

Exploring the Connection Between Auditory Health and Overall Wellbeing

JUNE 14, 2023

About the Maryland Health Care Commission (MHCC)



WHO WE ARE

- ▶ Independent State regulatory agency

WHAT WE DO

- ▶ Transform care delivery into a value-based care system in which providers collaborate to provide high-quality, coordinated care that emphasizes quality and outcomes and includes financial incentives tied to value

HOW WE HELP

- ▶ Collaborate with payers and providers to transition to quality-aligned, value-based care and to harness the potential of data in facilitating meaningful change



Learning Objectives

- ▶ Understand auditory health and its connection to your overall health and wellness
- ▶ Discuss how hearing loss impacts health outcomes and care utilization
- ▶ Discuss tips for recognizing the signs of hearing loss
- ▶ Explore strategies for establishing referral relationships with audiologists



AGENDA

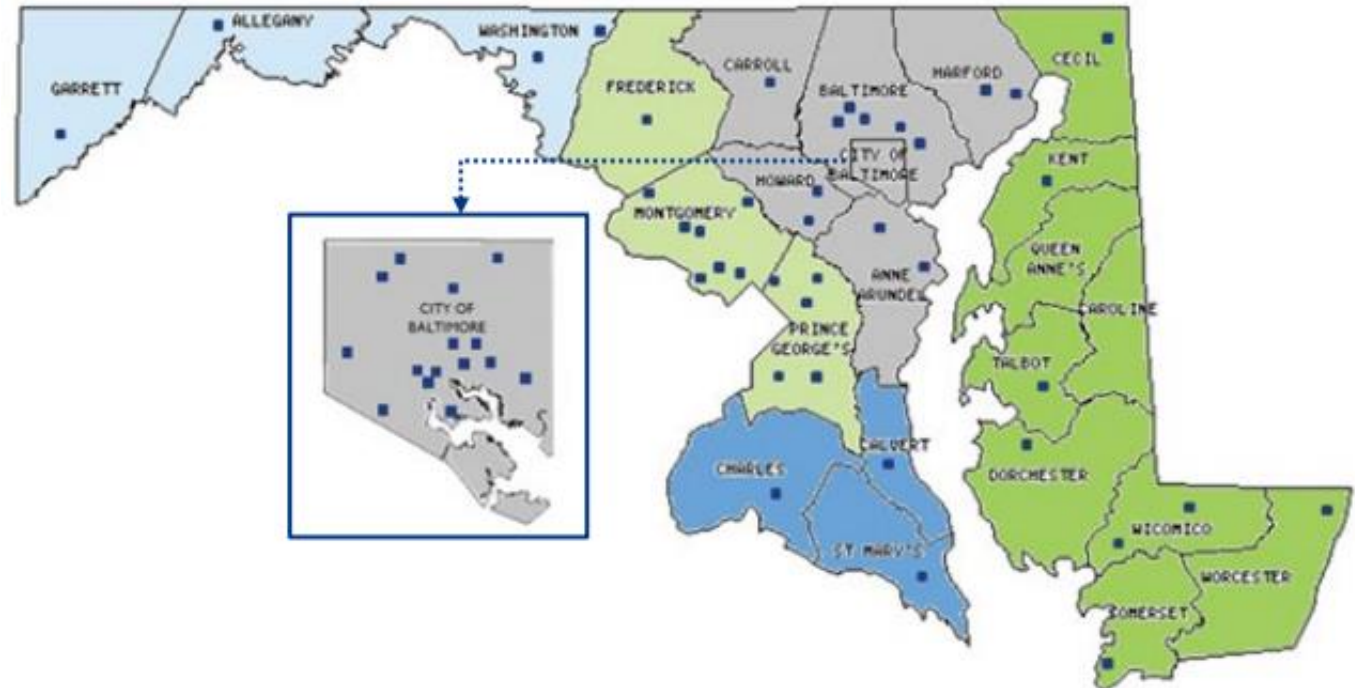
- ▶ **Overview of Maryland Landscape**
- ▶ **Practice Transformation**
- ▶ **Auditory Health and Overall Wellbeing**
- ▶ **Q&A**





State of Maryland Health Care Landscape

- ▶ 6.17 million people
- ▶ 16.3% of population is age 65 and over
- ▶ Highest median household income by State
- ▶ 45 acute care hospitals
 - All private and not-for-profit
 - Two academic medical centers

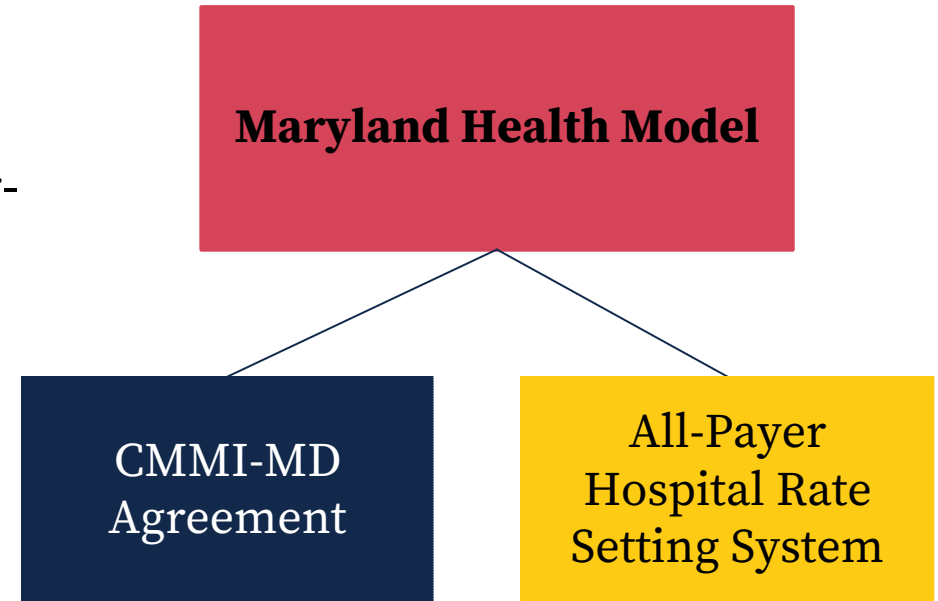




Maryland's Unique Health Care Payment System

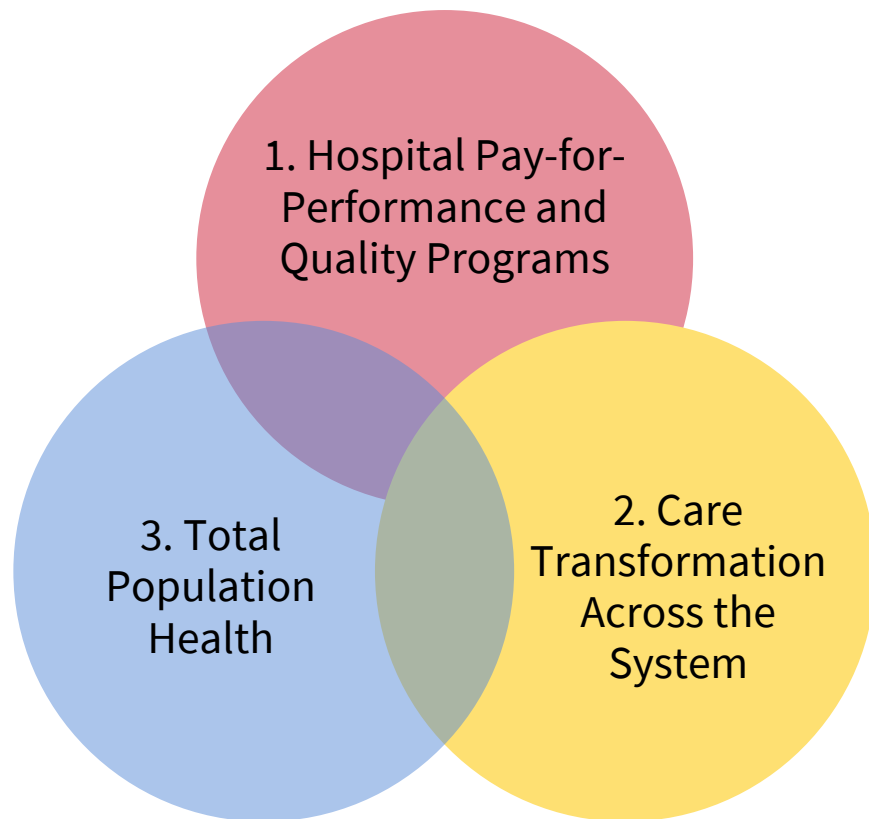
► Maryland's approach:

- Enables cost containment for the public
- Incentivizes better health outcomes through pay-for-performance programs
- Avoids cost shifting across payers and provides equitable rates to self-pay customers
- Funds investments in population health
- Establishes Maryland as a leader in linking quality and payment





TCOC Model Components



Component	Purpose
1. Hospital Population-Based Revenue	Expands hospital quality requirements, incentives, and responsibility to control total costs through limited revenue-at-risk (e.g., Medicare Performance Adjustment, reduction of potentially avoidable utilization, and reduced readmissions)
2a. Care Redesign and New Model Programs	Fosters care transformation across the health system: <ul style="list-style-type: none"> • Expands incentives for hospitals to work with others • Opportunity for development of “New Model Programs” for non-hospital providers (e.g., EQIP) • MACRA eligibility with participation
2b. Maryland Primary Care Program	Enhances chronic care and health management for Medicare enrollees
3. Population Health	Encourages programs and provides financial credit for improvement in statewide diabetes, opioid addiction, and at least one other state priority area Develops a Statewide Integrated Health Improvement Strategy



ADVANCING PRACTICE TRANSFORMATION





Health Equity Practice Roundtable

- ▶ The MHCC convened a Health Equity Practice Roundtable (HE Roundtable) in March 2022 with representatives from advanced care delivery practices to identify challenges and opportunities for practices seeking to address key health equity concerns in their communities
- ▶ The goal of HE Roundtable was to advance health equity in ambulatory practices in Maryland through the development of practice resources informed by HE Roundtable feedback
- ▶ Feedback from the HE Roundtable informed a Health Equity Symposium in March 2023 focused on strategies for identifying patterns of need in the community, building referral networks for services related to social needs, and connecting patients to resources
- ▶ More information about the HE Roundtable is available at:
mhcc.maryland.gov/mhcc/pages/apc/apc_icd/apc_icd_learning_networks.aspx



Advancing Practice Transformation in Ambulatory Practices Program

- ▶ The MHCC released an Announcement for Grant Applications in May 2021 to identify a Care Transformation Organization (CTO) to engage eligible primary care and specialty practices (practices) in a practice transformation program (program)
- ▶ Grant objectives include:
 - ▶ Preparing practices to deliver efficient, high-quality care while improving health outcomes
 - ▶ Laying the foundation for practices to provide team-based, patient-centered care, and efficient use of health information technology
 - ▶ Supporting Total Cost of Care model goals by readying practices to participate in value-based care (VBC) models



Program Overview

- ▶ In June 2021, MedChi CTO was competitively selected to complete transformation activities
- ▶ A crucial role of MedChi CTO is providing practice coaching on specific transformation topics and approaches, such as quality improvement and tools to help sequence and manage change essential to succeed in a VBC model
- ▶ Program milestones:
 - Milestone 1 – Readiness Assessment
 - Milestone 2 – Workflow Redesign
 - Milestone 3 – Training



Program Overview

(Continued)

- ▶ Approximately 27 practices currently engaged in Round 1 are projected to complete the program in June 2023
- ▶ An additional 15 practices began Round 2 in January 2023
 - Round 2 of the program is projected to be completed by June 2024



Learning Network Events

- ▶ The MHCC convenes peer learning network events in collaboration with local and national health care leaders on topics, such as telehealth, advanced care delivery, and practice transformation
- ▶ More information on learning network events is available at:
mhcc.maryland.gov/mhcc/Pages/apc/apc/apc.aspx





Advanced Care Delivery Events

- ▶ Prior events available on the [Learning Network](#) include:



Health Equity Symposium

March 2023

Challenges around addressing... discussed during this symposium in collaboration with the Health Commission and MedChi, The Society. Discussions focus on s... patterns of need in the commu... networks for services related to connecting patients to resource

[Watch Now](#)



Assessing and Vetting Community Resources

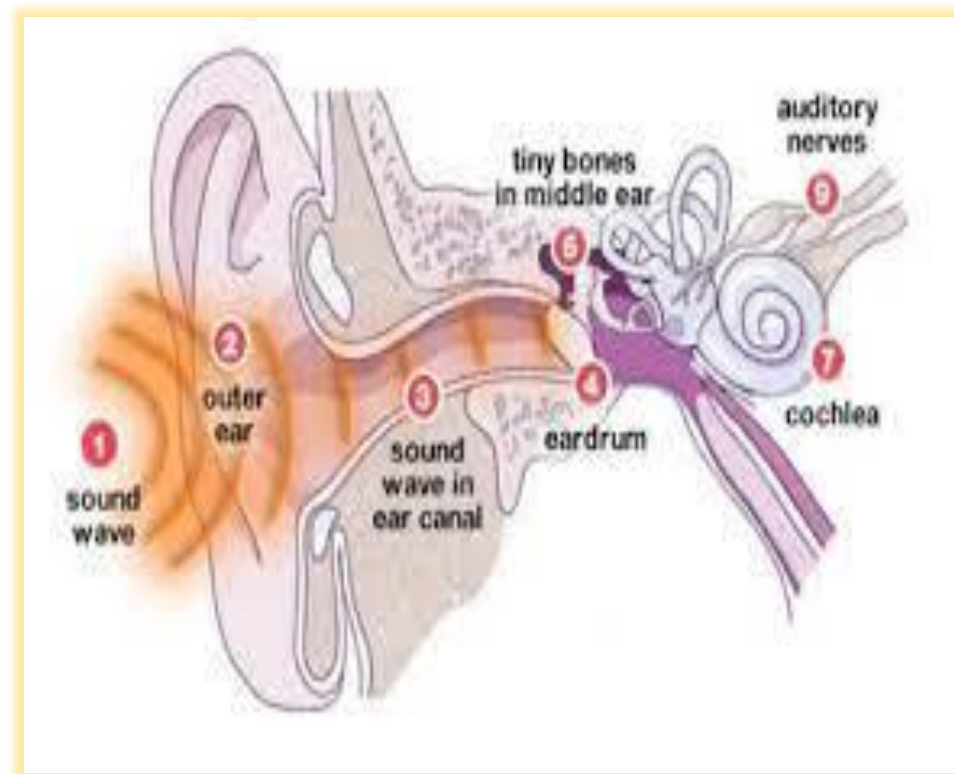
May 2022

Clinicians from Carroll Hospital and Adventist HealthCare discuss identifying statewide community resources, determining capacity of community resources, and leveraging and prioritizing partnerships with community resources.

[Watch Now](#) [Download Slides](#)



AUDITORY HEALTH AND OVERALL WELLBEING





Abigail Ritinski, Au.D, CCC- A

- ▶ Hearing & Balance Solutions, LLC was first opened 2019, by Audiologist Dr. Kristin Krotz
- ▶ Dr. Abigail Ritinski joined the practice in the fall of 2021 and opened a second practice location in Severna Park
 - We work with all patient populations, ranging from newborns to geriatrics and accept all major insurances (including Medicare)
 - Comprehensive hearing, balance and tinnitus evaluations, hearing aid fitting/programming and servicing, newborn hearing screenings, aural rehabilitation, custom hearing protection, custom swim plugs, in-home services
 - Years in field — 3 years

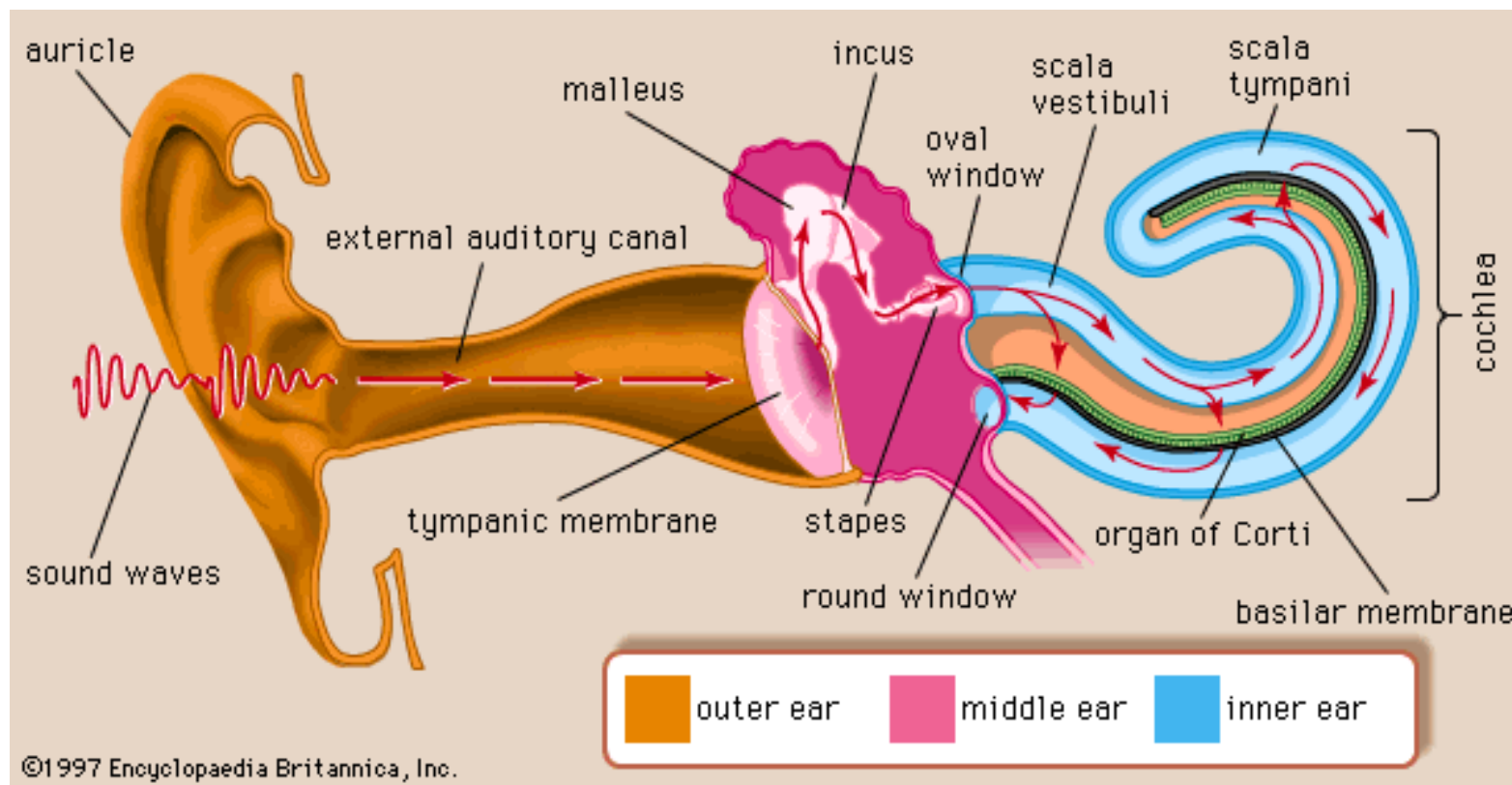


Katherine Grote, FNP-C, HIHC CSp

- ▶ Katherine Grote is the founder of Integrative Family NP LLC is in Annapolis, MD and serves patients ranging from newborns through geriatrics
- ▶ Provided services include telemedicine, home calls, and concierge care
 - Years in field as a nurse practitioner — 4 years
 - Years as a registered nurse — 13 years



Overview of the Auditory Process



- ▶ External ear
- ▶ Ear canal
- ▶ Tympanic Membrane (TM)
- ▶ Inner ear
- ▶ Nerves
- ▶ Brain

Those with history of stroke, dementia, recurrent concussions, head trauma are at increased risk of the neurological system malfunctioning causing hearing loss due to damage to that part of the brain



Hearing Loss and the Impact on Patients



Source: www.health.harvard.edu/blog/good-hearing-essential-to-physical-and-emotional-well-being-2016102010480



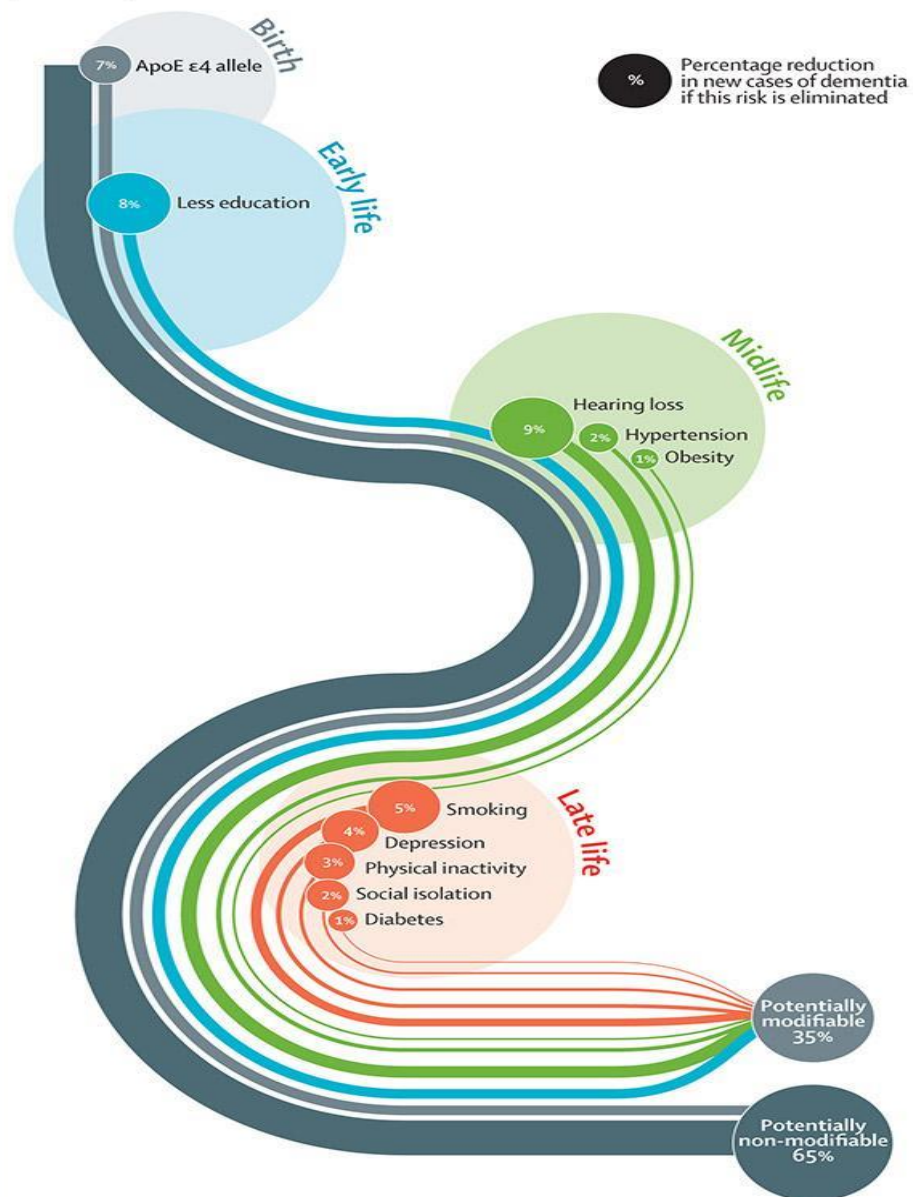
Comorbidities

- ▶ Those with history of stroke, dementia, recurrent concussions, head trauma are at increased risk of the neurological system malfunctioning causing hearing loss due to damage to that part of the brain
- ▶ Approximately 33% of people over 60, 67% of people over 70, and 12-15% of school-aged children have some degree of hearing loss
- ▶ Because hearing loss impacts social interactions, family connections, and workplace productivity, it can have a greater impact on life than cardiac disease, stroke, osteoporosis, sciatica, cancer, and many other common conditions
- ▶ People with hearing loss are more likely to experience earlier onset of dementia, earlier mortality, and falling incidents than those with normal hearing



Risk factors for dementia

The Lancet Commission presents a new life-course model showing potentially modifiable, and non-modifiable, risk factors for dementia.



Risk Factors for Dementia

Source: www.thelancet.com/commissions/dementia2020.

How Hearing Loss Impacts Health Outcomes and Care Utilization



- ▶ Communication is the foundation of relationships
 - Loss of relationships with friends and family
 - Being isolated from those you love or care about

- ▶ Emotional/mental distress
 - Increased risk of depression
 - Feeling isolated
 - Hearing fatigue



General Health Concerns

- ▶ Misunderstanding or not hearing what a provider is saying leads to inability to be compliant with care and manage health
- ▶ Higher risk of hospitalization due to health risks
 - Increased risk of cognitive decline and dementia
 - Safety concerns

Tips for Recognizing the Signs of Hearing Loss



- ▶ Repeating, “What?” “Say that again” “I didn’t hear you”
- ▶ Being told the television or radio is too loud
- ▶ Having trouble hearing over the phone
- ▶ Occasionally thinking others are mumbling or speaking softly
- ▶ Inappropriately responding to others after misunderstanding what was said
- ▶ Constant roaring, ringing, or hissing in ears
- ▶ Avoiding crowded places and restaurants because of difficulty hearing



Strategies for Developing Referral Relationships with Audiologists

- ▶ Networking events e.g., lunch and learn events
- ▶ Use relationship with interdisciplinary specialists or providers that would typically refer to an Audiologist: primary care providers (PCP), internal medicine, neurology, ENT, PT, SLP
- ▶ Recruit Audiologists for health fairs and senior fair events to provide information, hearing screenings and balance screenings



CASE SCENARIOS





Scenario #1

A 32-year-old female patient comes into PCP office due to dizziness and light headedness. Dizziness is more with movement; makes her feel nauseous. Also occurs when laying down. No other symptoms. No recent illness. No recent travel. Does endorse recent amusement park visit; love of roller coasters.



Approach

- ▶ Perform basic hearing screening in office, visualization of external and internal ear (canal and TM)
- ▶ Neuro exam negative with exception of following finger with eyes only, causing some dizziness
- ▶ When patient supine on exam table, with head turned right and left reports dizziness both directions
- ▶ Referral to audiology for vestibular evaluation



Scenario #2

An 86-year-old male patient comes into PCP office with his wife who reports she has noticed her husband becoming more forgetful, an increased need for repetitions during conversations and has noticed he has stopped attending almost all his social groups that occur in noisy or crowded settings.

She also reported he tends to shuffle his feet and use assistive surfaces while walking. She reported one significant fall.



Approach

- ▶ Comprehensive case history exam which revealed significant history of loud noise exposure
- ▶ Otoscopy– clear, bilaterally
 - Middle ear analysis revealed normal middle ear system bilaterally
 - Inner ear analysis revealed absent OAE responses
 - Audiometry testing in the sound booth revealed a normal precipitously sloping to severe sensorineural hearing loss, bilaterally



Approach

(Continued)

- ▶ Word understanding abilities were excellent when properly amplified
- ▶ Comprehensive balance evaluation revealed bilateral vestibular weakness
- ▶ Recommendations to patient include:
 - Binaural amplification to stimulate the auditory pathways
 - VRT with a focus on gaze and stabilization exercises
 - Annual hearing re-evaluation
 - Refer back to PCP



Scenario #3

A three-month-old infant and mom seen for hearing follow up. Mom reported newborn spent six days in the NICU and failed her hearing screening twice in both ears. No other medical concerns reported. Prenatal care was received from 8 weeks. No complications or issues during the prenatal period. Mother did not use any NSAIDs or acetaminophen.



Approach

- ▶ Reviewed family past medical history
- ▶ Reviewed developmental milestones
 - Any family history of hearing loss?
- ▶ Evaluation: Otoscopy – clear canals, bilaterally
 - Middle ear analysis revealed normal ear drum movement
 - No signs of ME fluid, bilaterally
 - Present and robust DPOAEs were obtained and repeatable
 - Hearing test was normal at today's visit
- ▶ No concerns for hearing at this time
- ▶ Refer to PCP

How Can PCPs and Audiologists Collaborate for the Common Good of the Patient?



- ▶ Availability to:
 - Collaborate
 - Be able to reach out to other providers
- ▶ Technology aids us in better communication if utilized via: EMRs, faxes, emails, phone/text
- ▶ Knowing scope of practice for given provider/practice
- ▶ Knowing when to refer out and when to manage internally



THANK YOU



Melanie Cavaliere
Chief, Innovative Care Delivery
melanie.cavaliere@maryland.gov



mhcc.maryland.gov