

Feasibility of a Primary Care-embedded Brain Health Navigator to Facilitate Cognitive Assessment and Risk Stratified Clinical Pathway

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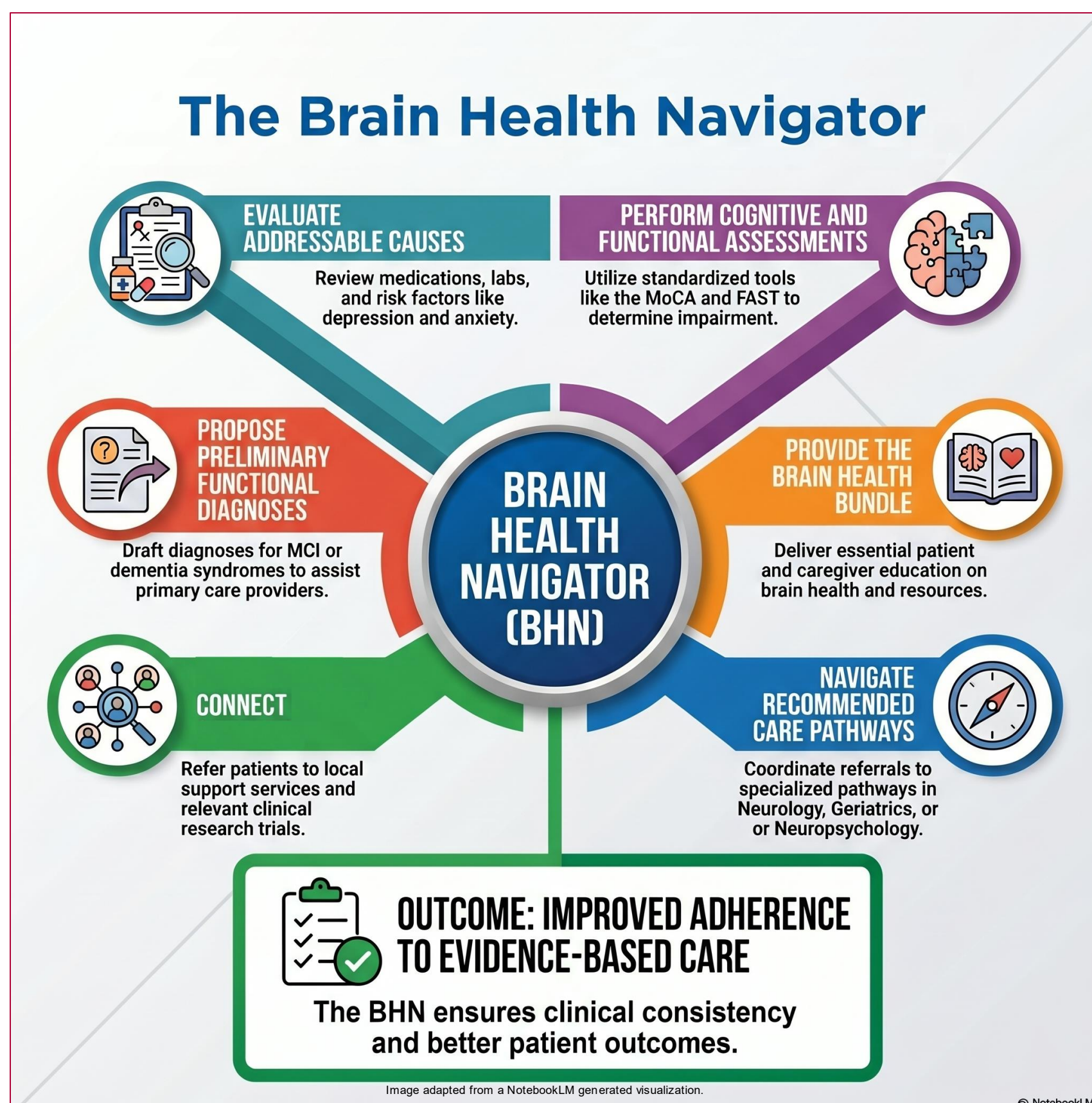
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BACKGROUND

- Primary Care (PC) is the main source of care for adults at risk for dementia.
 - Limited time, resources, knowledge, and confidence limit PC evaluations of cognitive concerns.
 - We developed the PC Brain Health Navigator (BHN) model during our 2022 Davos Alzheimer's Collaborative Healthcare System Preparedness Flagship early detection implementation.^{2,3}
- The PC BHN:**
- facilitates addressable cause evaluation
 - performs patient and caregiver education
 - provides community resources and research referrals.
 - develops proposed functional diagnosis
 - facilitates recommended care pathway referrals
 - previously demonstrated improved adherence to evidence-based care.^{1,4}
- We evaluated relationships associated with PC BHN navigation:

Can the PC BHN help navigate the right patient to the right brain health care pathway?

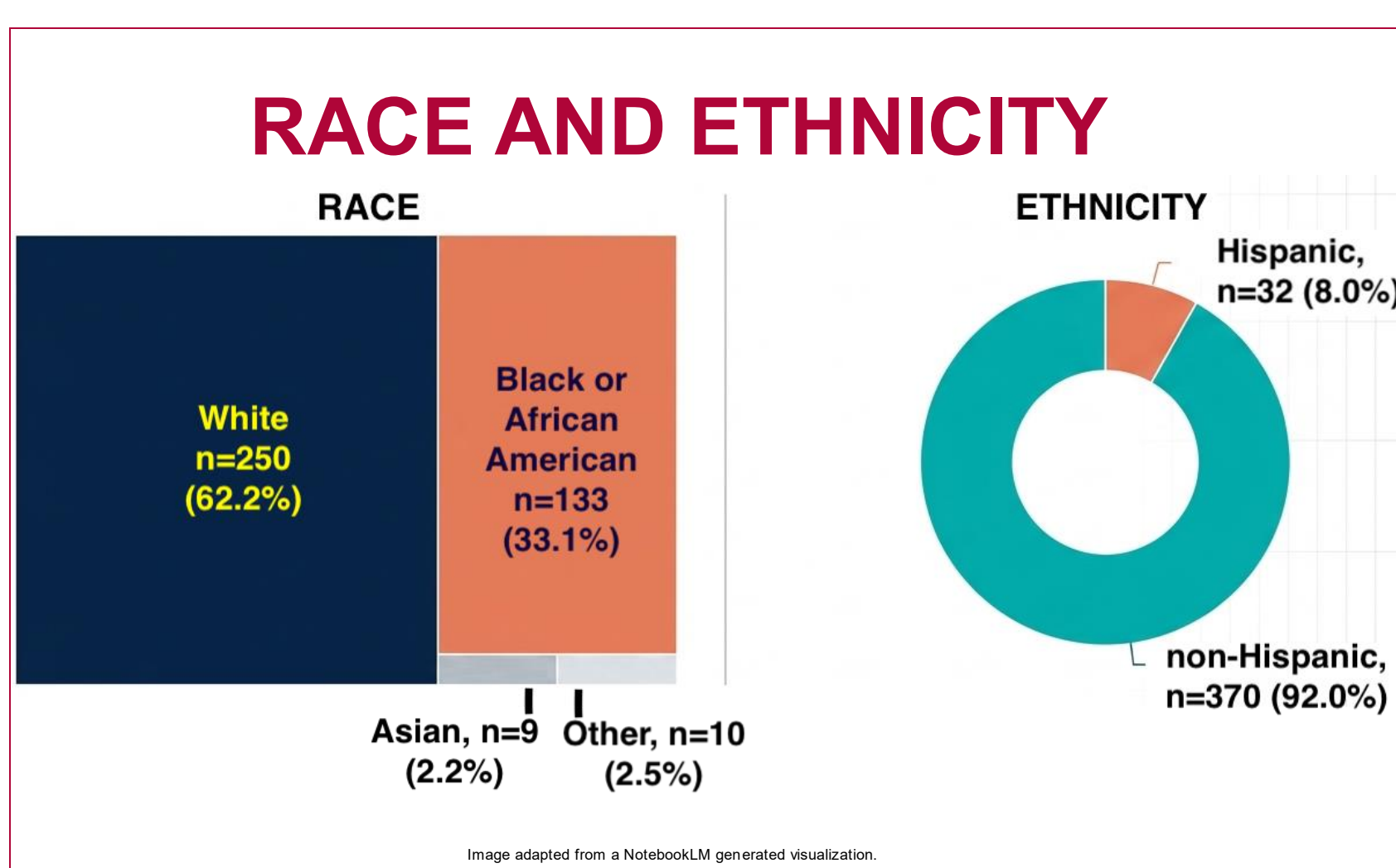
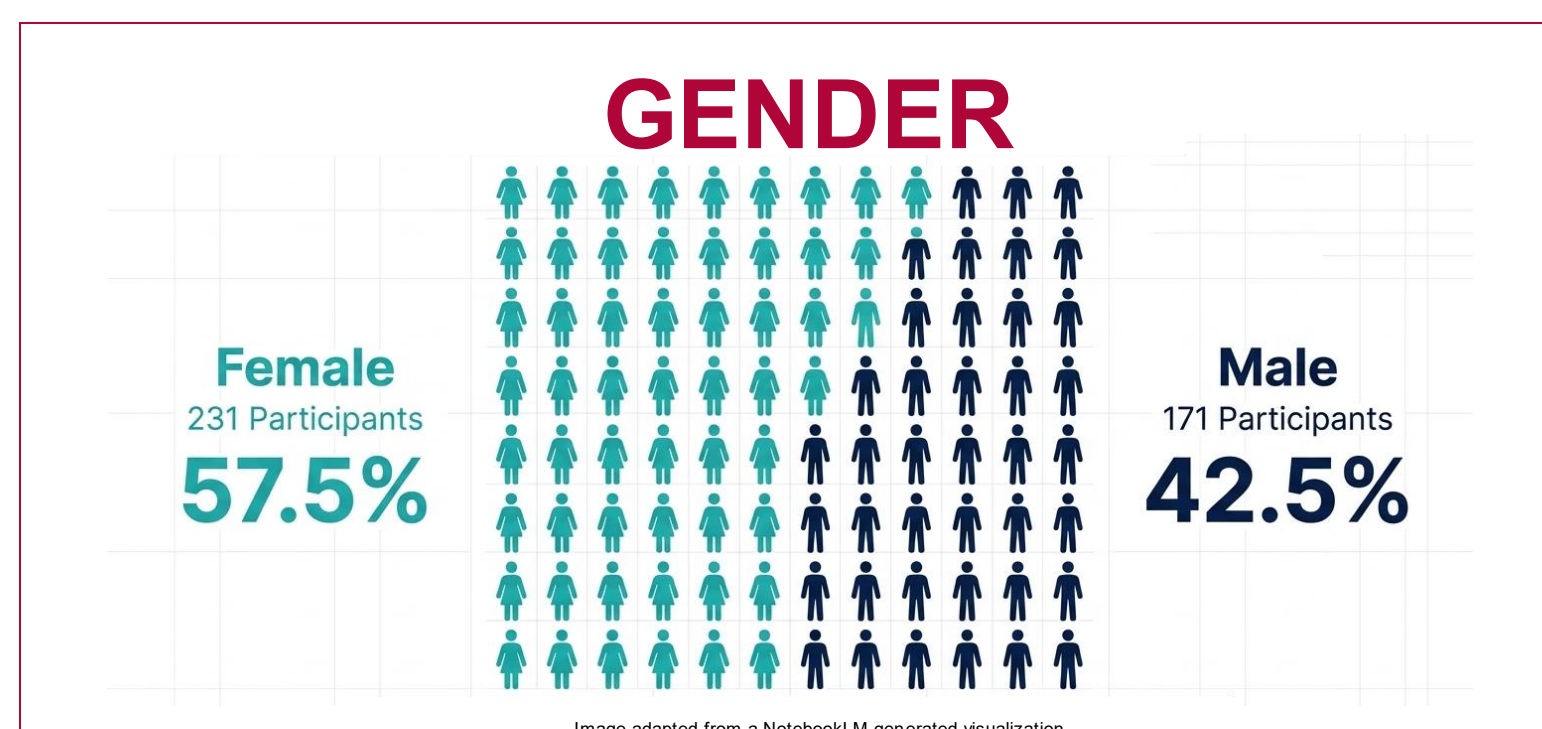
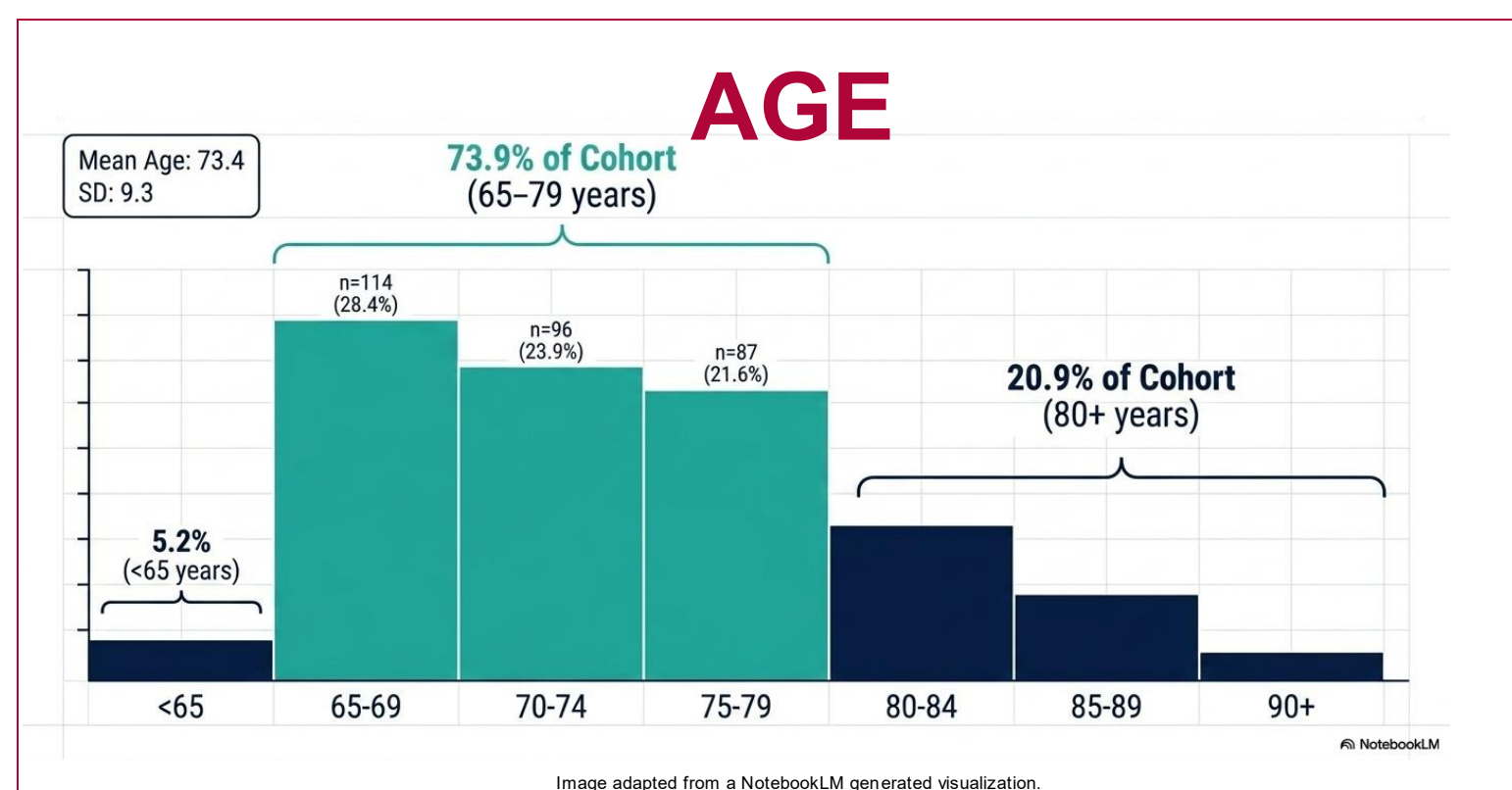
PC BHN NAVIGATOR FUNCTIONS



METHODS

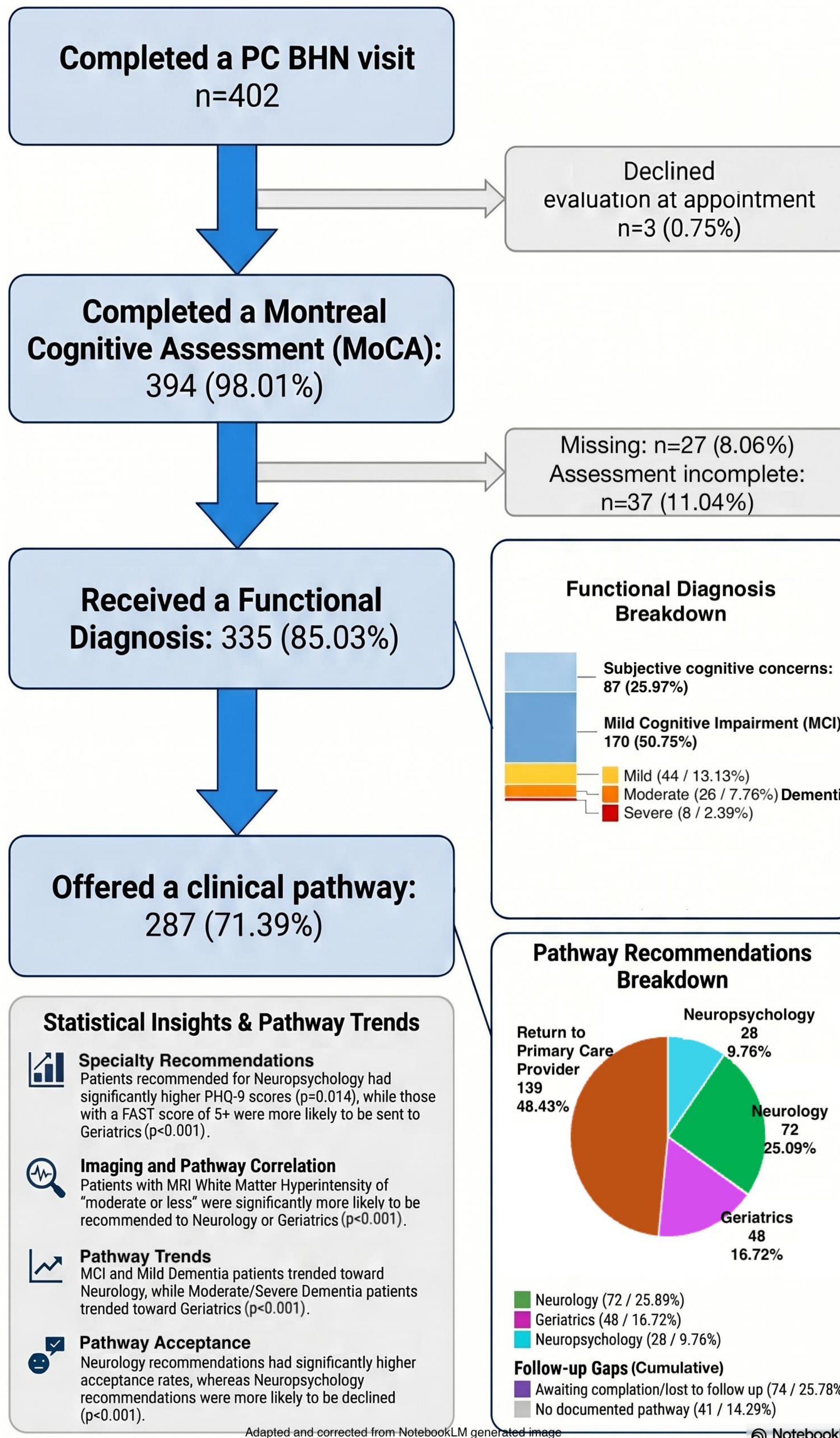
- Included patients completing at least one PC BHN visit between June 1, 2022 and December 16, 2025.
- A clinical algorithm to guide care pathway recommendations.
- Patients who decline the recommended care pathway are returned to their PC team.
- IU IRB designations:
 - Implementation: non-human subjects research,
 - Pre/post evaluation: exempt
- Data was collected from a clinical registry and chart abstraction. Analyses were conducted using R version 4.6.0.
- Descriptive statistics were calculated overall and by care pathways.
- Multivariate logistic regression models were developed to explore associations between clinically relevant patient characteristics and care navigation outcomes.

RESULTS



RESULTS

Primary Care Brain Health Navigator: Patient Flow and Clinical Pathway Outcomes



CONCLUSIONS

- Most patients completing a PC BHN visit underwent cognitive evaluation.
- The PC BHN identified higher-risk patients and effectively guided care pathways for nearly half of all evaluated patients.
- Geriatrics patients were older and had worse functional status and more likely to have moderate or severe dementia.
- Neurology pathway patients were more likely to have MCI or Mild Dementia Syndrome.
- Neuropsychology referrals had lower acceptance.
- ASCVD-risk and PHQ-9 score was associated with declining the PC BHN recommended care pathway.
- More than one-third of patients were open to research participation.
- A PC Brain Health Navigator holds potential to improve early diagnosis and appropriate utilization of specialty care resources.

REFERENCES

- Brosch, J. R., Summanwar, D., Fowler, N. R., Hammers, D. B., Perkins, A. J., Higbie, A., ... & Willis, D. R. (2025). An innovative health systems approach to support early detection of cognitive impairment in primary care—the brain health navigator. *BMC Primary Care*, 26(1), 271.
- Fowler, N. R., Hammers, D. B., Perkins, A. J., Summanwar, D., Higbie, A., Swartzell, K., ... & Willis, D. R. (2025). Feasibility and acceptability of implementing a digital cognitive assessment for alzheimer disease and related dementias in primary care. *The Annals of Family Medicine*, 23(3), 191-198.
- Summanwar, D., Fowler, N. R., Hammers, D. B., Perkins, A. J., Brosch, J. R., & Willis, D. R. (2025). Agile implementation of a digital cognitive assessment for dementia in primary care. *The Annals of Family Medicine*, 23(3), 199-206.
- Willis, D. R., Summanwar, D., Fowler, N. R., Brosch, J. R., & Hammers, D. B. (2026). The primary care brain health navigator: A perspective on implementation. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 18(2), e70323.

PATHWAY ACCEPTANCE

- 67.7% of patients were open to referrals.
- 43.3% accepted the PC BHN recommended care path.
- After adjustments, PHQ-9>9 (vs. <=9) was associated with openness to additional referrals (OR 2.91, 95% CI 1.15-7.53; p=0.024) and higher ASCVD risk increased odds of accepting the recommendation (OR 1.06, 95% CI 1.01-1.11; p=0.009).
- 33.8% were open to research participation.