# Low Vision Technology Update

## Rebekah Lin OD, FAAO

Lighthouse Guild of New York

LinR@lighthouseguild.org

#### **Course Description/Abstract**

This course will review the newest technology for visually impaired patients and discuss factors for success in getting appropriate technology to patients. Topics include review of currently available technologies and selection, patient selection, and making technology more affordable on limited incomes. The presentation will concentrate on different types of low vision technology including video magnifiers, head mounted displays, smartphones and tablets, and mobility devices.

### **Course Learning Objectives**

- 1. Present new and developing technologies in caring for patients with low vision.
- 2. Discuss patient selection and matching with appropriate solutions.
- 3. Present lower cost and more accessible options for patients who cannot access expensive technology.

#### Course Outline

- 1. Patient selection: familiarity with, access to, and ability to use technology must be considered as well as patient expectations
- 2. Video magnifiers
  - a. Portable and desktop electronic magnifiers what's new? Incorporation of touchscreens and optical character recognition (OCR) text to speech
    - i. Optelec
      - 1. Optelec 6 and 7 discontinued
    - ii. Irie AT
      - 1. Cloverbook Pro XL and Clovernote
    - iii. Eschenbach
      - 1. Optaro
    - iv. Low Vision International (LVI)
      - 1. MagniLink AIR Go
    - v. Low cost options
- 3. Computer updates
  - a. Mac accessibility in macOS 15 Sequoia
  - b. PC/Windows accessibility Windows 12?
  - c. Programs and software
    - i. Freedom Scientific 2024 and 2025 beta
      - 1. ZoomText
      - 2. JAWS
    - ii. Humanware
      - 1. Prodigi for Windows

- 4. Wearable devices
  - a. eSight
    - i. eSight Go and production updates
  - b. Eyedaptic
    - i. EYE5 and 6
  - c. OrCam
    - i. Orcam Read software updates
  - d. Envision
    - i. Envision Glasses and software updates
  - e. Meta
    - i. Ray-Ban Meta Smart Glasses
  - f. Apple
    - i. Apple Vision Pro
  - g. Other (announced and/or pre-production)
    - i. Ocutrx
    - ii. EyeCane
    - iii. .Lumen
- 5. Smartphones, tablets, and accessories
  - a. iOS and Android built in accessibility
    - i. iOS 18 updates
    - ii. Android 15 updates
    - b. Smartphone and tablet apps for the visually impaired
      - i. Al updates
  - c. Smartphone and tablet accessories
  - d. Smart devices
  - e. eReaders
- 6. Mobility devices
  - a. Advances in canes/other mobility devices
    - i. Glidance
      - 1. Glide (pre-order)
    - ii. WeWALK Smart Cane
    - iii. Ocutech
      - 1. SideSight
      - LTH01 Lighthouse Tech
- 7. Braille devices
  - a. Dot Pad

iv.

- b. Humanware Monarch
- c. Braille Doodle
- 8. What's next?
  - a. Where do we want to see low vision technology go in the future?
  - b. Artificial intelligence the integration
  - c. Access to technology
- 9. Take home points

- a. Every patient presents a unique combination of needs, skills, and abilities that must be considered in selecting the best option.
- b. Stay up to date on current technologies to make relevant and modern suggestions to your patients.

Note: Devices are constantly evolving and changing - I will endeavor to present the latest options available at the time of the program.