### **ECHO Vision and Eye Health in Primary Care**

12-07-22

#### Reminders:

- Please use your first name and center location when you join the conference
- Use the "chat" feature to ask questions



• Please remember to <u>mute your microphone</u> unless speaking.



• If you can't connect audio via computer or you lose computer audio at anytime, you can call in to session at (408) 638-0968, Meeting ID 907-467-7320##







# **Disclosures**

No one else in a position to control the educational content of this activity has any relevant financial relationships with ineligible companies to disclose. All of the relevant financial relationships listed for these individuals have been mitigated.

This CME-certified activity has not requested or received any support or funding from commercial interests.













# Low Vision Rehabilitation

Kelly Scherer, OD **Director of Clinical Services** The Chicago Lighthouse

# Low Vision Rehabilitation Who can benefit?

All causes and types of vision loss

**Light Sensitivity** 

Visual Field Loss
Peripheral vs
Central

Visual Acuity Loss

Visual distortions

**Color Vision Loss** 

Cortical vs Ocular vision loss







### **Low Vision Rehabilitation**

Who can benefit?

All levels of vision loss



### Visually Impaired

Visual acuity of 20/70 or worse in the better seeing eye.

### Legally Blind

Visual acuity equal to or worse than 20/200 in the better seeing eye; or a visual field of equal to or less than 20 degrees

Total Blindness

No light perception



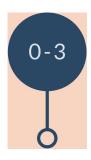




## **Low Vision Rehabilitation**

### Who can benefit?

### All Ages



# Infancy + Preschool

Early Intervention is a home based developmental and family support to promote learning and development in children with vision impair ment and multiple disa bilities.



### School Age

Children in the public school system are eligible for vision services including 1:1 with a teacher of the visually impaired and orientation and mobility training via IEP



### Working Age

Vocational rehabilitation
services are available
through Department of
Human Services at the state
level under Department of
Rehab Services or Blind
Bureau



#### Seniors

In-person and virtual programming designed to enhance independence, develop critical skills and foster a sense of community







# Low Vision Rehab Team



### Eye Care

Optometry and Ophthalmology



### Rehabilitative Therapy

Occupational Therapists, Certified Low Vision and Vision Rehabilitation Therapists



### **Orientation and Mobility**

Certified Orientation and Mobility Specialists



### **Assistive Technology**

**Certified Assistive Technology Instructional Specialists** 



#### Mental Healthcare

Psychologists, Counselors, Therapists



#### **Vocational Rehabilitation**

Employment Counselors









# **Low Vision Optometry**

### A functional look at vision

- Educates the individual on their diagnosis
- Reviews how the diagnosis effects day to day function
- Provides rehabilitative devices and strategies to optimize function based on patient goals





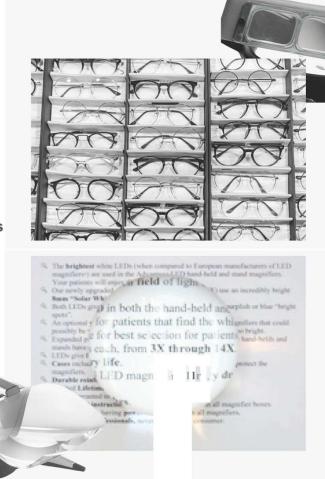




#### **Low Vision Devices**

The low vision exam includes evaluation for prescriptive optical devices including:

- Glasses
  - o Prism
  - o Microscopes
- Optical Magnifiers
  - o Handheld
  - o Stand
    - Dome





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### **Low Vision Devices**

- Telescopes
  - o Monocular handheld
  - o Binocular handheld
  - o Spectacle mounted
  - o Bioptics for driving

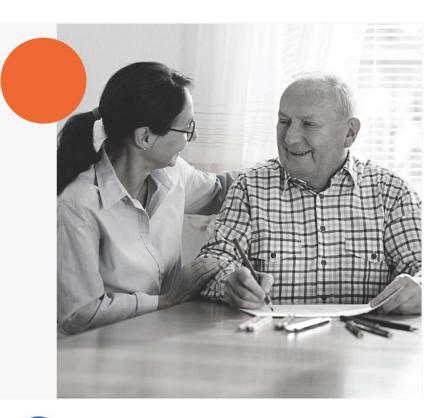












# Rehabilitation Therapy

Provide training on independent living skills

- · Accide nt and injury prevention
- Training on eccentric viewing, visual tracking and scanning
- Environmental or task modification
- Promote a healthy and satisfying lifestyle
  - Medication Management
  - Money Management
  - o Personal Care









### **Low Vision Devices**

There are a variety of non optical devices and daily living aids used in low vision rehabilitation including:

- Lighting
- · Filters or Tints
- Writing Tools
- · Tactile labeling
- · Audio devices



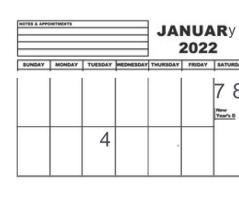














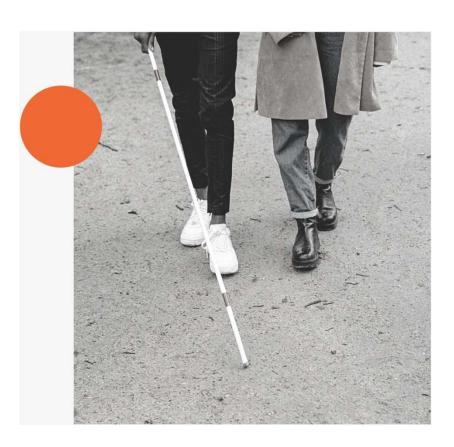




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New Year's D





# **Orientation & Mobility**

Teach safety and independence in navigating various environments

- Route planning and following directions
- · Long white cane skills
- Human guide technique
- Guide dogs
- Street crossings techniques
- Public transit use
- Sensory development
- Self protective techniques
- Soliciting and/or declining assistance
- Problem solving









# **Assistive Technology**

Provide training on accessibility features of personal technology and on assistive technology devices

- Cell phone and tablet apps and accessibility features
- · Computer accessibility and software
- · Smart speaker utilization
- Elect ronic magnification
- · Audio devices
- Braille technology









### **Low Vision Devices**

Assistive Technology
encompasses visual, audio and
tactile devices including:

- Electronic Magnification (CCTV's)
- Text to speech devices (OCRs)
- Refreshable Braille Displays
- Screenreaders





Speech Braille

Unirafillar Oater spitir s







Application: Desktop





# **Audio Description**

Audio Description is a way people with vision loss watch TV & movies. You can find lots of examples on Youtube. Try listening to one of something familiar and something unfamiliar to see how much you can gather without the visual video.

Find all audio described content cataloged by the Audio Description Project at adR.acb.org









# **Mental Healthcare**

Studies demonstrate high prevelance of depression, anxiety, and multiple co-morbid diseases in the visually impaired population.

- 1:1 Counse ling
- Support groups
- Family counseling
- Caregiver support









## **Vocational Rehabilitation**

Provide skills training for job readiness, job placement, and retention.

- Computer Literacy Training
- Resume writing
- Mock-interviews
- Coaching
- Job Skills Training
- Workplace Accommodations





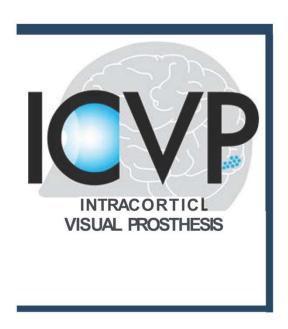


# **Research and Innovation**



### **Brainsport**

FDA approved device that translates visual information from a camera to electrical stimulation on the user's tongue, allowing blind individuals to determine shape, size, and location of objects as well as perceive movement and other environmental information.



#### **Intracortical Visual Prosthesis**

Currently in phase 1 of clinical trials, this device implanted in the brain communicates wirelessly with a camera which may help people who are bliind perceive some light.







## Research and Innovation

# FIGHTING BLINDNESS

Together, we're winning

### **Foundation Fighting Blindness**

World's leading private funder of retinal disease research that helped develop the first FDA approved gene therapy for an inherited retinal disease. The Foundation provides information and outreach programs for patients, families and professionals including local and regional chapters.

#### FOUNDATION FIGHTING BLINDNESS



### **My Retina Tracker**

The foundation supports a free genetic testing program as well as a research data base for individua Is with inherited retinal diseases like Stargardts and Retinitis Pigmentosa.









Prevent Blindness - U.S. & International Agencies, Centers, Organizations, and Societies

lowvision.preventblindness.org/resourcesf

C State Vocational Rehab Services

Department of Rehab Services - Blind

Services

rsa.ed.gov/about/states

Vision Service Alliance Directory

visionservealliance.org/lost-your-vision/







# Resources

All directly available to patients

Free White Cane

nfb.org

Free Currency Reader

bep.gov

# Accessible Medication Packaging

Accessible Pharmacy.com

**Free Online Learning** 

Hadley.edu

**Free Audio Books** 

loc.gov/nls







# ADDITIONAL RESOURCES

National Federation of the Blind

nfb.org

Prevent Blindness

preventblindness.org
- Transportation services
directory

**Reading Services** 

CRIS Radio chicagolighthouse.org/radio

Gatewave.org

NFB Newsline

**Audio Books** 

bookshare.org

loc.gov/nls

American Printing House

visionaware.org aph.org

American Council of the Blind acb.org

American Foundation for the Blind

AFB.org







### **Announcements**

- You will receive a link to the post session survey today. Please complete it in the next <u>two weeks</u>.
- Information about obtaining CME will be shared with you after you
  complete the survey. This is <u>separate</u> from the post-session survey.
- Our facilitators are available for consultation on your patients.
- FOLLOW-UPS: You will be asked to complete a follow-up case form.
   Patient outcomes are critical for assessing the success of ECHO-Chicago. We welcome you back to a future session to present your follow up case.







# Please join us for other ECHO-Chicago Series

- Complex Pediatric Asthma Thursdays, beginning January 19<sup>th</sup>, 8 AM 9 AM CST (12 sessions)
- CNA Leadership Workshop Thursdays, beginning in March, 8 AM 9 AM CST (12 weeks)
- Geriatrics Tuesdays beginning in March, 8 AM 9 AM CST (12 sessions)
- **Urinary Incontinence** Wednesdays beginning in March, 8 AM 9 AM CST (8 sessions)

Also feel free to register on our website for our final COVID-19 population-specific update session for our latest cohort, from 5:30-6:30 PM

Adult update sessions (Wednesday, August 15<sup>th</sup>)

For more information on upcoming series, please see our monthly newsletter or visit our website, <a href="mailto:echo-chicago.org">echo-chicago.org</a>



Spread the word – invite colleagues to join ECHO-Chicago!





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