

Shifting the Paradigm: Making Cognitive Assessment a Standard of Care

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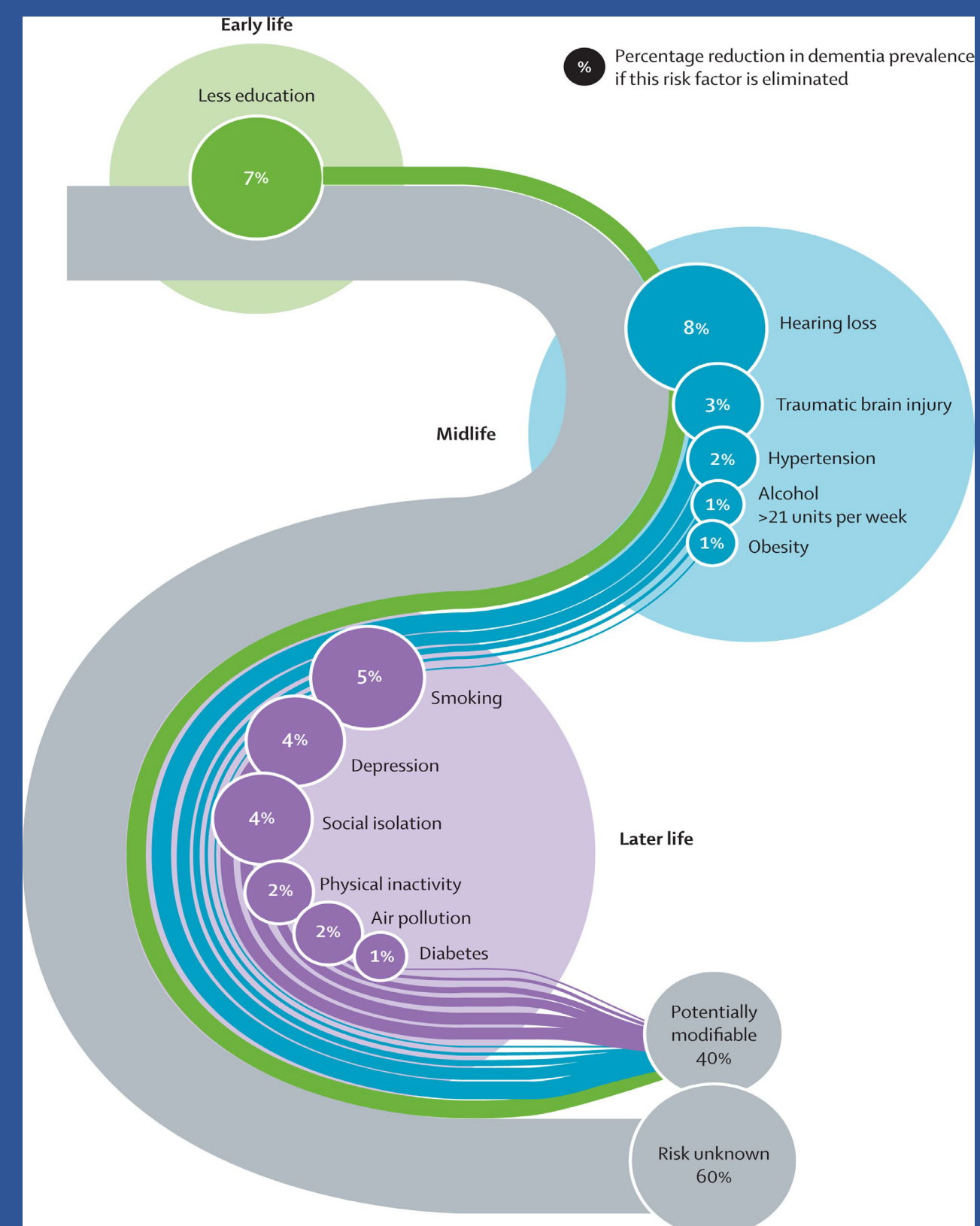
ABSTRACT

Early cognitive decline often goes unidentified in primary and specialty care due to limited time, inconsistent screening practices, and lack of training.

Allied health professionals, such as audiologists, optometrists, pharmacists, and rehabilitation therapists, see older adults more frequently and routinely assess functions closely tied to cognition, creating strong opportunities for early detection.

Using an integrated care pathway approach, this poster outlines how brief, adaptive cognitive screening integration into electronic medical records for comprehensive delivery of patient-centered care for timely communication and patient planning.

Audiology serves as the leading model, demonstrating feasibility, patient acceptance, and improved coordination. This framework provides a scalable strategy to advance early cognitive detection and preventive care.



Livingston et al., 2020. Lancet Commission on Dementia Prevention

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INTRODUCTION

Cognitive decline often begins with subtle changes easily mistaken for normal aging. Because these early signs rarely prompt further evaluation, many individuals progress for years, compensating for perceived cognitive gaps, missing the window of early intervention and lifestyle modifications are most effective. Despite national recommendations, cognitive screening remains inconsistently implemented due to workflow constraints.

Allied health professionals are well positioned to detect early changes in cognition. Audiology, optometry, pharmacy, rehabilitation therapy, and integrative medicine routinely assess functions tied to cognition. Audiology has led this shift, especially after the Lancet Commission identified hearing loss as the top modifiable risk factor for dementia. Many practices now combine hearing evaluations and cognitive screenings as patients often present to audiology long before raising cognitive concerns elsewhere.

Integrating a 5-minute objective screening tool, e.g. Cognivue Thrive (which measures **Memory, Executive Function, Visuospatial Memory, Reaction Time** and **Processing Speed**) into routine workflows supports earlier detection of cognitive change and provides a practical model for other allied health disciplines.



OBJECTIVES

- To describe an integrative care pathway approach to position allied health as a critical entry point for early detection of cognitive changes via cognitive screenings.
- To highlight audiology as an evidence-based model that demonstrates feasibility, relevance, and scalability.
- To outline a cross-disciplinary framework connecting allied health with primary and specialty care for timely cognitive evaluation and care planning.

CONCLUSIONS

- Allied-health professionals are uniquely positioned to expand early cognitive detection.
- Audiology provides a validated, scalable approach for integrating cognitive screening into routine care.
- Brief, adaptive screening aligns with allied-health workflows and strengthens care coordination.
- The Integrative Care Pathway framework supports practical, scalable integration across disciplines.
- Widespread adoption has the potential to improve early identification, reduce crisis-driven care, and enhance long-term outcomes for patients and families.

METHODS

A structured framework was developed to evaluate integration of cognitive screening within allied-health:

1. Patient Pathway Mapping

Common allied-health visit types, hearing evaluations, vision exams, medication reviews, functional assessments, were analyzed as screening access points based on frequency and relevance to cognitive function.

2. Two-Step Cognitive Assessment Model

- Step 1: Cognivue Thrive screening incorporated into routine Allied Health visits.
- Step 2: Comprehensive cognitive evaluation performed by primary or specialty providers when necessary.

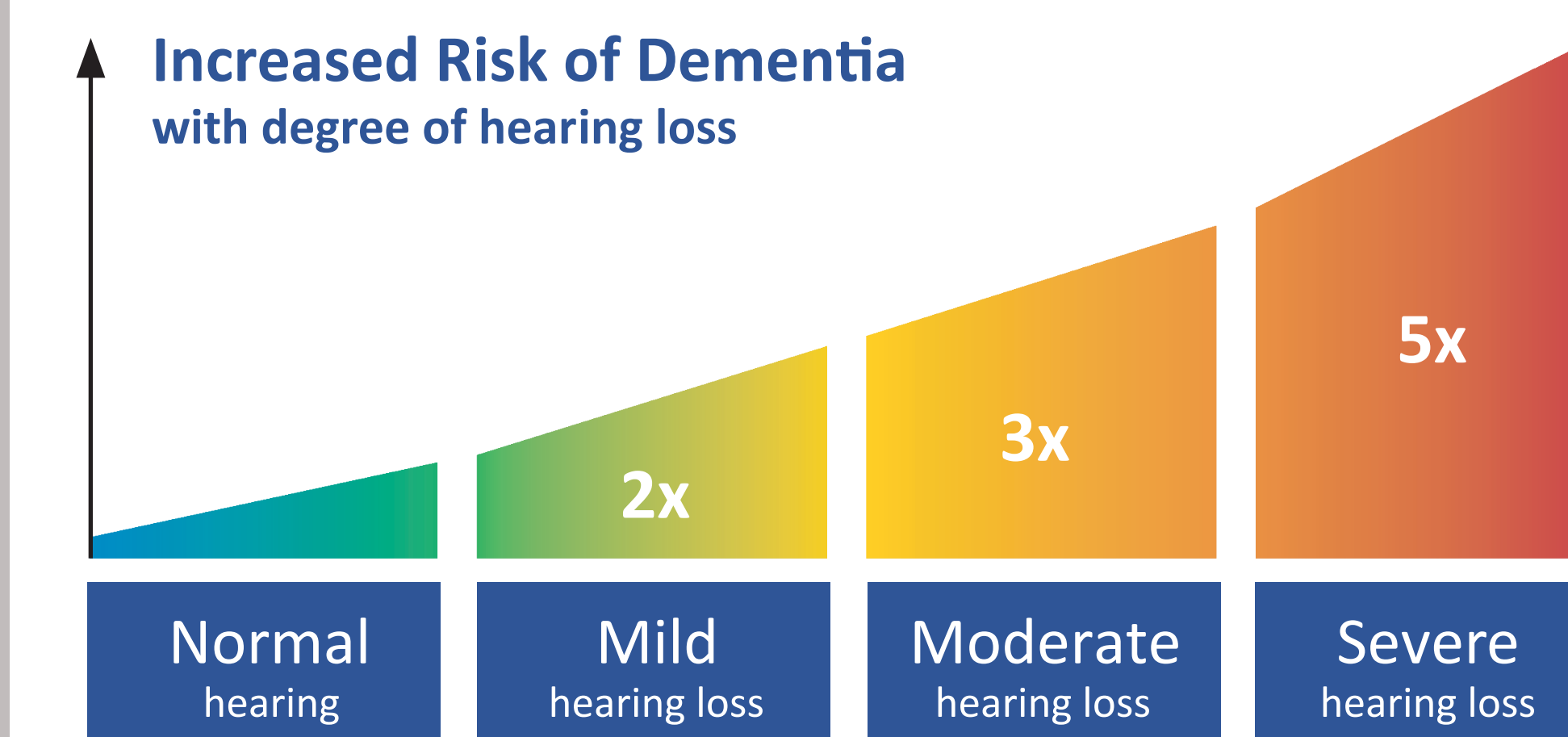
3. Feasibility and Workflow Considerations

- Visit flow integration
- Staff and time burden
- Patient usability and acceptance
- Communication pathways to physicians
- Opportunities for early intervention

4. Evidence-Based Rationale

The model draws on established literature linking sensory impairment and cognitive health.

RESULTS

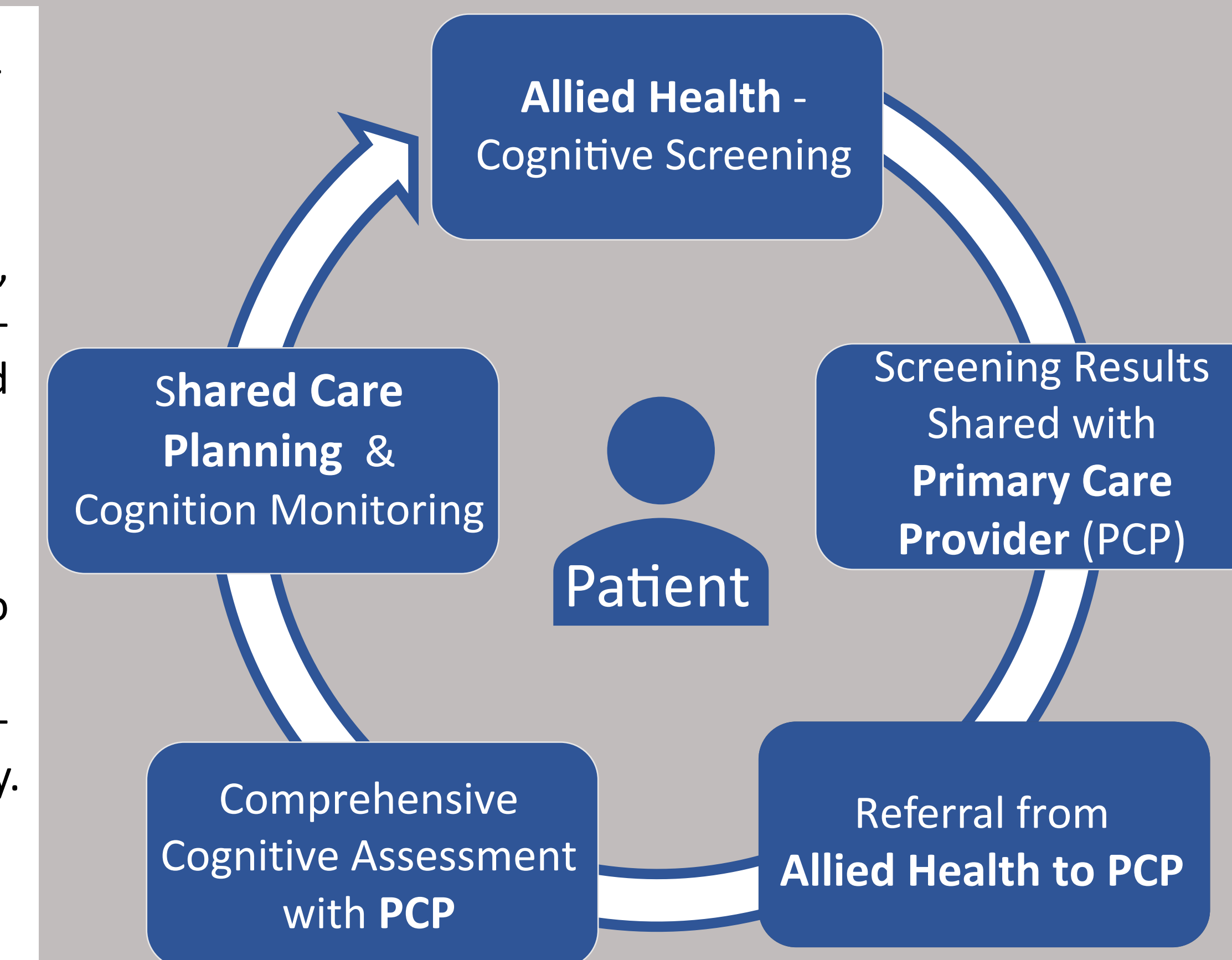


Audiology as the Leading Use Case

- Hearing loss accounts for 8.2% of global dementia risk—the largest modifiable factor.
- Every 10 dB of hearing loss is associated with a 130% increased risk of cognitive decline.
- Approximately 20% of adult audiology patients present with cognitive deficits needing further evaluation.
- Providers report enhanced overall quality of care when cognitive screening is incorporated.

Cognitive screenings frequently uncovers cognitive impairment not documented in primary care, with 25–45% of older adults meeting criteria for previously unrecognized mild cognitive impairment (MCI). Cognivue Thrive brief 5 minute screening can reveal deficits that routine visits miss and improve patient understanding of cognitive health and lifestyle changes that may reduce risk or slow decline.

INTEGRATED CARE PATHWAY



DISCUSSION

Early cognitive screening can be expanded by leveraging clinicians who see older adults most often. This comprehensive care-team approach can serve rural elders, and support those with limited access to preventative care.

Integrated Care Pathway Findings:

Reach: Allied-health clinicians see older adults more often than primary care, creating repeated opportunities for early cognitive screening and long-term monitoring.

Effectiveness: Point-of-care screening enables earlier recognition of decline, thereby reducing delays in implementation of changes in lifestyle changes.

Adoption: Brief, adaptive tools fit naturally into workflows and require minimal staff time.

Implementation: Screening adds ~5 minutes and aligns well with allied-health assessments where sensory-cognitive links are strong.

Maintenance: Clinics report high patient acceptance, and improved interdisciplinary communication.

Overall, this integrated care pathway shows how allied-health professionals can expand access to cognitive screenings. Audiology provides a proven, scalable model that fits clinical workflow and leverages the known effects of sensory deprivation on cognition. Integrating screening where patients discuss functional changes normalizes cognitive-health conversations, reduces stigma, and provides data supporting earlier diagnosis, timely referral, proactive planning, and engagement in lifestyle changes that may reduce future risk. Extending this approach across optometry, pharmacy, rehabilitation, and integrative medicine increases detection opportunities and strengthens coordinated care for the aging population. Collective service provision enables patients and caregivers to develop opportunities to have conversations about brain health that can impact aging trajectory.

REFERENCES

- Lin et al., 2011. *Archives of Neurology*.
- Tsoi et al., 2015. *International Journal of Geriatric Psychiatry*.
- Shen et al., 2016. *American Journal of Audiology*.
- Lin et al., 2019. *Journal of the American Geriatrics Society*.
- Livingston et al., 2020. *Lancet Commission on Dementia Prevention*.
- National Academies of Sciences, Engineering, and Medicine, 2020. *Cognitive Aging*.
- WHO, 2021. *Risk Reduction of Cognitive Decline and Dementia*.
- Darrow K.N., 2023. *Hearing Review*.