

1. Think of Low Vision Care as a two-tier service:
 - a. Primary Low Vision Care - basic magnification and daily living resources
 - i. Patient characteristics:
 1. Acuity: Typically, better than 20/200
 2. Little or no large or dense scotomas
 3. Main goal: reading and distance spotting
 - ii. Basic LV competency
 - iii. Minimal diagnostics required
 - iv. Emphasis on high adds, hand-held, and daily living resources
 - b. Comprehensive Low Vision Care (Advanced Vision Rehabilitation of various levels)
 - i. 20/200 or worse
 - ii. Advanced optics/ technology often required
 - iii. Often requires OT, PT, mobility
 - iv. Typically requires outside referral to Advanced Services
2. Case History
 - a. Identify expectations of patient and family
 - b. Search for symptoms and goals
3. Establish Goals
 - a. Near Vision needs/abilities
 - i. Particularly focused on school and studies
 - ii. Don't forget to discuss mobile devices (smart phone, tablet, laptop)
 - b. Distance needs/abilities
 - c. Activities of Daily living issues
 - d. Illumination and Glare needs
4. Acuity
 - a. Do what you can! Snellen, symbols, images,
 - b. Parents will assist in sharing what they think the child is "missing"
 - c. What can the child see in daily life? What can't the child see?
 - d. Once acuity is established, capture a basic magnification demand for the examination
 - e. Basic magnification demand: What mag will bring the patient from current acuity to goal acuity?
 - i. Distance:
 1. If DVA is 20/100 is acuity, and goal is 20/50, a $100/50 = 2.0x$ distance scope is required
 - ii. Near:
 1. If NVA is 20/80, and goal is 20/40 text, a $80/40 = 2.0x$ mag is needed
5. Refraction
 - a. Trial frame and retinoscopy is often the best method of refracting very young patients
 - b. Use the phoropter when possible
 - c. Bring the acuity chart or your distance target to the required working distance
 - d. ETDRS type of acuity configuration works best (chart on a rolling stand)
6. Exam Flow: Consider your LV exam as a "demonstration visit"

- a. Identify best distance spectacle acuity via refraction/retinoscopy and trial frame if needed
 - b. Identify acuity and patient acceptance of high add
 - c. Identify acuity and patient acceptance of hand-held magnifier
 - d. Identify acuity and patient acceptance of monocular telescope
 - e. Identify acuity and patient acceptance of technology (apps, video magnifier, etc.)
 - f. Summarize and discuss with parents/patient
 - g. Dispense one device, train, return for next device in 1-4 weeks
7. About Binocularity and near asthenopia
- a. In many/most low vision cases, binocularity is not present. When not present, don't waste time with prism assessment
 - b. When binocularity is present and working on high add for near:
 - i. Convergence required for adds over 3.0D can induce asthenopia: add BI prism to relieve
 - ii. Rule of thumb: add"2 to the add power for each eye: if +5.00 add, give 7BI each eye
8. Simple and inexpensive tools
- a. Mobile magnification apps (often free)
 - b. Typoscope
 - c. Sunglasses and hats (glare & light sensitivity)
 - i. Plum, yellow and orange, and sometimes Polarized if glare is an issue
9. A basic low vision kit
- a. Trial lens kit (you probably already have) for refraction and add assessment
 - b. 2x, 3, 5x, 10x hand-held magnifiers (without illumination)
 - c. 2x, 3, 5x, 10x hand-held magnifiers (with illumination)
 - d. 2x, 3x, 4x hand-held monocular telescopes
 - e. 3x binocular telescope if possible
 - f. Samples of various filters (clip-ons, fit-overs)
 - g. Samples of Typoscope, check guides, writing guides
 - h. Access to smart phone apps, computer screens to demonstrate as needed
10. Practice Pearls
- a. Don't get lost or caught in trying to force the math make sense!
 - b. Start simple and build the patients low vision toolkit over time
 - c. Don't try to solve all issues in one visit. Add one piece at a time, over time
 - d. Don't become a non-profit (unless you want to of course)
 - e. Charge for devices. Have a clear return policy but define it in advance!
 - f. Become familiar with Apple and Windows accessibility features
 - i. Contrast
 - ii. Reverse color
 - iii. Font size
 - iv. Magnifier
 - g. ALWAYS revisit and update goals
 - h. Maintain a list of what has been tried/dispensed/returned and why