

A Company-Wide Initiative to Improve Screening for Vision Impairment

Tami Levorgood, OTR/L, MSCS, OTD Candidate & Marie Christine Potvin, PhD, OTR/L
Philadelphia University

Background

- Tremendous growth of America's elderly population¹
- Vision impairment prevalence increases with age¹
- Impairments often unnoticed until vision is screened^{2,3}
- Adults expect declining vision with aging^{2,3}
- Impaired vision negatively impacts occupational performance^{4, 5, 6, 7, 8, 9}
- Vision impairments must be identified prior to intervention to improve occupational performance
- Occupational Therapists (OT) should screen every client's vision
- OT at this company identified this need but were not doing it

Rationale

Number of vision screenings performed by OTs will increase

Objectives

- >1 out 6 point ↑ in knowledge of vision impairment & confidence in screening (6 questions; 1=strongly disagree to 7=strongly agree)
- 40% of clients will undergo vision screening
- Identify & resolve barriers to vision screening (4 questions)

Methods

Literature review to identify:

- Aspects of vision to be screened
- Valid & reliable screening tools
- Inexpensive screening tools options

Developed & Presented a series of 3 workshops

Recruitment

- E mails sent to all company OTs
- Verbal requests at start of each workshop

Ethical Approval

- Obtained through company and university IRB
- Informed consent process completed

Workshop design

- Based on principles of adult learning
- Knowledge translation theories applied^{10,11,12,13}
- Participants motivated to learn
- Lecture only not effective driver of change

Session Content

Session 1 Lecture

- Age related vision impairment
- Conditions to be screened
- Standardized tools and low cost options

Session 2 Hands-on Practice

- MN Read
- ETDRS
- Amsler Grid
- Peripheral Vision
- Mars Contrast Sensitivity
- VF-14 Self Report

Session 3 Discussion

- Case Study Discussion
- Reflective Discussion
- Resources for:
 - Physician referral sources
 - Screening tools at each site
 - Mentors at each facility

Outcomes

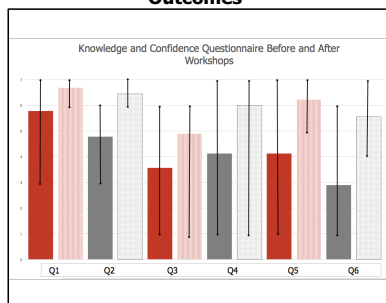


Figure 1. Participants self-report of knowledge and confidence levels pre/post workshops

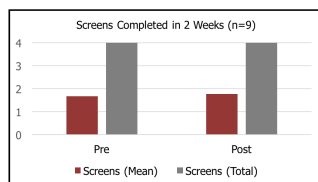


Figure 2. Participant's self-report of vision screens completed pre/post workshops

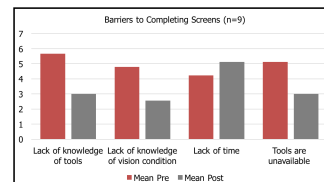


Figure 3. Participants self-report of barriers to vision screening pre/post workshops

Conclusions

Summary:

Comprehensive educational initiative can improve OT staff's self-perception of knowledge and confidence in focus area

Adult Learning Principles

- Multi component interventions impact outcomes¹²
- Tailored intervention can drive behavior change¹⁰
- Reflective practice helps change participants perspective¹³

Participant Satisfaction with Workshop:

- Vision impairment screenings help provide better patient care
- Felt improved ability to complete vision impairment screen
- Satisfied with teaching methods

Most Beneficial Within the Workshop:

- Tangible resources
- Hands on practice
- Presence of mentor

Barriers to Vision Screening:

Limited knowledge of process and tools are barriers

Limitations

Small sample size completing questionnaires (9) compared to all participants (25)

Number of screens unchanged before and after education. Potential reasons:

- Lack of time
- 2/9 respondents hand therapists
- Mentor unavailable

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Further information

Please contact: Tami Levorgood, OTR/L, MSCS
Email: levorgood7359@students.philau.edu