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Audiology Services in Nursing Homes and Communal Living,

in partnership with the American Academy of Audiology

Kathy Dowd, AuD

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Executive Director – The Audiology Project

EXPERTISE

- Doctor of Audiology, Pediatric and Adult Audiology, Auditory Processing, Digital Amplification, Skilled Nursing Home Care

RESEARCH INTERESTS

- Diabetes and other chronic disease effects on hearing and balance issues, cognitive problems and auditory processing
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Disclosures

- **Presenter Disclosure**: Financial: Presenter has received an honorarium for presenting this course. Non-financial: Presenter has no relevant non-financial relationships to disclose.
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- As healthcare is rapidly evolving, new findings may change the validity of the information presented in this course. Providers should always consult the latest research and guidelines from professional associations.
- The interventions discussed in this course may be limited in generalizability, requiring practitioners to consider specific individual and population factors.
- The course may not cover all possible risk factors, diagnostic methods, or treatment options, and complex cases may require additional considerations.
- Healthcare providers should apply cultural competence and sensitivity to ensure effective and respectful care based on their patients' diverse needs.
- Providers should always evaluate the limitations of diagnostic and screening tools, considering their potential for false results as well as any ethical implications.
- It is the responsibility of course participants to critically evaluate the evidence from multiple sources to guide professional practice.

Learning Outcomes

After this course, participants will be able to:

- Explain the federal, Supreme Court, and state laws governing hearing and balance service delivery in skilled nursing and communal living facilities, including the role of the independent assessor and the importance of hearing assessment prior to cognitive evaluation.
- Describe the process for implementing onsite audiology services — including contracts, medical orders, documentation, and collaboration with facility staff — as well as the medical necessity criteria for hearing and balance assessments.
- List the support and training resources available to facility staff for hearing aid care, troubleshooting, and communication strategies.

Today's Agenda

- Discuss the current hearing assessment crisis in United States nursing homes.
  - Medical directors are unaware of the laws
  - Few SNFs provide hearing services
  - Training of administration, staff and families is critical for implementation
- The legal mandate for hearing assessment and the medical necessity for identifying hearing loss underutilization in US nursing homes.
  - Federal or state law for hearing assessments in 14 days of admission
  - SLP professional guidelines to screen adults in advance of cognitive, speech or language assessments and treatments
  - Chronic diseases, ototoxic medications, trauma and complaints are Medicare criteria for medical necessity in audiology services
- 3 identified strategies that could effectively close the gap on under-identified and under-treated hearing loss.
  - Contract for on-site services with nursing homes
  - Consider a CMP training grant to help educate all persons involved in nursing homes
  - Independent assessor position can be requested from state agency if valid hearing assessments are not being conducted

Legal Mandates for Hearing Services

OBRA 1987
The Olmstead Act of 1999
American with Disabilities Act

The Omnibus Budget and Reconciliation Act of 1987: OBRA

- Mandates hearing assessment within 4 days of admission
  - CMS MDS Hearing Assessment is a subjective observation
- Lack of knowledge of medical necessity for hearing services exists
  - Medical directors are surprised by medical issues causing hearing loss.
- The Invisible Handicap: Cannot observe
  - CMS states they will not change current protocols

The Federal Law OBRA States:

3) RESIDENTS' ASSESSMENT.— "(A) REQUIREMENT.—A skilled nursing facility must conduct a **comprehensive, accurate, standardized, reproducible assessment of each resident's functional capacity**, which assessment— "(i) describes the resident's capability to perform daily life functions and significant impairments in functional capacity; "(ii) is based on a uniform minimum data set specified by the Secretary under subsection (fK6)(A)iii) in the case of a resident eligible for benefits under title XIX, uses an instrument which is specified by the State under subsection (eX5); and "(iv) in the case of a resident eligible for benefits under part A of this title, includes the identification of medical problems.

•C) FREQUENCY.— "(i) IN GENERAL.—**Such assessment must be conducted— "(I) promptly upon (but no later than 4 days after the date of) admission** for each individual admitted on or after October 1, 1990, and by not later than October 1, 1990, for each resident of the facility on that date; "(II) promptly after a significant change in the resident's physical or mental condition; and "(III) in no case less often than once every 12 months.

•P 163 (iii) **USE OF INDEPENDENT ASSESSORS.—If a State determines, under a survey under subsection (g) or otherwise, that there has been a knowing and willful certification of false assessments under this paragraph, the State may require (for a period specified by the State) that resident assessments under this paragraph** -be conducted and certified by individuals who are independent of the facility and who are approved by the State.

Current Lack of Compliance with OBRA in SNFs

- Administrator says they don't do hearing services In Part A. They wait till Part B. But they have someone who comes to test quarterly (every 3 months)
- SLP, when questioned about a resident who could not hear, said "I can tell he hears better out of the left ear"
- The same SLP said she has never screened hearing in any of her jobs, but she did give the resident a cognitive evaluation.
- A rehab director, when given the list of chronic diseases and ototoxic meds contributing to hearing loss, said, "Diabetes causes hearing loss?"
- The administrator said she has 90% of residents with cognitive problems, but almost no hearing-impaired residents.
- MD Director says he has 19 facilities, and he has never signed orders for hearing assessments (California)

The Olmstead Act of 1999

- A Supreme Court decision affecting all states
- Mandates hearing services in line with ADA
- Focused on all communal living centers

•*Olmstead's* Origin: Americans with Disabilities Act (ADA) and ADA's Mandate of Community Integration

•• ADA's "integration mandate" requires that individuals receive services in the most integrated setting appropriate to their needs.

•• Preamble to ADA's regulations, Title II, states that an integrated setting is one that enables individuals with disabilities to interact with people without disabilities "to the fullest extent possible…"

Who Does the Olmstead Plan Help?

- People with *disabilities* who live in *facilities*, (e.g., ICF)
  - e.g., developmental centers, psychiatric hospitals, skilled nursing facilities, and adult care homes.
- People in *other segregated settings*, e.g., prison, juvenile detention centers
  - “sheltered workshops” or segregated day programs.
- People at *serious risk* of institutionalization or segregation.
- Target population is cross-disability and across the life span – both adults and children.

Quality of Life and Quality of Care

Medicare Quality Indicators:

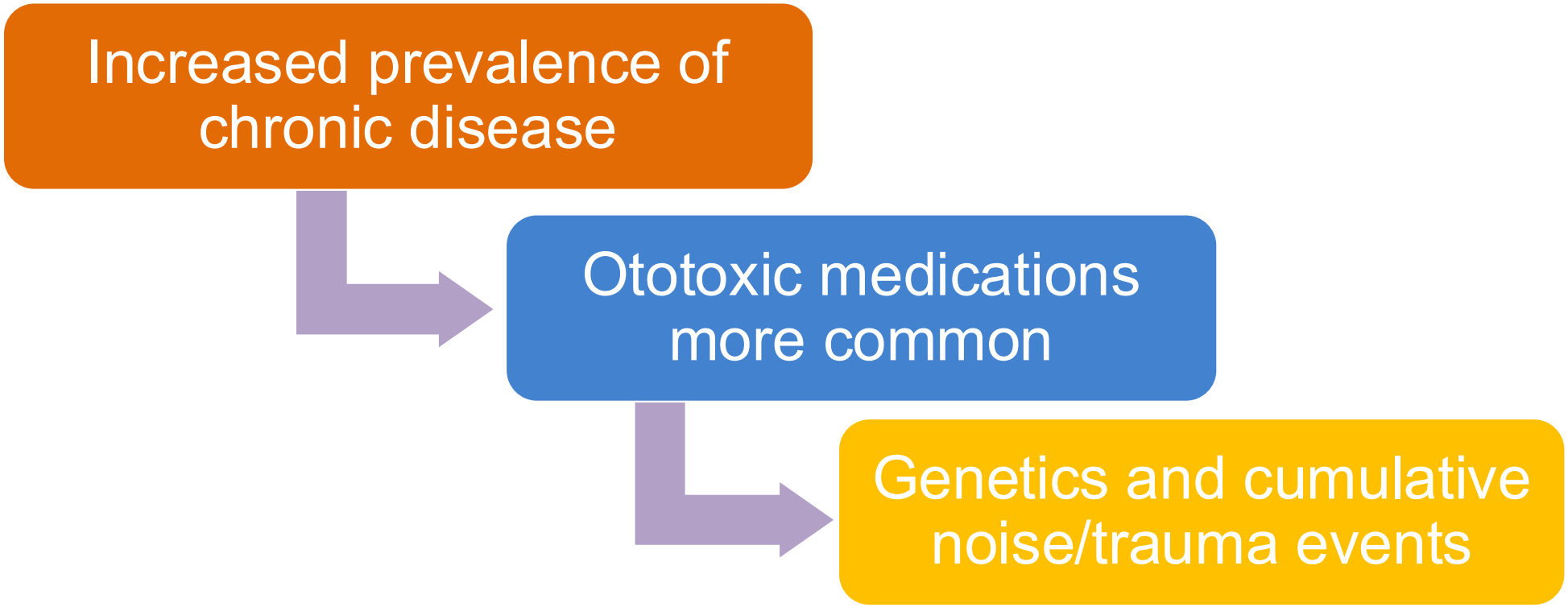
- Medication Rates,
- Unintended Weight Loss,
- Falls,
- Episodes Of Disruptive Behavior,
- Participation In Activities

Better hearing can improve all of these quality indicators!

Medical Necessity for Hearing Services

Chronic Diseases
Ototoxic Medications
Trauma
Genetics

Weakened Immunity with Advancing Age…??



Serving SNF Residents with Hearing Loss

Medical Necessity

- What diseases, medications, trauma are on the FLII and face sheet?
- Cerumen management often needed in SNFs
- Hearing testing and treatment must occur ***before*** cognitive evaluations and treatment
  - ***CMS DNH Triage Team says there is no timeline for cognitive evaluations/Tx. Other issues must be vetted first***

Medical Management

•Include family and HCPOA in process. Will hearing aids improve quality of life?
•Hearing aids and all services in AuD Scope of Practice can be billed
•Staff training on medical necessity, monitoring, reporting issues and troubleshooting devices

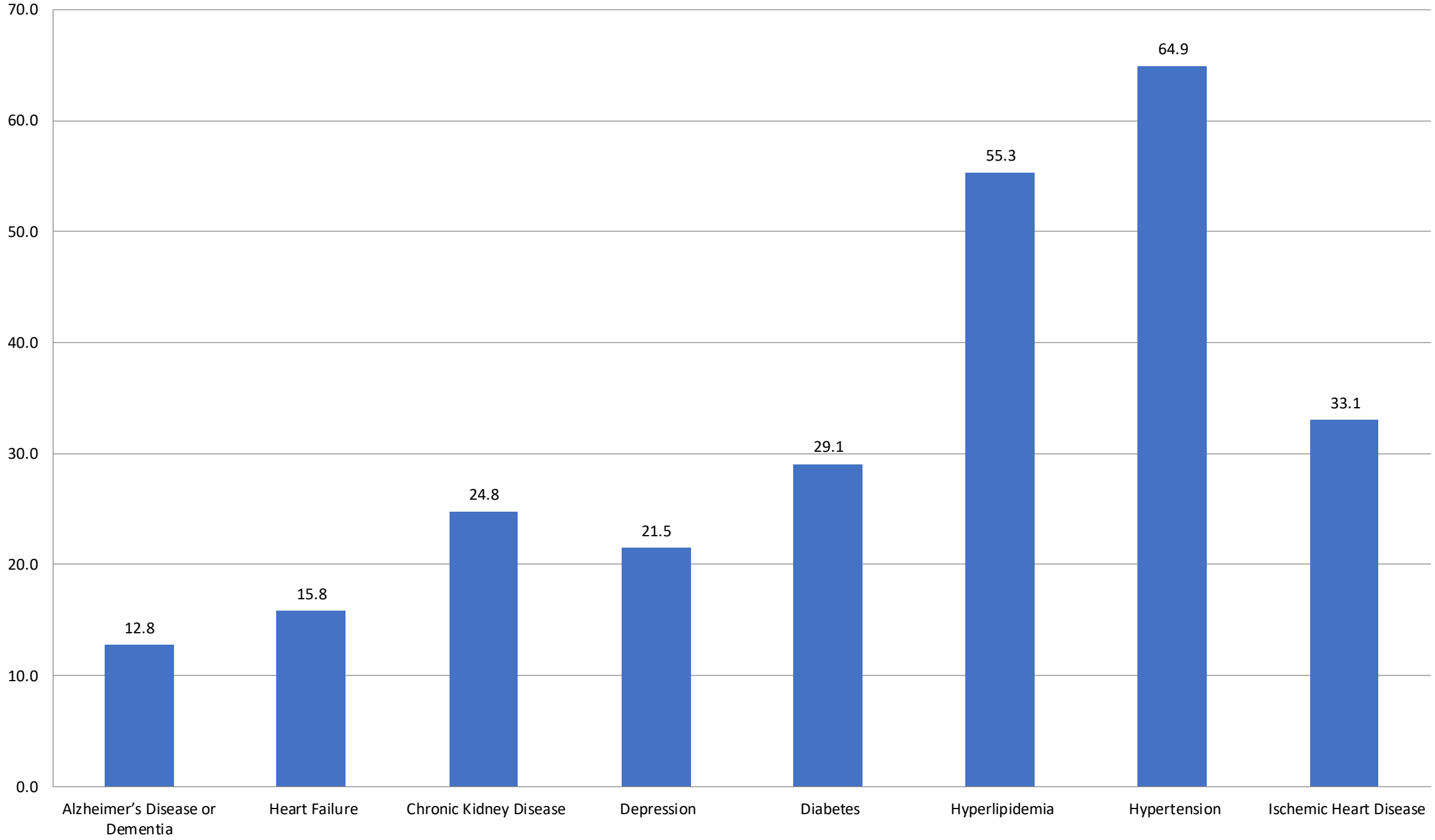
A Confounding Factor:
The CMS MDS hearing assessment is *not* a hearing assessment because:

- Anosognosia: inability to know you are sick or have a sensory impairment
- Patient “denies” illness
- Lack of self-awareness
    - Spouse and family notice first
- Not denial but true neurological deficit

Diseases Affecting Hearing & Balance

- Diabetes
- Chronic renal disease
- Cardiovascular disease
- Hypothyroidism
- Alzheimer’s disease
- Paget’s disease
- Chron’s disease

% NC Medicare Comorbidities in 2017Audiology Tests



Audiological Concerns: Diabetes

Hearing Loss

- •Cochlear microangiopathy
- •Neural degeneration

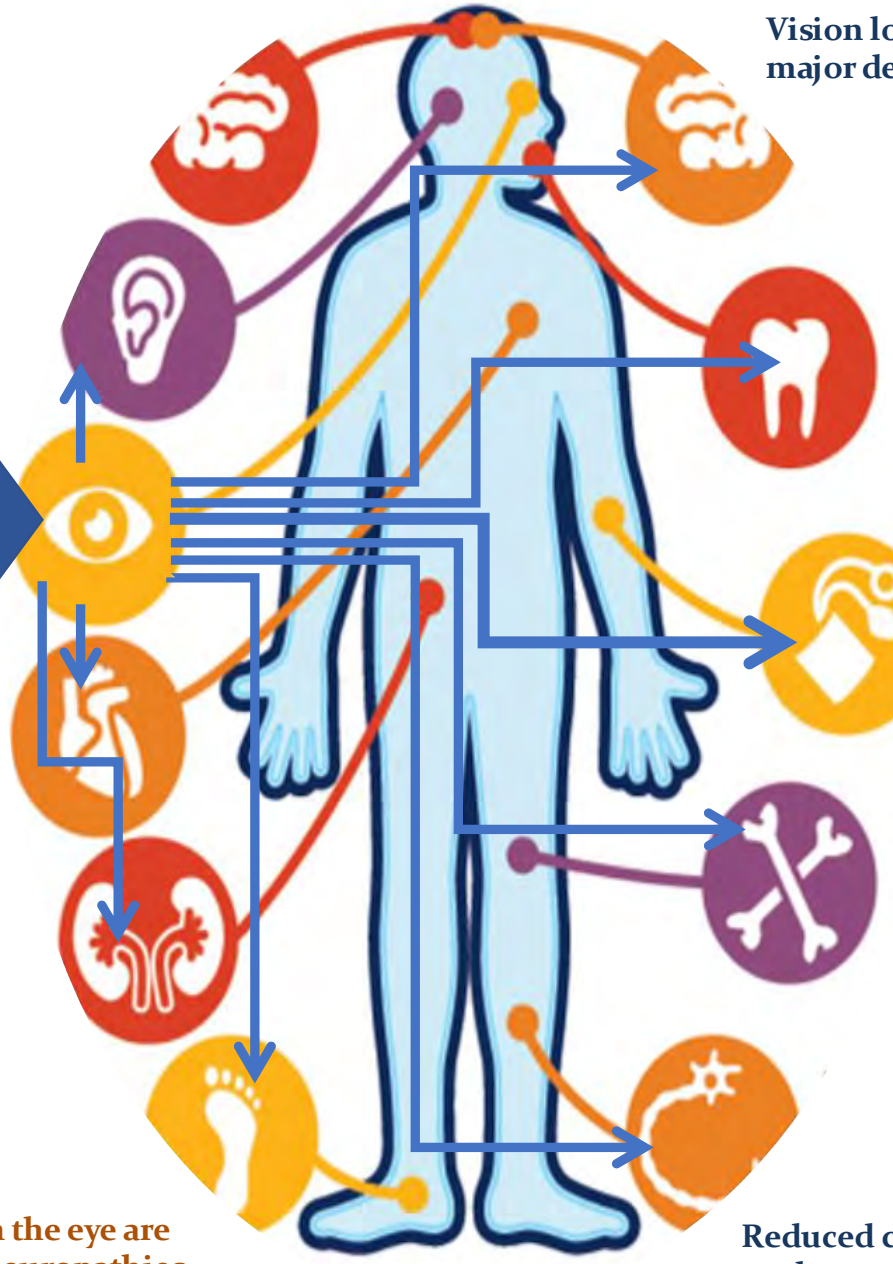
Balance & Fall Risk

- •Foot neuropathy and vision effects
- •Vestibular effects of diabetes

Diabetic Pain & Infection Control

- •Ototoxicity
- •Vestibulotoxicity

Hearing Loss is Higher Among those with Diabetic Retinopathy



Comprehensive Eye Exam

Vision loss due to diabetes is associated with major depression. [17]

Diabetic retinopathy is associated with periodontal disease. [18]

Worsening diabetic retinopathy is associated with elevated diastolic blood pressure. [19]

65% of individuals with Vision Impairment could achieve normal vision with an eye exam and new glasses, reducing falls leading to fractures. [20]

Reduced corneal sensitivity, dry eye, and ocular muscle palsies are early indicators of diabetes and associated neuropathies. [21]

Signs of diabetes detected in the eye are associated with peripheral neuropathies of the foot and foot ulcers. [22]

Diabetic retinopathy is associated with early kidney disease-Albuminuria. [23]

Retinal plaque signals obstructive vascular disease of the heart or carotid artery. [24]

References available by request:
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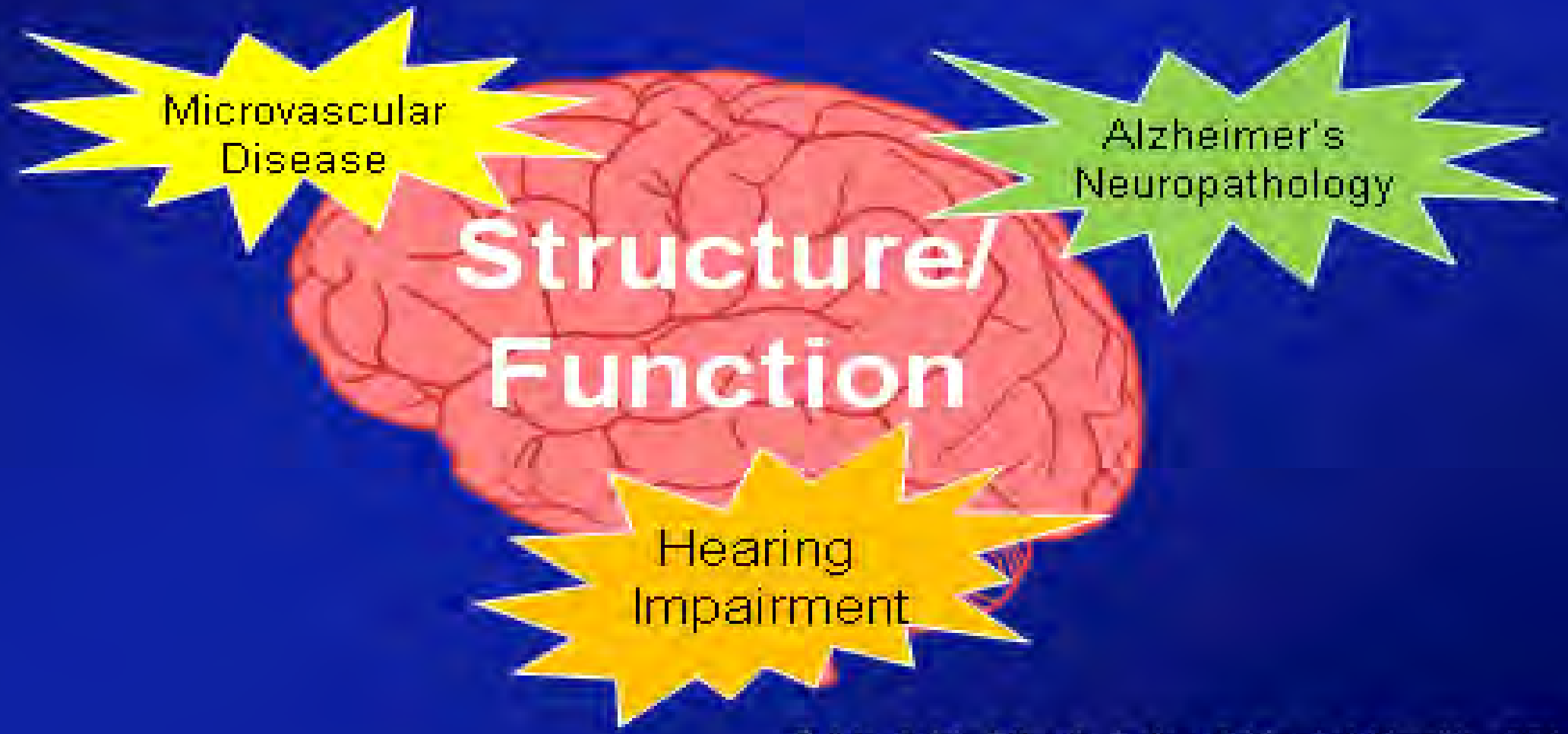
Double Hit Theoretical Model

Hearing Loss & Brain Structure/Function



F. Lin & M. Albert, Aging & Mental Health, 2014

Audiological Concerns: Cardiovascular Disease

Hearing Loss

Strokes: CVA
DVT, PE, HBP

Balance & Fall Risk

Fluid build up in extremities: loss of feeling
Hypertension related (44% in NHANES)

Medication

Loop inhibiting diuretics
Pain Rx

Audiological Concerns: Chronic Kidney Disease

Hearing Loss

- Increased creatinine, electrolytic, urea levels
- DPOAE testing show early disorders

Balance & Fall Risk

- Hypotension related

Medication

- Loop inhibiting diuretics
- Aminoglycosides for infections

Medications Affecting Hearing & Balance

- Hormone Replacement treatment
- Cancer Chemotherapeutics
- Pain Medications
- Loop Inhibiting Diuretics
- Infection Control Medications
- Research at RX List.com
- Quinine and Malaria drugs

Factors that Increase the Risk of Ototoxicity

- Impaired renal function
- Prolonged treatment course (over 10 days)
- Concomitant use of loop diuretics (Lasix)
- Concomitant use of nephrotoxic or ototoxic drugs (Vancomycin)
- Advanced age (over 65)
- Previous aminoglycoside treatment
- Sensorineural hearing loss
- Noise exposure when taking these medications

The Role of Audiology

Implementation of Services

Staff Training

Role of Audiology in Nursing Homes

- High incidence of hearing loss (80%)
- Hearing must be monitored due to illness and medications
- Training staff in referral processes and taking care of hearing aids
- **OBRA federal and FL** state laws require hearing be assessed within 14 days of admission
- Improve quality of life and quality of care
- The audiologist must be part of assessment team, especially before cognitive evaluations are administered

Symptomatic similarities of cognitive issues and untreated hearing loss

Alzheimer's Disease	Hearing Loss
Depression, anxiety, disorientation	Depression, anxiety, feelings of Isolation
Reduced language comprehension	Reduced communication ability
Impaired memory (esp. short term)	Reduced cognitive input
Inappropriate psychosocial responses	Inappropriate psychosocial responses
Loss of ability to recognize	Reduced mental scores
Denial, defensiveness	Denial, heightened defensiveness, negativity
Distrust and suspicion regarding other's motives	Distrust and paranoia (belief that others may be talking about them)

Speech therapists' ASHA professional guidelines: When to screen or refer

Hearing Loss Risk Factors and Associated Conditions

- Advanced age
- Chronic health conditions (e.g., Diabetes, cardiovascular disease, kidney disease)
- Disorders of the ear (e.g., Ménière's disease, otosclerosis, autoimmune inner ear disease)
- Exposure to ototoxic and vestibulotoxic medications, such as those prescribed for the treatment of cancer, infection, and pain
- Exposure to recreational noise (e.g., Personal listening devices) and/or occupational noise
- Genetic factors
- Head trauma, history of ear infections
- History of falls
- Speech, language, cognitive impairments
- Stroke
- Tinnitus

Coverage of Hearing Services

1. Medicaid
2. Medicare
3. Spend down position
4. Unmet medical need: access to patient monthly liability

- Hearing assessment
- Hearing Aids
- Aural Rehabilitation
- Auditory Processing testing and services
- Annual monitoring or immediately if change in communication

Place of Service Codes for Billing

Code	Description	Typical Use Case
13	Assisted Living	Services in AL or similar residential care
14	Group Home	Services in Group residential
21	Inpatient Psych	Psychiatric hospitals
31	Skilled Nursing	Post-acute care
32	Nursing Facility	Long-term care
99	Other	Place of Service non specified

Reimbursement for Audiology Services and Hearing Aids

NURSING HOMES

- Part A: short term stay
  - *Bill nursing home usual + customary for services
  - * Loaner hearing aids
- Part B: long term stay
  - *Spend down position
  - Medicaid
  - Private Pay
  - Unmet medical need process

COMMUNAL LIVING CENTERS

- Low-income housing
- Assisted living centers
- Intermediate Care facilities (ICF)
- Group homes/Family homes
- Juvenile detention centers/prisons

Bill Medicare, Medicaid or State for services

Florida Hearing Needs

NURSING HOMES

- 682 certified MC/MCD nursing homes
- Estimate of assessments:
  - New admissions every year: **81,840** residents
  - Annual assessments for long-term care: **68,200**

Total nursing home hearing assessments

= 150,040 every year

COMMUNAL LIVING CENTERS

- Low-income housing
- Assisted living centers: **129**
- Intermediate Care facilities (ICF) **104**
- Residential Treatment Center (BEH) **191**
- Juvenile detention center **21** facilities
- Prisons: **134** facilities:
- **89,000** prisoners

Florida Resources:

1. Training Grant
2. Independent Assessor Appointment
3. Professional Training

CMP Training Grant for Nursing Homes

- **Budget considerations:**
  - $6k annually for each SNF X 3 years
- **Onsite/virtual training regarding:**
  - *Causes of hearing loss,
  - *Care and use of HA,
  - *When to refer,
  - * Interpreting the audiogram, communication needs,
  - Fall prevention
- **Check with your state CMP grant agency**

- Independent Assessor appointed by state if facilities are not providing hearing services

- Professionals to Fill the Need
  - 1807 Registered Audiologists in FL: ? # active
  - # FL Hearing aid dispensers
  - Train undergrad students interested in Audiology as dispensers
  - Hire SLPs under your practice for aural rehab services

What services can be billed by Audiology?

Forms Needed for Orders, Chart Notes, etc.

- Medical orders for all services. Audiologist completes and signs **orders** for the Medical Director to sign
  - Assessments: Order: ‘hearing assessment for medical management”
  - Treatments: cerumen management with **orders** for drops in advance of next visit
  - Amplification: Part A loaner chart order. Part B chart **order** for hearing aids
    - Medical Director signs order for hearing aids.
  - Chart notes: for delivery of hearing aids and services needed by staff

Medical Necessity for Hearing Services

- Training of staff for
- Onsite services
- **Report of changes in behavior**
- Care of hearing aids or other devices
- Troubleshooting devices
- Communication strategies
- **Reporting to audiology asap for assessment**

Civil Monetary Penalty grants

Civil Money Penalties (CMPs) are monetary fines imposed by CMS
- For violation of Medicare or Medicaid participation requirements

- CMP grants are funding opportunities for training projects that improve resident care and quality of life
- Each facility participates in a 1-3 year training project
  - Current CMP budget is $6k annually per facility

Who Ya Gonna Call?

- **Administrators**
- **Director of Nursing**
- Business office
- Medical director
- Rehab center

“We provide onsite hearing services for your residents. Can we schedule a time to discuss our programs? “

Thank You!
Questions?

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