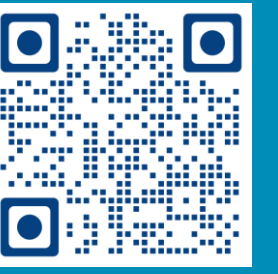


PILOTING DIGITAL COGNITIVE ASSESSMENTS AND A BLOOD-BASED BIOMARKER TO IMPROVE ALZHEIMER'S DISEASE DIAGNOSIS

Rhonna Shatz¹, Yosuke Nakamura², Courtney Adams², Hideki Toyosaki², Bryan Cobb², Feride Frech², Rifky Tkatch²

1. University of Cincinnati, Cincinnati, OH, United States. 2. Eisai, Inc., Nutley, NJ, United States.



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Introduction

- Inefficiencies in the diagnosis for Alzheimer's Disease (AD) remain a significant barrier to timely intervention for patients¹⁻²
- Primary care providers (PCPs) are the first point of contact for patients, but frequently lack practical, scalable screening tools, resulting in fragmented referral pathways and prolonged time for specialist diagnosis³⁻⁵
- Digital cognitive assessments (DCAs) and blood-based biomarkers (BBMs) have shown strong potential for feasibility and scalability in aiding of early detection of cognitive impairment in real-world settings⁶⁻⁷
- The primary objective is to estimate the time from the initial cognitive complaint (CC) in a primary care setting to confirmed diagnosis of AD, using a digital diagnostic pathway incorporating an at-home DCA, an in-clinic DCA, and a BBM with a PCP

Methods/Data Collection/Analysis

- This is a single-center, prospective, observational study enrolling 200 subjects (>50 years, with a CC) through the University of Cincinnati PCP clinics (**Figure 1**). Enrollment will begin in June and be completed within one year
- As part of the Standard of Care (SOC), PCP will refer eligible subjects to a brain health navigator (BHN) who informs them of the study. As part of the diagnostic process, the BHN also administers standardized neuropsychological tools and orders neuroimaging and the BBM. The Better Dx study implements two DCAs as part of this process and evaluates the implementation of the BBM as part of this process. Primary objective is measured by the date of referral (CC) to date of diagnosis
- Secondary objectives were:
 - To evaluate providers', subjects', and care partners' willingness to undergo DCAs and BBM testing for routine cognitive screening in primary care clinical setting. This is measured by a 6-items survey (2 items on each domain)
- Exploratory objectives were to assess:
 - Diagnostic agreement between DCA + BBM results and the final confirmed diagnosis
 - Determine the proportion of subjects evaluated in primary care who need additional evaluation in specialty care
 - Time from initial complaint to diagnosis using the DCA + BBM pathway vs historical standard of care (provided by the University)
- Analysis: descriptive statistics will be used to analyze the primary, secondary, and exploratory objectives

Conclusions

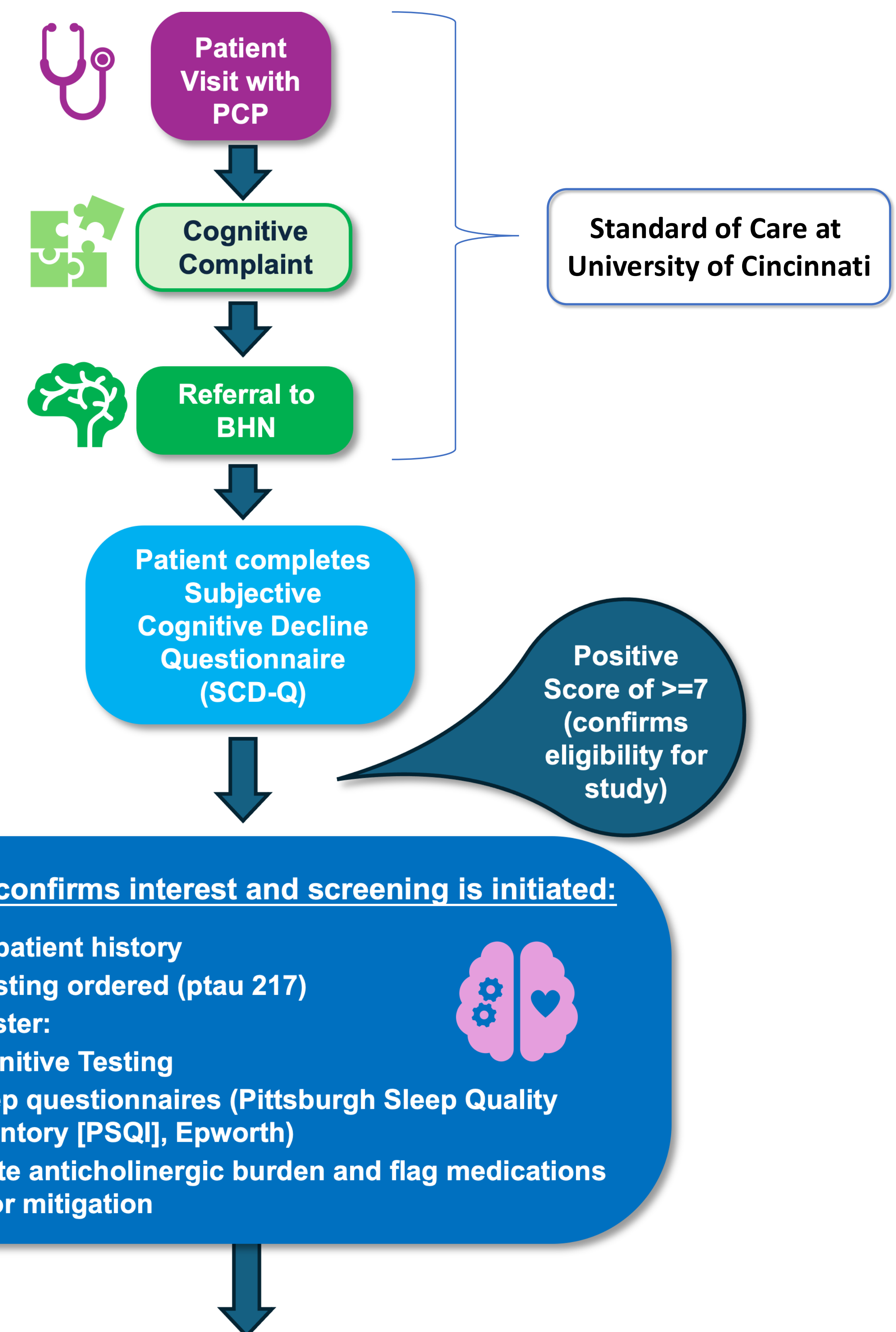
This study will:

- Evaluate the acceptability and feasibility of a structured diagnostic pathway integrating DCAs and BBMs in primary care
- Assess time from initial cognitive complaint to diagnosis using the DCA + BBM pathway
- Generate real-world evidence on implementation of this diagnostic approach

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Methods (continued)

Figure 1. Better Dx BHN Model Care Pathway



Patient consent completed and enrollment begins:

- **After enrollment, patient completes Speech-Based Cognition (SB-C) and a self-administered validated DCA (done at home). Also DCA in the clinic (Digital Clock and Recall)**
- **Interpretation of findings by the BH PCP and behavioral neurologist based on findings of the BBM and the DCAs**
- **Date of this visit serves as the endpoint to calculate the outcome variable (time to diagnosis)**

- **BH PCPs makes final diagnosis of AD or MCI due to AD, and results delivered to the patient by the BH PCP**
 - **FPI: June 8, 2026**

