

Exploring Vision-Based Occupational Therapy

Megan Van Heerde, OTS

Faculty Mentor: Whitney Lucas Molitor, OTD, MS, OTR/L, BCG

Needs Assessment

What percentage of the population you serve is receiving vision therapy services addressing convergence insufficiency, strabismus, amblyopia, double vision, etc. from either you or an outside source?

- 36% of the respondents reported at least 10% of their caseload is currently receiving services

What percentage of the population you serve does not receive vision services but would benefit from them?

- 52% reported at least 20% of their caseload would benefit

Do you provide vision therapy services to your clients? If so, please provide examples of interventions and/or common diagnoses treated?

- 64% of the respondents said they provide vision services to their clients

Do you have specific training related to visual interventions?

- 44% said they have specific training

Do you believe there is a need for an increase in vision therapy services in Sioux Falls and the surrounding areas?

- 84% of the respondents believed there is a need for more vision services



What is Vision Therapy?

According to the College of Optometrists in Vision Development (COVD), the purpose of vision therapy is to develop or improve fundamental visual skills, improve visual comfort, ease, and efficiency, and to alter the way an individual processes and interprets visual information (College of Optometrists in Vision Development [COVD], n.d.). This can be done through various exercises that address sustaining visual attention, accurately and effortlessly moving the eyes, stabilizing alignment of the eyes, optimizing accommodative ranges, improving hand/body/eye coordination, improving visual perception, and eliminating compensatory behaviors (Center for Visual Learning, n.d.). Researchers have concluded accommodation/convergence insufficiencies, learning related vision problems, strabismus, amblyopia, stress-induced vision problems, and traumatic brain injuries benefit the most from vision therapy (Barrett, 2009; Center for Visual Learning, n.d.).

Vision therapy takes a holistic approach to treat vision disorders, beyond the provision of correcting refractive errors or treating ocular disease (Barrett, 2009). Behavioral optometry appreciates the connection between the brain and eyes and the process of how visual information is sent to specific areas of the brain resulting in visual processes (Gates, 2012). When an individual is unable to develop this connection, vision therapy, under the supervision of a behavioral optometrist, may be beneficial (Gate, 2012).

Why Occupational Therapy?

- While working in close relation to the optometrist, occupational therapists can use supportive, compensatory, and/or direct remediation interventions to address the vision deficits impeding on the individual's ability to perform their occupations (Scheiman, 2011).
- According to the Occupational Therapy Framework (American Occupational Therapy Association [AOTA], 2014), vision is part of an individual's senses, therefore when this sense is impaired, occupational performance decreases, allowing for vision therapy to be within the OT scope of practice.
- Developmental vision impairments often impact a child's ability to succeed in many occupations as indicated by poor hand-eye coordination, clumsiness, frequent headaches, short attention span, experiences dizziness and/or motion sickness, difficulty with reading comprehension, difficulty with reading tasks, and difficulties with handwriting (Center for Visual Learning, n.d.).
- The practice of occupational therapy understands the importance of sensory stimulation and its impact on the visual system (AOTA, 2014).

Advocacy

According to Wurzbach (2012,) occupational therapists are unsure of their role in providing vision services. Many feel they have the knowledge to treat vision deficits, however, are not confident in their skills and abilities to provide the best care to their patients (Wurzbach, 2012). Also, the regulations outlined by the state's law do not clearly state the role of OT in this area (Wurzbach, 2012). Many felt as though the law was limiting the OT's ability to provide comprehensive care when working with eye care professionals (Wurzbach, 2012).

CPT Codes for Vision-based OT

Codes	Activities	Reimbursement Rates (Medicare)	
97110- Therapeutic Exercise	Ocular Control	Marsden Ball	\$30.88
	Tracking tube	Bunt ball	
	Four-leaf clover		
97112- Neuromuscular Reeducation	Balance board	Bal-A-Vis-Ex	\$35.20
	Walking rail	Yoga	
	Pepper trampoline	Ball games	
97530- Therapeutic activities	Puzzles	Bal-A-Vis-Ex	\$40.96
	Geoboard	Swish Card Game	
	Lacing/Lite Brite/Beading	Mental Blox	
	Reading/writing	Four-leaf clover	
	Mazes	Tangrams	
97533- Sensory Integration	Balance board	Pepper trampoline	\$34.48
	Walking rail	Complete preferred task while wearing glasses	
	Slow and controlled movement (swing)	Heavy work	
96111-Developmental Testing		\$126.16	

References

- American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process, 3rd ed., *The American Journal of Occupational Therapy*, 68(S1), S1-S51.
- Barrett, B. (2009). A critical evaluation of the evidence supporting the practice of behavioral vision therapy. *Ophthalmic & Physiological Optics*, 29(1), 4-25.
- Center for Visual Learning. (n.d.). About vision therapy. Retrieved from <http://visiontherapysouthdakota.com/about-vision-therapy/>
- College of Optometrists in Vision Development. (n.d.). What is vision therapy?. Retrieved from www.covd.org/?page=vision_therapy
- Gates, T. (2012). Dynamic vision: Vision therapy through the anti-gravity system. *Journal of Behavioral Optometry*, 23(2), 40-43.
- Scheiman, M. (2011). *Understanding and Managing Vision Deficits: A Guide for Occupational Therapists*, 3rd ed. Thorofare, NJ: SLACK Inc.
- Wurzbach, R. (2012). Occupational therapists' perception of their role in working with clients experiencing visual deficits: A phenomenological study. *Online Theses and Dissertations*, 74. Retrieved from <https://encompass.eku.edu/etd/74>