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

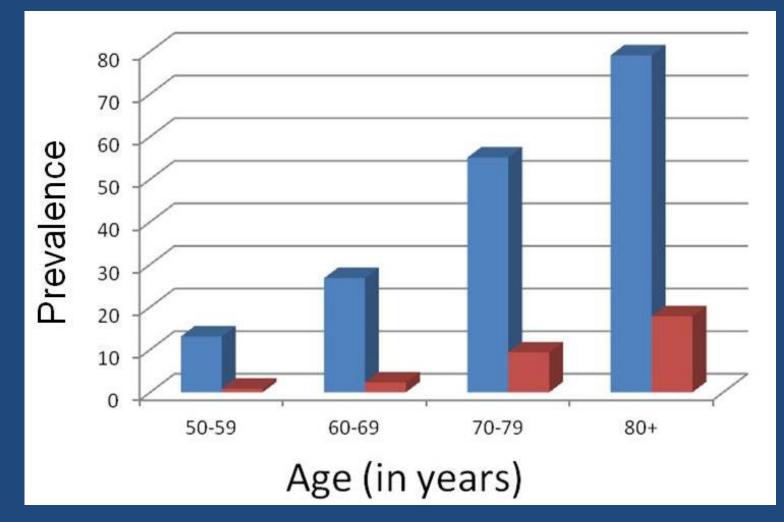
- For healthy aging:
  - Need to maintain social and physical engagement
- Sensory loss:
  - Impedes active participation and engagement
  - Likely contributes to faster rates of cognitive decline

• 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

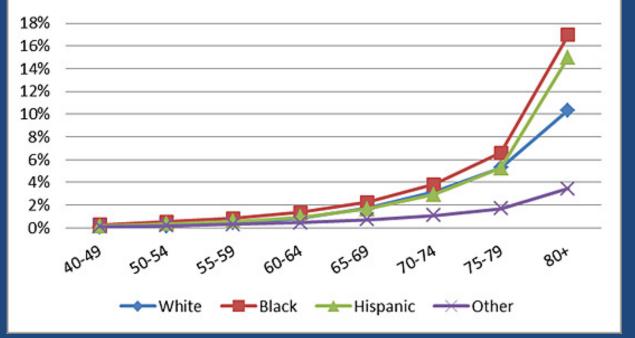


Lin et al, Arch Int Med, 2012

# Age-Related Low Vision

#### Prevalence

2010 U.S. Prevalence Rates Low Vision



#### **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

(https://nei.nih.gov/sites/default/files/neiimages/lowvisionprevalencerates\_1\_2010.jpg) (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

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

# **Community-Based Services**

#### **Baltimore HEARS**

- 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?