Innovative Care Models: Delivering ‘Whole Person Care’ and Reducing Disparity

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Overview

• Current knowledge
  – Age-related hearing and/or vision loss
  – Rehabilitation services

• Alternative approaches
  – Integrated rehabilitation programs
  – Community-based research & interventions

• Research priorities
Why is this important

• For healthy aging:
  – Need to maintain social and physical engagement

• Sensory loss:
  – Impedes active participation and engagement
  – Likely contributes to faster rates of cognitive decline

• Successful sensory rehab needs to be in place before we can successfully treat cognitive decline
Who’s receiving sensory loss rehabilitation?

CURRENT KNOWLEDGE
Hearing Loss & Hearing Aid Use
Prevalence in the U.S., 1999-2006

Lin et al, Arch Int Med, 2012
Age-Related Low Vision

Prevalence

2010 U.S. Prevalence Rates
Low Vision

- 40-49: 2%
- 50-59: 4%
- 60-64: 6%
- 65-69: 9%
- 70-74: 12%
- 75-79: 16%
- 80+: 18%

Rehabilitation outcomes

- Outpatient LVR clinics
  - 28 clinics; 468 patients
  - 47% show improved overall visual ability

- VA inpatient clinic
  - 139 patients
  - 93% showed improved visual ability

(Stelmack et al., 2006; Goldstein et al., 2015)
Sensory Loss & Dementia

Hearing Loss Treatment
• Reduction in:
  – Caregiver-identified problem behaviors
  – Depressive symptoms
  – Neuropsychiatric symptoms

(Palmer et al., 1999; Mamo et al., 2017)

Low Vision Rehabilitation
• Improved visual acuity
• Reduced functional trajectories
• Families express unmet needs
• Practitioners express lack of knowledge in accommodating cognitive deficits

(Lawrence et al., 2009; Whitson et al., 2012)
Increase access to rehabilitative care

WHOLE PERSON CARE
Integrated Services

MORE-LVR

• Addressing cognitive deficits during low-vision rehab
• Target 4 common cognitive deficits
  – Short-term memory
  – Executive function
  – Communication barriers
  – Slow processing speed

(Whitson et al., 2013)
Community-Based Services

- Access HEARS
  - Non-profit organization
- Memory HEARS
  - Dementia Clinic
- PACE HEARS
  - Group Care setting
- San Antonio HEARS
  - VA Geriatric Clinic setting
- Toronto HEARS
  - Senior Centers

Better Communication

Knowing the basics of hearing + Using Conversation Tips & Tricks + Using your listening device
Knowledge Gaps

• Does sensory rehabilitation slow cognitive decline?

• Do simple solutions (e.g., community-based education) create successful results?
Research Opportunities

• How do we integrate hearing and vision rehab into comprehensive treatment plans?

• What is good enough?