

New York State Commission for the Blind and Visually Impaired.

Telephone: (5 1 8) 4 7 3 - 1 8 0 1 or (8 6 6) 8 7 1 - 3 0 0 0.

Web site: www.ocfs.state.ny.us/main/cbvh

New York Vocational and Educational Services for Individuals with Disabilities.

Telephone: (800) 2 2 2 - 5 6 2 7.

Web site: www.vesid.nysed.gov

Northeastern Association for the Blind in Albany.

Telephone: (5 1 8) 4 6 3 - 1 2 1 1.

Web site: www.naba-vision.org

North Carolina**North Carolina Division of Services for the Blind.**

Telephone: (9 1 9) 7 3 3 - 9 8 2 2.

Web site: www.dhhs.state.nc.us/dsb

North Carolina Division of Vocational Rehabilitation.

Telephone: (9 1 9) 7 3 3 - 3 3 6 4.

Web site: www.dhhs.state.nc.us/docs/divinfo/dvr.htm

North Dakota**North Dakota Association of the Blind.**

Telephone: (7 0 1) 6 9 6 - 2 5 0 9.

Web site: www.ndab.org

North Dakota Division of Rehabilitation Services.**Telephone: (7 0 1) 3 2 8 - 8 9 5 0.****Web site: <http://www.nd.gov/dhs/services/disabilities/>****North Dakota Vision Services/School for the Blind (NDVS).****Telephone: (7 0 1) 7 9 5 - 2 7 0 0.****Web site: www.ndvisionservices.com****Ohio****Ohio Rehabilitation Services Commission.****Telephone: (800) 2 8 2 - 4 5 3 6.****Web site: www.rsc.ohio.gov/default.htm****Oklahoma****Oklahoma Department of Rehabilitation Services, Visual Services Division.****Telephone: (4 0 5) 9 5 1 - 3 4 0 0.****Web site: www.okrehab.org****Oregon****Oregon Commission for the Blind.****Telephone: (9 7 1) 6 7 3 - 1 5 8 8 or toll-free (8 8 8) 2 0 2 - 5 4 6 3.****Web site: www.cfb.state.or.us****Oregon Office of Vocational Rehabilitation Services.****Telephone: (5 4 1) 9 6 7 - 2 0 2 2.****Web site: www.oregon.gov/DHS/vr/****Pennsylvania****Associated Services for the Blind of the Delaware Valley.****Telephone: (2 1 5) 6 2 7 - 0 6 0 0.****Web site: www.asb.org**

Pennsylvania Association for the Blind.**Telephone: (7 1 7) 2 3 4 - 3 2 6 1.****Web site: www.pablind.org/****Pennsylvania Council of the Blind.****Telephone: (7 1 7) 9 2 0 - 9 9 9 9 or (800) 7 3 6 - 1 4 1 0.****Web site: www.pcb1.org****Pennsylvania Office of Vocational Rehabilitation.****Telephone: (800) 4 4 2 - 6 3 5 2.****Web site: www.nepacil.org/OVR.htm****Rhode Island****Rhode Island Division of Rehabilitation Services.****Telephone: (4 0 1) 4 2 1 - 7 0 0 5 or (800) 7 5 2 - 8 0 8 8.****Web site: www.ors.ri.gov****Rhode Island Services for the Blind and Visually Impaired.****Telephone: (4 0 1) 4 2 1 - 7 0 0 5.****Web site: www.ors.ri.gov****South Carolina****South Carolina Commission for the Blind.****Telephone: (8 0 3) 8 9 8 - 8 7 0 0 or (800) 9 2 2 - 2 2 2 2.****Web site: www.sccb.state.sc.us****South Carolina Division of Vocational Rehabilitation Services.****Telephone: (8 0 3) 8 9 6 - 6 5 0 0.****Web site: www.scvrd.net****South Dakota****South Dakota Association of the Blind.****Telephone: (6 0 5) 2 2 4 - 4 1 8 3.****Web site: sdab.club.officelive.com/default.aspx**

South Dakota Division of Rehabilitation Services.**Telephone: (6 0 5) 7 7 3 - 5 9 9 0.****Web site: www.state.sd.us/dhs/drs****South Dakota Services to the Blind and Visually Impaired.****Telephone: (6 0 5) 7 7 3 - 4 6 4 4.****Web site: www.state.sd.us/dhs/sbvi****Tennessee****Tennessee Department of Human Services.****Services for the Blind and Visually Impaired.****Telephone: (6 1 5) 7 4 1 - 2 9 1 9.****Web site: www.state.tn.us/humanserv****Texas****Texas Commission for the Blind.****Telephone: (5 1 2) 3 7 7 - 0 5 0 0 or (800) 2 5 2 - 5 2 0 4.****Web site: www.dars.state.tx.us/dbs/index.shtml****Texas Division of Rehabilitation Services.****Telephone: (800) 6 2 8 - 5 1 1 5.****Web site: www.dars.state.tx.us/dbs****Utah****Utah State Office of Rehabilitation.****Division of Services for the Blind and Visually Impaired.****Telephone: (8 0 1) 3 2 3 - 4 3 4 3 or toll-free (800) 2 8 4 - 1 8 2 3.****Web site: www.usor.utah.gov****Utah Division of Rehabilitation Services.****Telephone: (8 0 1) 5 3 8 - 7 5 3 0.****Web site: www.usor.utah.gov**

Vermont

Vermont Association for the Blind and Visually Impaired.

Telephone: (8 0 2) 8 6 3 - 1 3 5 8.

Web site: www.vabvi.org

Vermont Division for the Blind and Visually Impaired.

Telephone: (8 0 2) 2 4 1 - 2 2 1 0.

Web site: www.dbvi.vermont.gov

Vermont Division of Vocational Rehabilitation.

Telephone: (8 0 2) 4 7 9 - 4 2 1 0 or (800) 2 8 7 - 2 1 7 3.

Web site: www.vocrehabvermont.org

Virginia

Virginia Department for the Blind and Vision Impaired.

Telephone: (8 0 4) 3 7 1 - 3 1 4 5.

Web site: www.vdbvi.org

Virginia Division of Vocational Rehabilitation.

Telephone: (8 0 4) 7 8 6 - 1 2 0 1 or (800) 5 2 2 - 5 0 1 9.

Web site: www.vadors.org/vocrehab.htm

Washington

Community Services for the Blind and Partially Sighted.

Telephone: (2 0 6) 5 2 5 - 5 5 5 6 or (800) 4 5 8 - 4 8 8 8.

Web site: www.csbps.com

Washington Division of Services for the Blind and Visually Impaired.

Telephone: (3 6 0) 5 8 6 - 1 2 2 4.

Web site: www.dsb.wa.gov

Washington Division of Vocational Rehabilitation.

Department of Social and Health Services.

Telephone: (3 6 0) 4 3 8 - 8 0 0 8 or (800) 6 3 7 - 5 6 2 7.

Web site: www.dshs.wa.gov/dvr

Washington State Services for the Blind and Visually Impaired.
Telephone: (2 0 2) 6 4 5 - 5 8 6 9.
Web site: www.dsb.wa.gov

West Virginia

West Virginia Division of Rehabilitation Services.
Blind and Visually Impaired Services.
Telephone: (3 0 4) 7 6 6 - 4 7 9 9.
Web site: www.wvdrs.org

Wisconsin

Wisconsin Division of Rehabilitation Services.
Telephone: (6 0 8) 2 4 3 - 5 6 0 3.
Web site: www.dwd.state.wi.us/dvr

Wyoming

Wyoming Council of the Blind.
Telephone: (800) 4 2 4 - 8 6 6 6.
Web site: otnt.info/wycb/index.html

Wyoming Division of Rehabilitation Services.
Telephone: (3 0 7) 7 7 7 - 7 3 8 9.
Web site: www.wyomingworkforce.org/vr/

Distributors of Low Vision Devices

AbilityHub.

Assistive technology for computers and disability.

Telephone: (8 0 2) 7 7 5 - 1 9 9 3.

Web site: www.abilityhub.com

Ai Squared.

ZoomText® screen reader software.

Telephone: (8 0 2) 3 6 2 - 3 6 1 2.

Web site: www.aisquared.com

Allied Technologies, Inc.

Reading systems, ZoomText.

Telephone: (8 0 0) 2 6 7 - 5 3 5 0.

Web site: www.alliedtec.com

ALVA Access Group.

Windows and Macintosh access software. For information on “outSPOKEN®,” text-to-speech software for Power Macintosh.

Telephone: (5 1 0) 9 2 3 - 6 2 8 0.

Web site: www.aagi.com

Assistive Technology, Inc.

LINK talking keyboards, computer aids, talking appliances.

Telephone: (6 1 7) 6 4 1 - 9 0 0 0 or (800) 7 9 3 - 9 3 3 7.

Web site: www.assistivetech.com

Bossert Specialties, Inc.

Braille, computer and daily living aids, talking appliances.

Telephone: (6 0 2) 9 5 6 - 6 6 3 7 or (800) 7 7 6 - 5 8 8 5.

Web site: www.wemagnify.com

Dragon Naturally Speaking®.

Offers a full line of multilingual speech-recognition products.

Telephone: (7 8 1) 5 6 5 - 5 0 0 0.

Web site: www.nuance.com

Freedom Scientific.

Screen reading, scanning, learning systems software. Braille note takers, embossers, and displays.

Telephone: (800) 4 4 4 - 4 4 4 3 (U.S. and Canada).

Web site: www.freedomscientific.com

G. W. Micro, Inc.

For information on Window Eyes®, a multifunctional speech reader program for both PCs and Macintosh.

Telephone: (2 1 9) 4 8 9 - 3 6 7 1.

Web site: www.gwmicro.com

JBliss Low Vision Systems.

Reading systems. Imaging (scanning) software. Web browser, e-mail and word processing for low vision users.

Telephone: (8 8 8) 4 5 2 - 5 4 7 7.

Web site: www.jbliss.com

LS & S Products, Inc.

Products for the visually impaired and hard of hearing. Talking and low vision products, computer aids, assistive technology, daily living products, and Braille items.

Telephone: (800) 4 6 8 - 4 7 8 9.

Web site: www.lssproducts.com

Maxi-Aids

Full-line catalog of blind, low vision, and products for the visually impaired, including speech recognition and talking appliances.

Telephone: (5 1 6) 7 5 2 - 0 5 2 1.

Web site: www.maxiaids.com

Optically Yours, Inc.

Talking watches.

Telephone: (3 5 2) 3 0 7 - 6 7 9 7.

Web site: www.opticallyyours.com

Pulse Data HumanWare, Inc.

Assistive technology in reading/writing for visual impaired. Braille, speech recognition.

Telephone: (800) 7 2 2 - 3 3 9 3.

Web site: www.pulsedata.com

SensAbility, Inc.

Reading machines, adaptive software, and Braille embossers.

Telephone: (8 4 7) 3 6 7 - 9 0 0 9 or (8 8 8) 6 6 9 - 7 3 2 3

Talking Rx®.

Talking Rx® device that tells you exactly how many pills to take, when, and what for.

Telephone: (8 8 8) 7 9 8 - 2 5 5 7.

Web site: www.talkingrx.com

Telesensory Corporation.

Scanners.

Telephone: (800) 8 0 4 - 8 0 0 4.

Web site: www.telesensory.com

TextAloud®.

Converts any text into voice or MP3.

Web site: www.textaloud.com

Distributors of Audio Books

Amazon.com.

Web site: www.amazon.com

American Printing House for the Blind.

Telephone: (800) 2 2 3 - 1 8 3 9 or (5 0 2) 8 9 5 - 2 4 0 5.

Web site: www.aph.org

Assistive Media for Visually Impaired.

Telephone: (7 3 4) 3 3 2 - 0 3 6 9.

Web site: www.assistivemedia.org

Associated Services for the Blind.

Telephone: (2 1 5) 6 2 7 - 0 6 0 0 or (800) 8 7 6 - 5 4 5 6.

Web site: www.asb.org

Audible.Com.

Telephone: (8 8 8) 2 8 3 - 5 0 5 1.

Web site: www.audible.com

Audiotome.

Telephone: (4 1 0) 5 5 1 - 4 8 7 4.

Web site: www.audiotome.com

Christian Record Services, Inc.

Telephone: (4 0 2) 4 8 8 - 0 9 8 1 or TDD (4 0 2) 4 8 8 - 1 9 0 2.

Web site: www.christianrecord.org

CIL Publications and Audio Books.

Telephone: (8 8 8) C I L - 8 3 3 3.

Web site: www.visionsvcb.org

Jimmy B's Audio Books.

Telephone: (3 1 0) 7 9 2 - 1 7 1 8.

Web site: www.audiobooks.com/jimmyb/jimmyb.html

Library of Congress.

Telephone: (800) 4 2 4 - 8 5 6 7 or (2 0 2) 7 0 7 - 5 1 0 0.

Web site: www.loc.gov

Reading and Radio Resource.

Telephone: (2 1 4) 8 7 1 - 7 6 6 8.

Web site: www.readingresource.org

Recorded Books.com.

Telephone: (800) 6 3 8 - 1 3 0 4.

Web site: www.recordedbooks.com

Regional and Sub Regional Libraries for the Blind and Physically Handicapped.

Telephone: (2 0 2) 7 0 7 - 5 1 0 0 or toll-free (8 8 8) 6 5 7 - 7 3 2 3.

Web site: www.loc.gov/nls/contact.html

Sound Solutions.

Telephone: (3 2 3) 6 6 3 - 1 1 1 1 or (800) 2 7 2 - 4 5 5 3.

Web site: www.biasoundsolutions.org.

Tape Ministries NW.

Telephone: (2 0 6) 2 4 3 - 7 3 7 7.

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Telephone: (800) 2 2 3 - 1 2 4 4.

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Xavier Society for the Blind.

Telephone: (2 1 2) 4 7 3 - 7 8 0 0 or (800) 6 3 7 - 9 1 9 3.

Website: www.xaviersocietyfortheblind.org

Credits: Activity Lessons

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Michael Fischer, O.D., F.A.A.O. (Low Vision Clinical Consultant, Lighthouse International, New York City).
Sharon Noseworthy (author: “Ideas on Coping With Low Vision”, published at www.mdsupport.org).
Maurice Peret (National Federation of the Blind).
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Charles Schwartz, M.S. (Support Specialist, Low Vision Products). American Foundation for the Blind (www.afb.org).
Members of MDList (www.mdsupport.org).

Credits: “Jim’s Story”

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