

Augmenting Nurse Support and Electronic Health Record (EHR) Integration for the Pragmatic Trial of the TabCAT Brain Health Assessment (TabCAT-BHA)

IMPACT Grand Rounds
April 17, 2025

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Disclosures

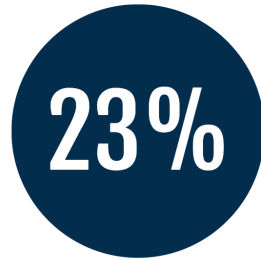
- TabCAT IP is owned by UCSF
- Current grant funding from:
 - Larry L Hillblom Foundation
 - National Institutes of Health
 - Alzheimer's Association
 - Global Brain Health Institute
 - John Douglas French Foundation
 - Rainwater Foundation

Diagnosis of AD/ADRD is Delayed and Inadequate

- **Delays are common:** More than 50% of persons with dementia and 90% with MCI in the U.S. have not been diagnosed. (Liu et al., JPAD, 2024)
- The type of **dementia is unspecified** in about 50% of cases (Chen et al., 2019, Alzheimer's & Dementia), and often remains unspecified even after 5 years of follow-up (Drabo et al., Alzheimer's & Dementia, 2019)
- **Disclosure is insufficient:** only about half of Medicare beneficiaries who have a dementia diagnosis in claims report being told of their diagnosis (Alzheimer's Disease Facts and Figures Special Report: Disclosing a diagnosis of Alzheimer's disease, 2015)

Racial/ethnic disparities in timeliness of dementia diagnosis

- 10,472 California Medicare beneficiaries with incident MCI or all-cause dementia diagnoses
- Timeliness: incident MCI vs. all-cause dementia diagnosis



of non-Hispanic White beneficiaries
were first diagnosed at the MCI stage



of Hispanic beneficiaries



of Black beneficiaries



of Asian beneficiaries

Why is it important to diagnose MCI or Dementia

- Treat reversible conditions
- Optimize medications
- Inform treatment decisions for other conditions
- Connect to support services and education
- Opportunity to participate in clinical trials and other research
- Address safety issues and quality of life goals
- Engage patients in planning ahead for their care
- Consider new or emerging therapies

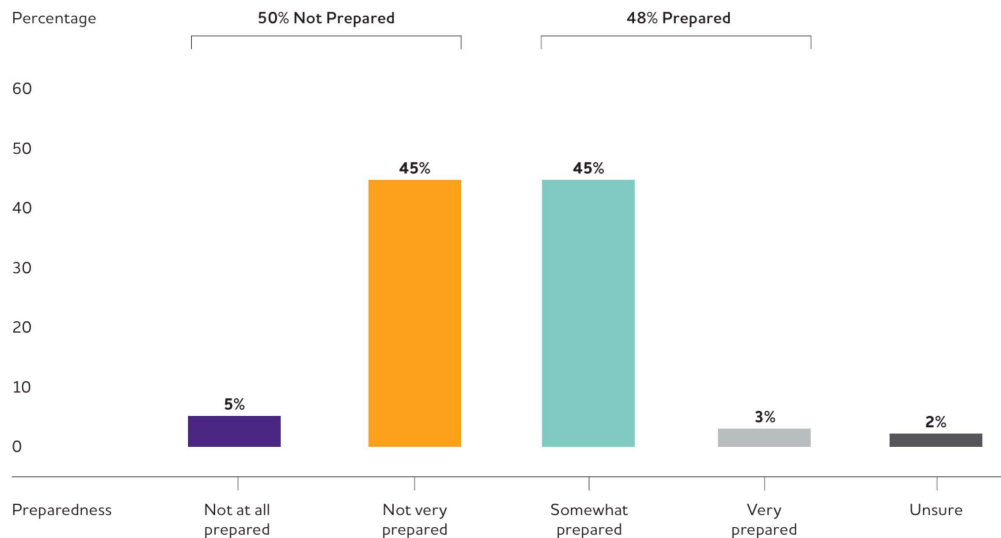
Why is it important to diagnose MCI or Dementia: The 3 Breakthroughs in Cognitive Care

1. 45% dementia risk is potentially modifiable (Lancet Commission Report)
2. Collaborative dementia care (GUIDE, see Alzheimer's Facts & Figures Special Report 2024)
3. New treatments – now and on horizon

Boustani, IMPACT Grand Rounds,
March 2025

The Important Role of Primary Care

- 82% of PCPs say they are on the front lines of providing dementia care
- 50% report that they are not prepared to provide this care



Created from data from the Alzheimer's Association Primary Care Physician Dementia Training Survey.^{A20}

Talk Outline

- DetectCID - The Consortium for Detecting Cognitive Impairment, Including Dementia
- TabCAT-Brain Health Assessment
- Implementation of the TabCAT-BHA as part of a diagnostic care pathway at UCSF primary care (DetectCID-1)
- Implementation of the TabCAT-BHA as part of a diagnostic care pathway at Kaiser Permanente Southern California primary care (DetectCID-2)
- Scaling the TabCAT-BHA & Brain Health Consultation

DetectCID

Multiple Etiology Dementias: Support research on early detection of cognitive impairment/dementia in everyday settings (Milestone 9.K)

Success Criteria

Complete at least three clinical trials to validate assessment paradigms to detect cognitive impairment in large and diverse populations in primary care practice and other every day clinical care settings.

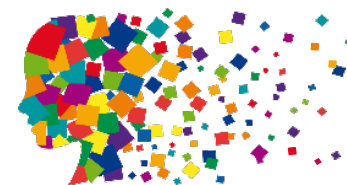
Relevant Recommendations

2016 ADRD Summit: MED Recommendation 1

2019 ADRD Summit: MED Recommendation 1, Priority 1

2022 ADRD Summit: MED Recommendation 1, Priority 1

2025 ADRD Summit: MED Recommendation 1, Priority 1



Alzheimer's Disease-Related
Dementias Summit 2025

The ADRD Summit 2025 will be held virtually on **April 29, April 30, and June 2**. It will feature a new Session “Research for Implementation of Discoveries into Practice”



Consortium for Detecting Cognitive Impairment, Including Dementia

- Since 2017, a collaborative network of research programs evaluating paradigms that include cognitive assessment tools and diagnosis protocols.
- **Overall Goal:** increase the frequency and improve the quality of patient evaluations for detecting cognitive impairment in primary care and other everyday clinical settings.
- In Phase I (RFA-NS-17-012), 3 paradigms were developed, and each was successfully implemented into at least one primary care clinic.
- In the current Phase II (RFA-NS-22-009), 3 large, pragmatic, cluster randomized trials are underway. Results expected in 2027!



Albert Einstein College of Medicine



Weill Institute for
Neurosciences

Memory and
Aging Center

M Northwestern Medicine

Feinberg School of Medicine



Lessons from Detecting Cognitive Impairment Including Dementia (DetectCID-1) in Primary Care

Key Lessons from Implementation:

- Engage primary care teams as partners – champions!
- Provide support to PCPs with diagnosis and ongoing care support
- Integrate with the electronic health record
- Ensure that paradigms address the needs of diverse populations

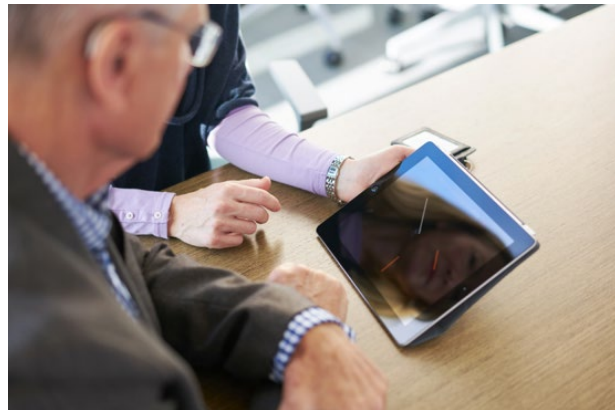


Alissa
Sideman, PhD

TabCAT-BHA

TabCAT Brain Health Assessment (TabCAT-BHA)

- 10-minute comprehensive yet highly efficient cognitive assessment optimized for the **detection of early-stage AD/ADRD** in primary care
- Automated scoring with EMR-integrated results



Birdwatch

(memory)

1. Instructions

2. Task Loop:

- Learning:
2 new bird-scene
pairs, or
selective reminding
pairs
- Immediate Recall:
All learned pairs
(up to 14 pairs)
- Feedback



You will see birds and the places
they live.

Remember which bird lives in
each place.



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This bird lives in this place.



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Touch the bird that lives in this place.



Birdwatch

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Now you will see the ones that
you missed.

Remember which bird lives in
each place.



Birdwatch

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- Learning:
2 new bird-scene
pairs, or
selective reminding
pairs
- Immediate Recall:
All learned pairs
(up to 14 pairs)
- Feedback



Great! You got them all correct.

Now you will see some new birds
and the places they live.

Remember which bird lives in
each place.



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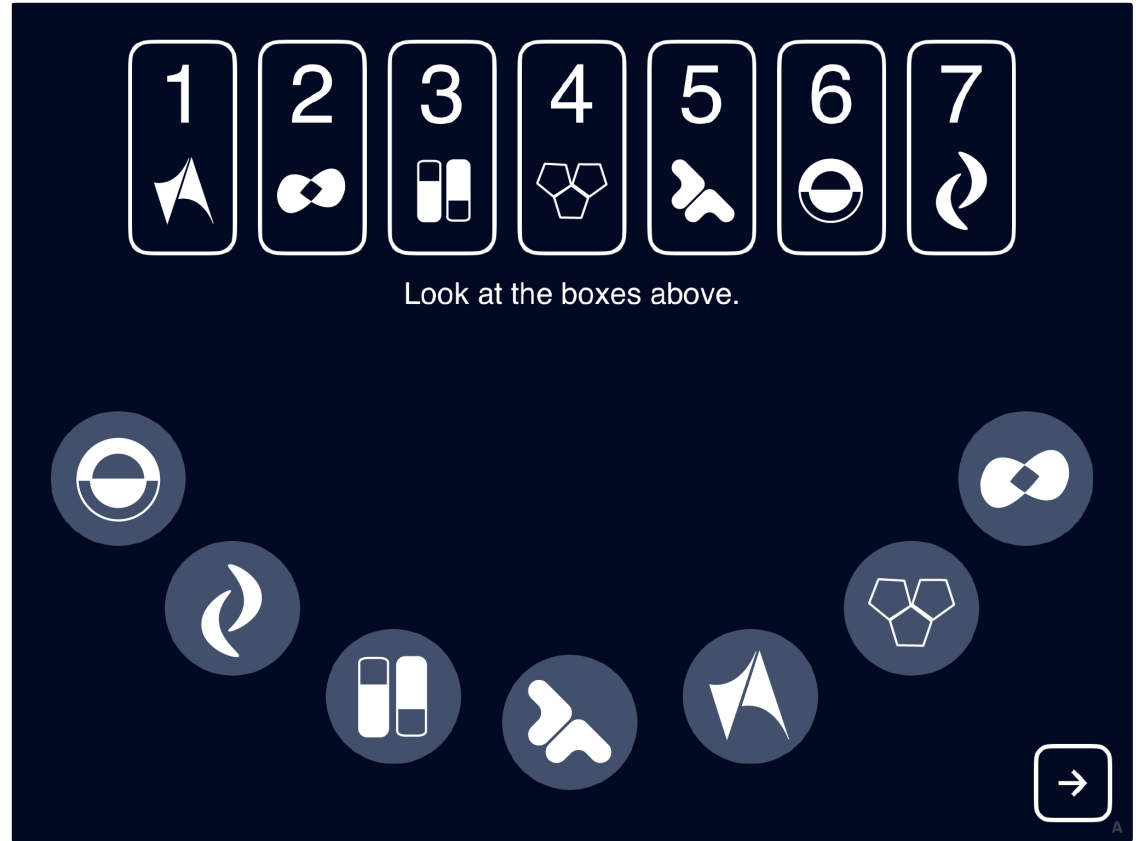
Touch the bird that lives in this place.



Match

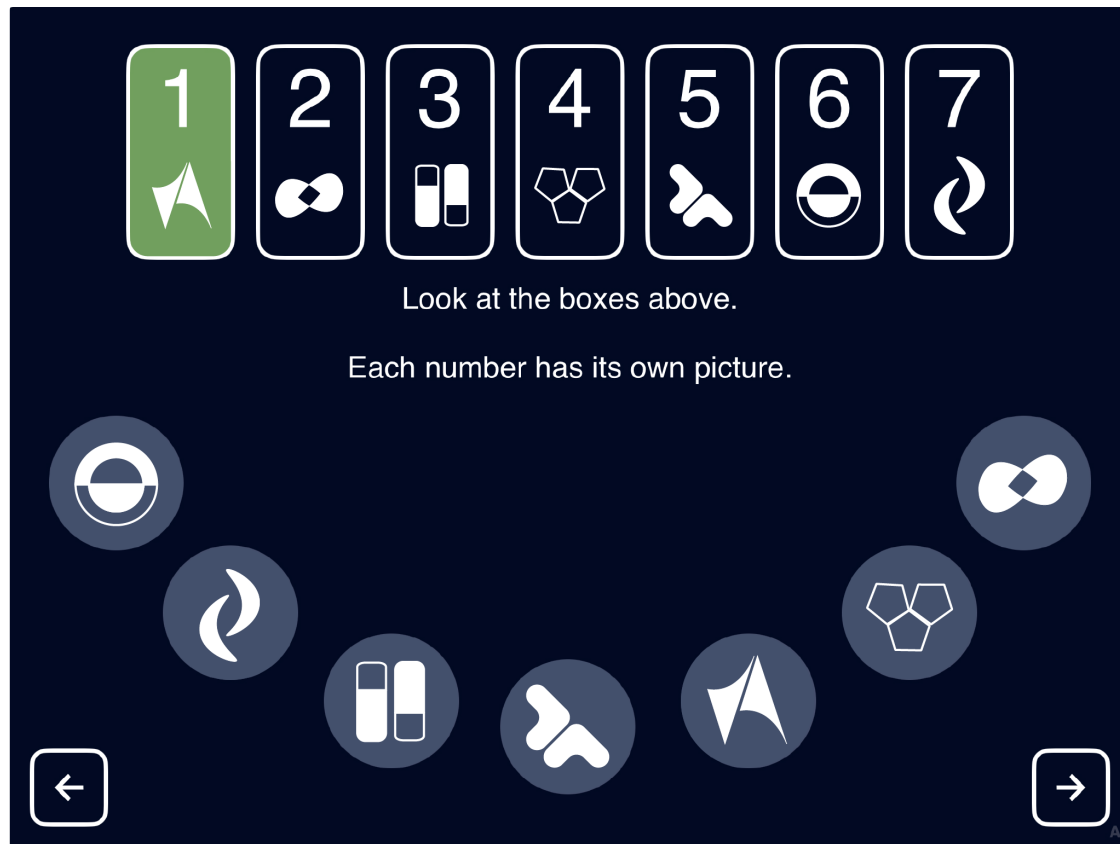
(executive function,
attention, and
processing speed)

1. Instructions
2. Practice Session
3. Task Session:
2 minutes,
as many correct
responses as
possible



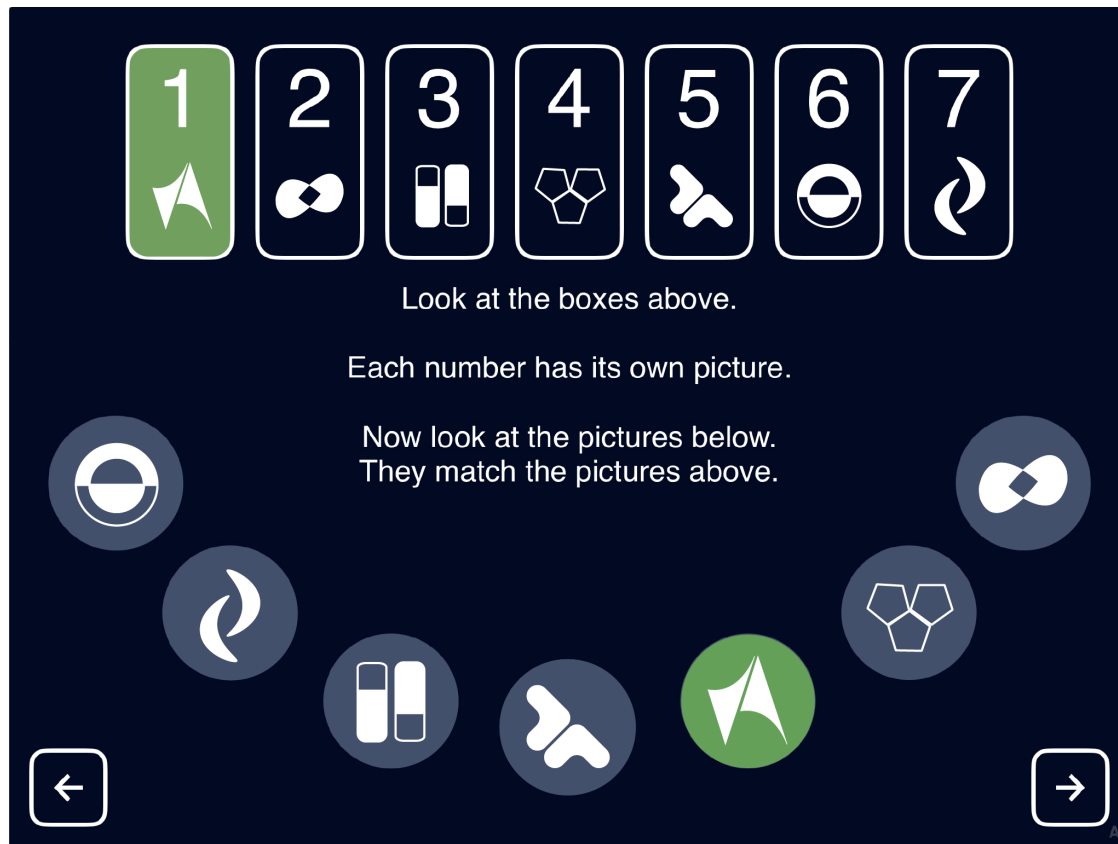
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Match

1. Instructions
2. Practice Session
3. Task Session:
2 minutes,
as many correct
responses as
possible



The interface is a dark blue rectangular area. At the top, there are seven numbered boxes (1-7) in a row. Box 1 is green and contains a white sailboat icon. Boxes 2-7 are white with dark blue borders and contain various icons: 2 has an infinity symbol, 3 has two vertical bars, 4 has three connected pentagons, 5 has a three-lobed shape, 6 has a circle with a horizontal line, and 7 has a circular arrow. Below these boxes, the text "Look at the boxes above." is centered. Further down, the text "Each number has its own picture." is centered. Below that, the text "Now look at the pictures below. They match the pictures above." is centered. At the bottom, there are seven circular icons arranged in a semi-circle. From left to right: a circle with a horizontal line (matches 6), a circular arrow (matches 7), two vertical bars (matches 3), a three-lobed shape (matches 5), a sailboat (matches 1, highlighted in green), three connected pentagons (matches 4), and an infinity symbol (matches 2). At the bottom left and right corners are square buttons with left and right arrows respectively. A small 'A' logo is in the bottom right corner.

1 2 3 4 5 6 7

Look at the boxes above.

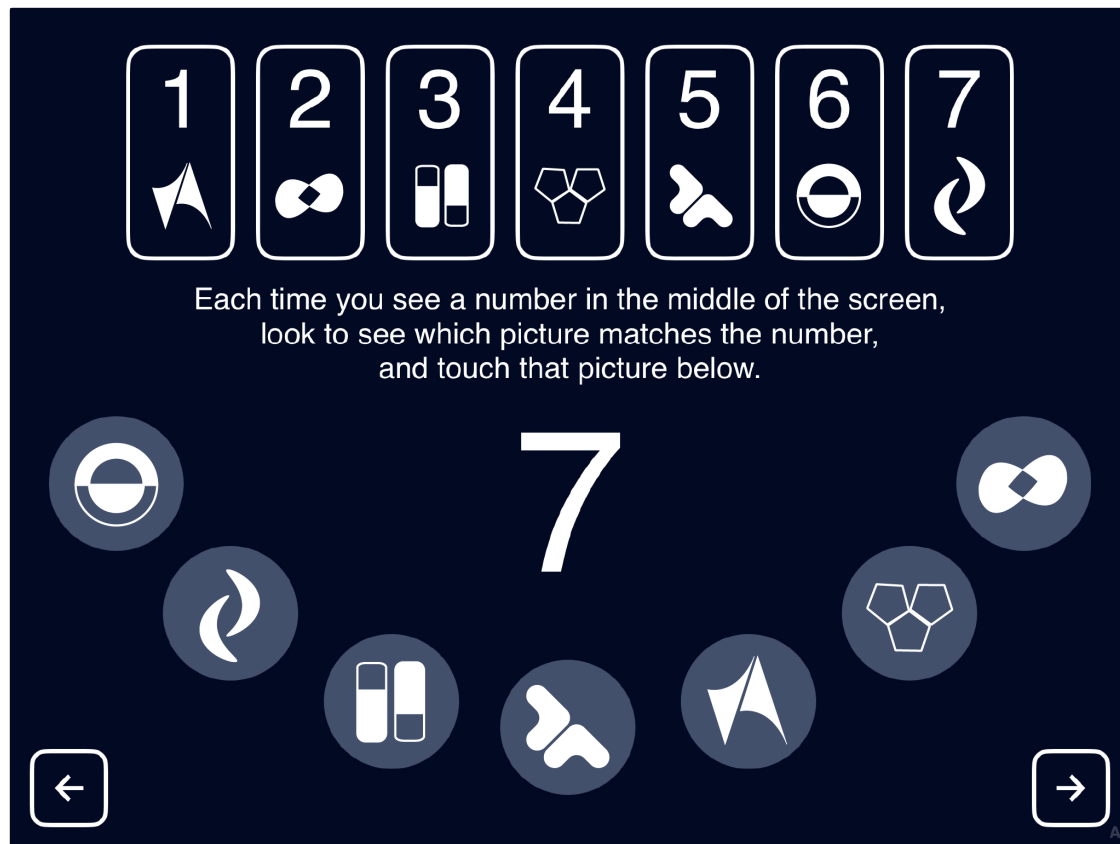
Each number has its own picture.

Now look at the pictures below.
They match the pictures above.

← →

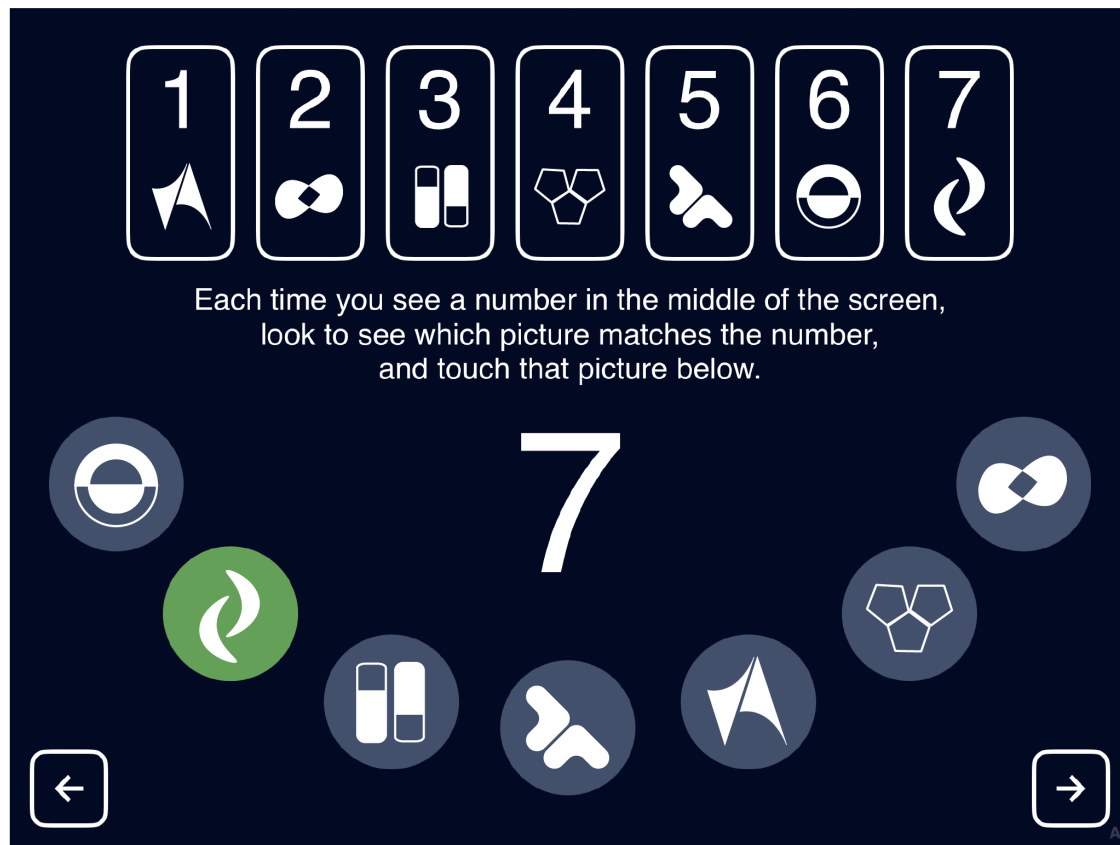
Match

1. Instructions
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2 minutes,
as many correct
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possible



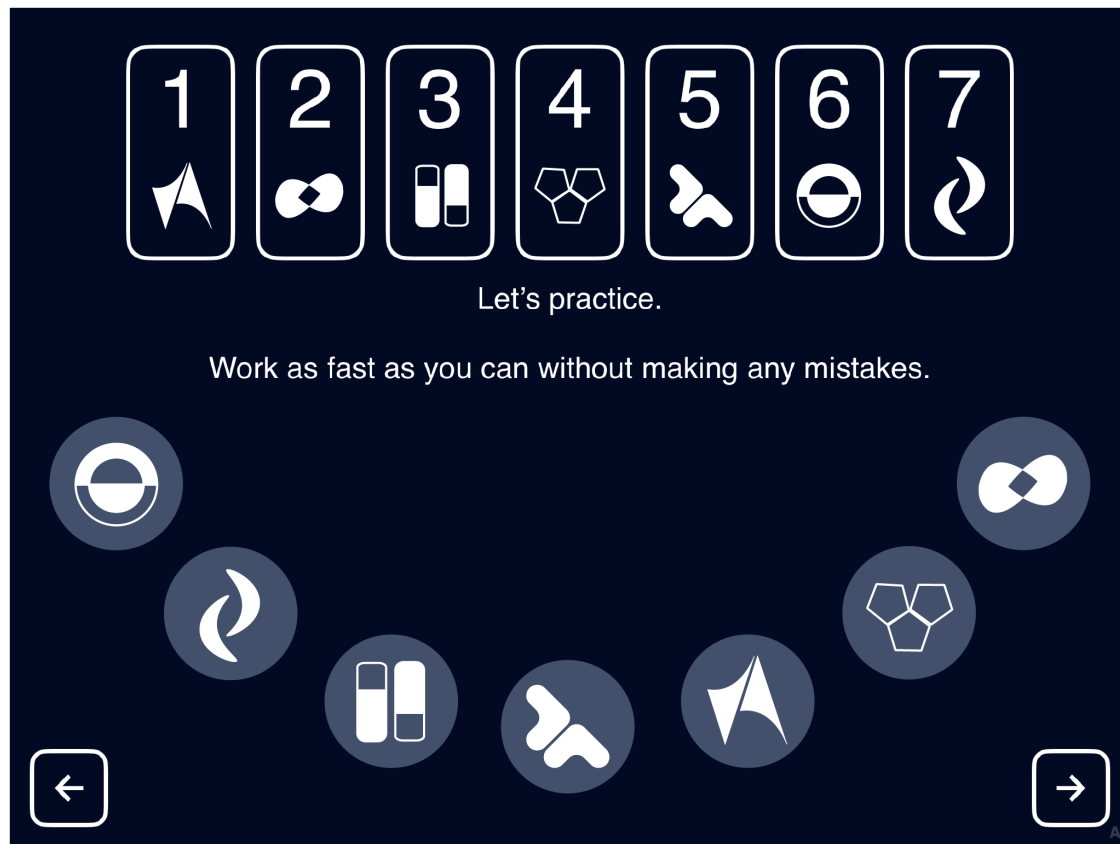
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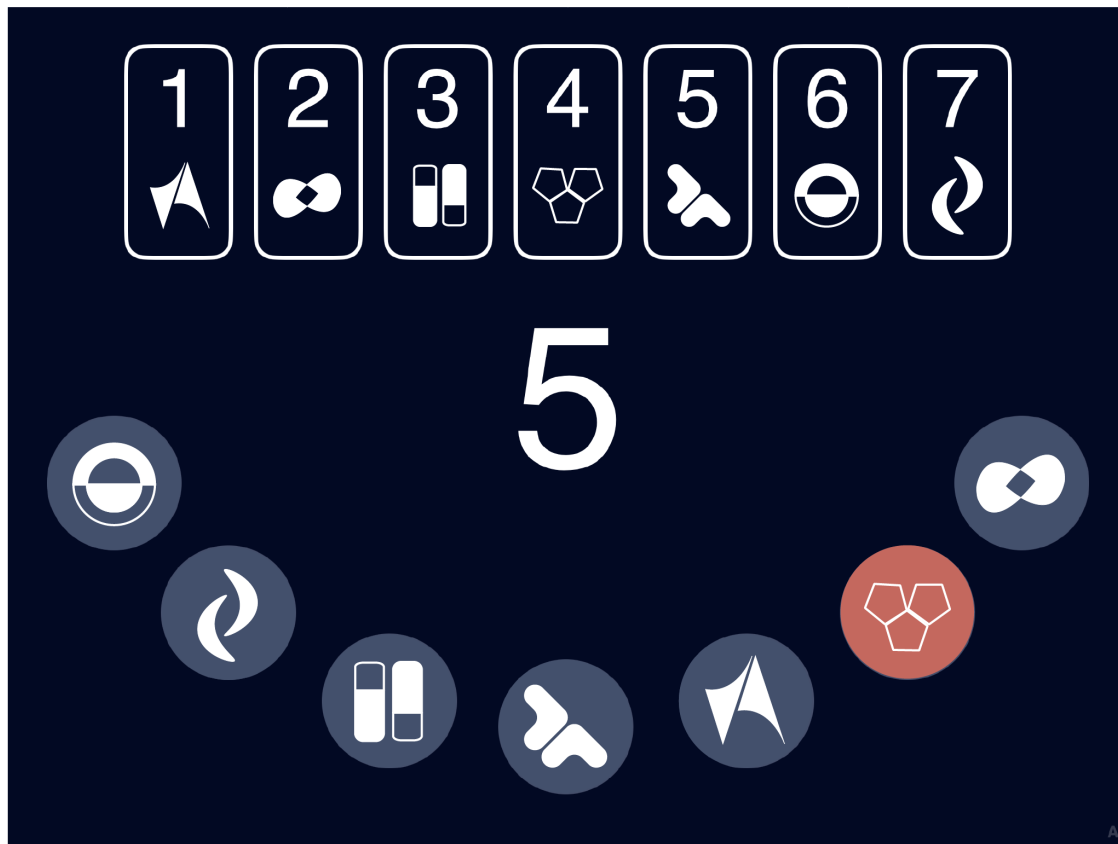
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2 minutes,
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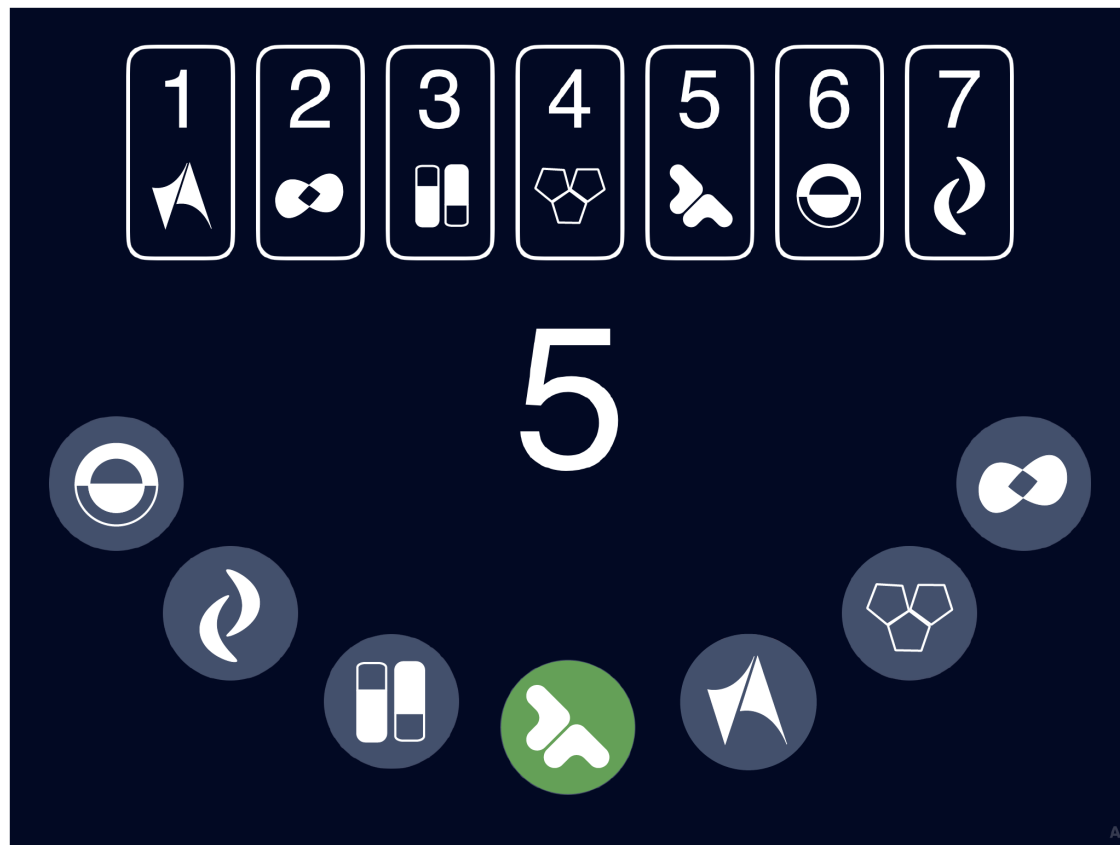
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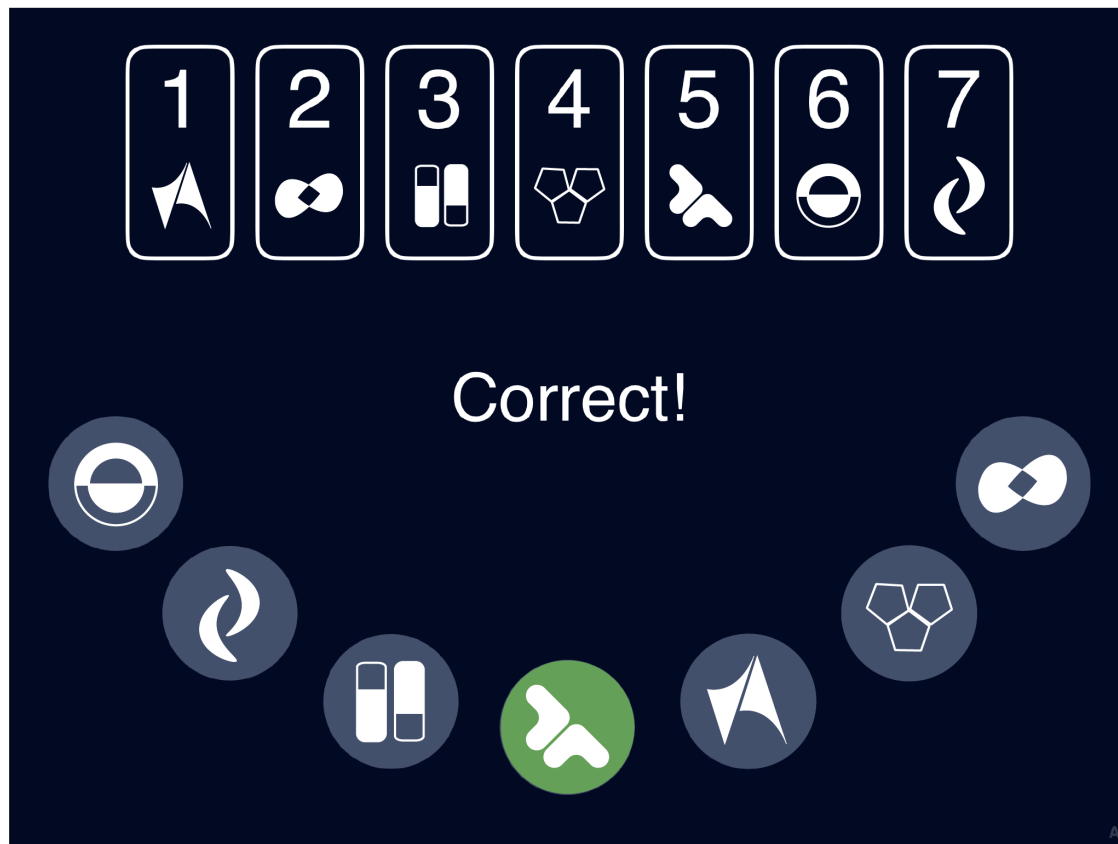
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1. Instructions
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3. Task Session:
2 minutes,
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Now we'll move on to the task.

You will no longer receive feedback after your responses.

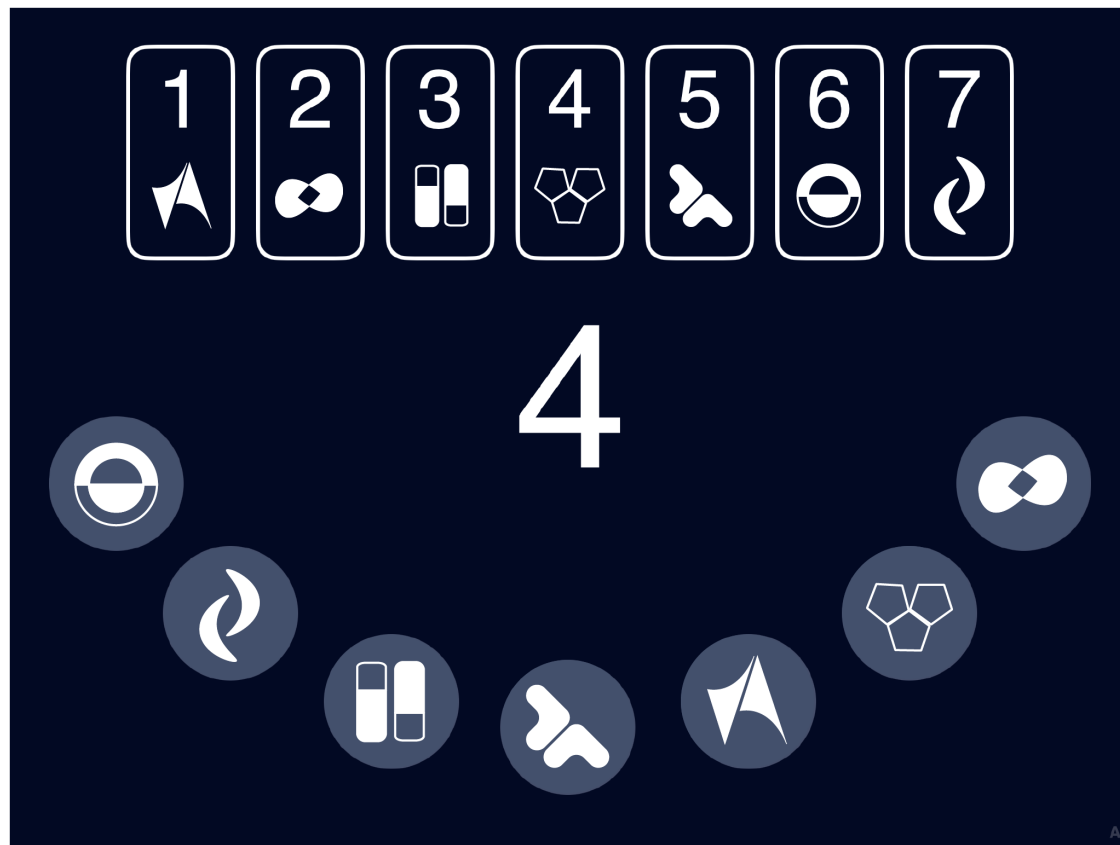
Work as fast as you can without making any mistakes.

Tap the “Begin” button when you are ready to begin.

Begin →

Match

1. Instructions
2. Practice Session
3. Task Session:
2 minutes,
as many correct
responses as
possible



Brain Health Survey

Informant-facing

1. Change in memory and daily function
2. Hallmark symptoms of atypical neurocognitive disorders
3. ECog-12 (Farias et al)
4. Delirium

UCSF Weill Institute for Neurosciences
Memory and Aging Center



These questions ask about the examinee. Please read each question carefully and check a box.

	Yes	No	I don't know
Have there been any changes in the examinee's memory or thinking skills?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does the examinee have difficulty doing something that they used to do easily (for example, cooking, hobbies, operating electronics/TV)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

We're looking for ways the examinee may have changed. Compared to 5 years ago, does the examinee:

	Yes	No	I don't know
Trip or fall more often?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seem unembarrassed after doing something others think is rude?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seem to see or hear things that are not there?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speak slower because it's hard for them to get words out?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have trouble moving their eyes or have a wide-eyed stare?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seem strangely unconcerned during a major life event (for example, job change or illness in family)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fail to understand words they used to know (for example, "Spatula? I don't know what that is.")?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get confused by the language while reading or watching TV?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Act out dreams while asleep (for example, punching, flailing arms in the air, making running movements, etc.)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

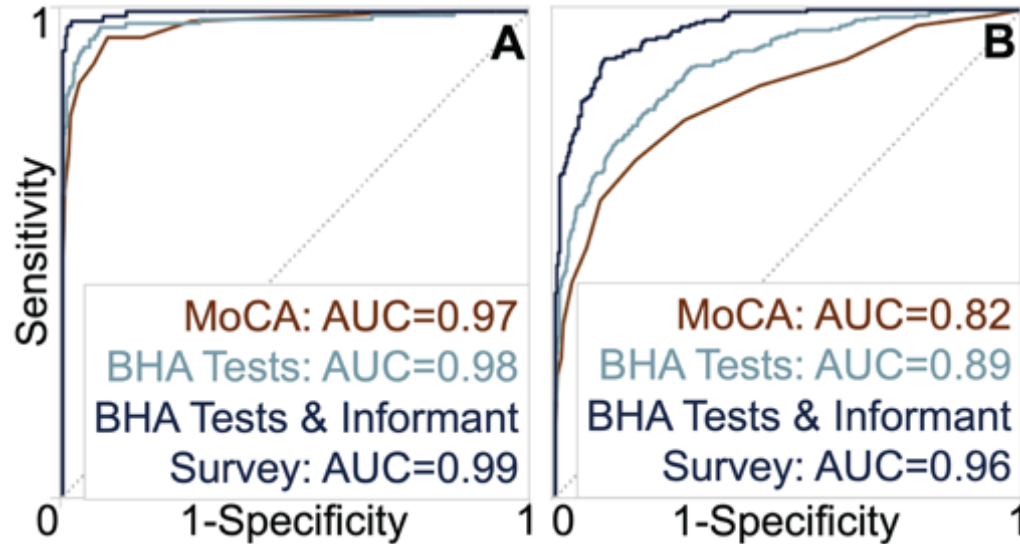
Brain Health Survey

Informant-facing

1. Change in memory and daily function
2. Hallmark symptoms of atypical neurocognitive disorders
3. ECog-12 (Farias et al)
4. Delirium

<i>Compared to 5 years ago, how much trouble does the examinee have:</i>	Better or no change	Questionable, occasionally worse	Consistently a little worse	Consistently much worse	I don't know
Remembering where they have placed personal items or objects?	•	•	•	•	•
Remembering the current date or day of the week?	•	•	•	•	•
Communicating or expressing ideas in a conversation?	•	•	•	•	•
Understanding spoken directions or instructions?	•	•	•	•	•
Difficulty calculating distances when driving or driving too close to another vehicle?	•	•	•	•	•
Finding their way around a familiar home?	•	•	•	•	•
Anticipating weather changes and planning accordingly?	•	•	•	•	•
Planning a trip, vacation, or outing?	•	•	•	•	•
Keeping living and work space (such as a home office, garage, or pantry) organized?	•	•	•	•	•
Managing bill payments?	•	•	•	•	•
Doing two things at once?	•	•	•	•	•
Working on a particular task while talking to someone at the same time?	•	•	•	•	•
<i>We would like to know if the examinee has had a sudden change in how they think or act.</i>			Yes	No	I don't know
In the past few days or weeks, has the examinee had a sudden change in how they think or act? For example, been unusually distractible or confused?			•	•	•

The TabCAT-BHA is near perfect at dementia detection, and highly accurate at MCI detection



Analysis based on 922 expertly diagnosed participants, tested in English or Spanish (466 controls, 332 MCI, 122 dementia)

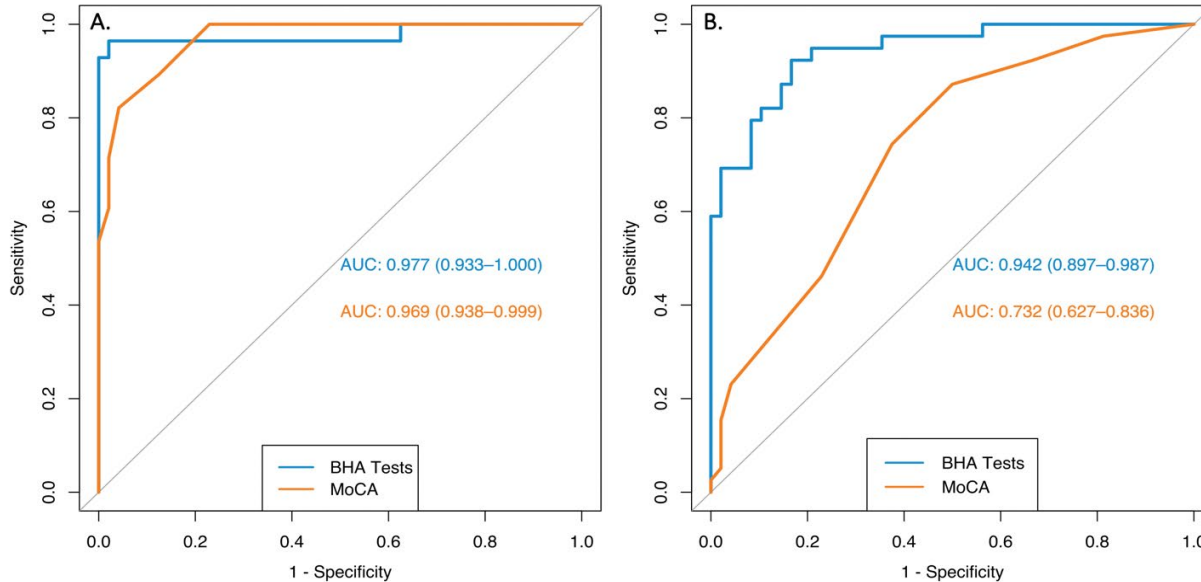
External Validation: Cuban sample: 53 NC, 46 MCI, 47 Dementia



Jorge Llibre



Ana Rodriguez Salgado



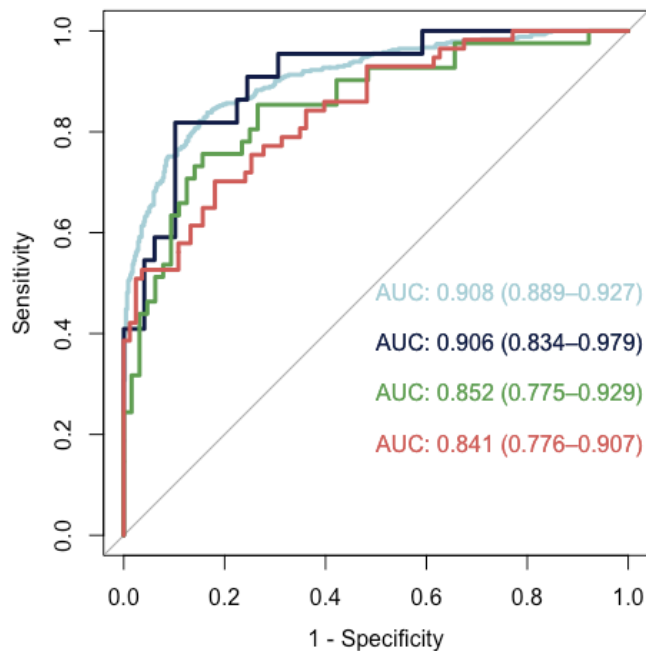
ROC curves showing discrimination between A) controls and individuals with dementia and B) controls and individuals with MCI based on the BHA tests and the MoCA

Accurate Detection in Race/Ethnic Minorities

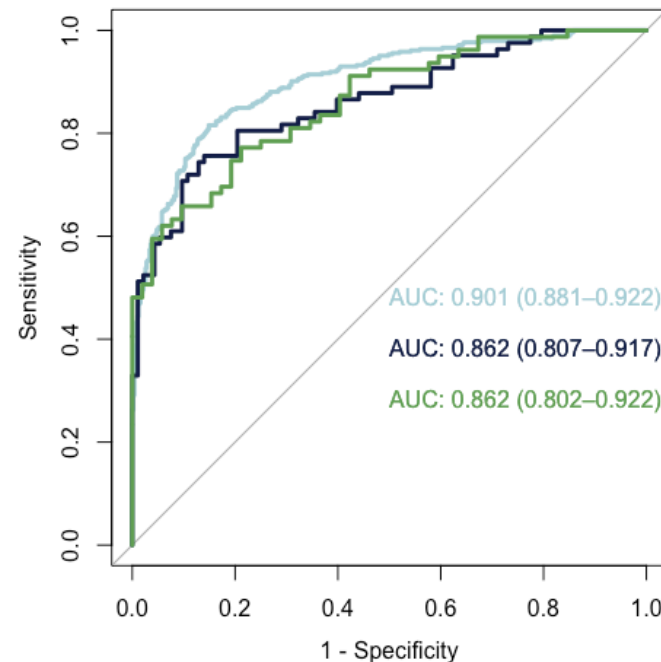


Elena Tsoy, PhD
Assistant Professor

US-based cohort (N = 1,195): 644 CN, 375 MCI, 176 dementia



- 879 White
- 105 Asian
- 71 Black
- 140 Latinx

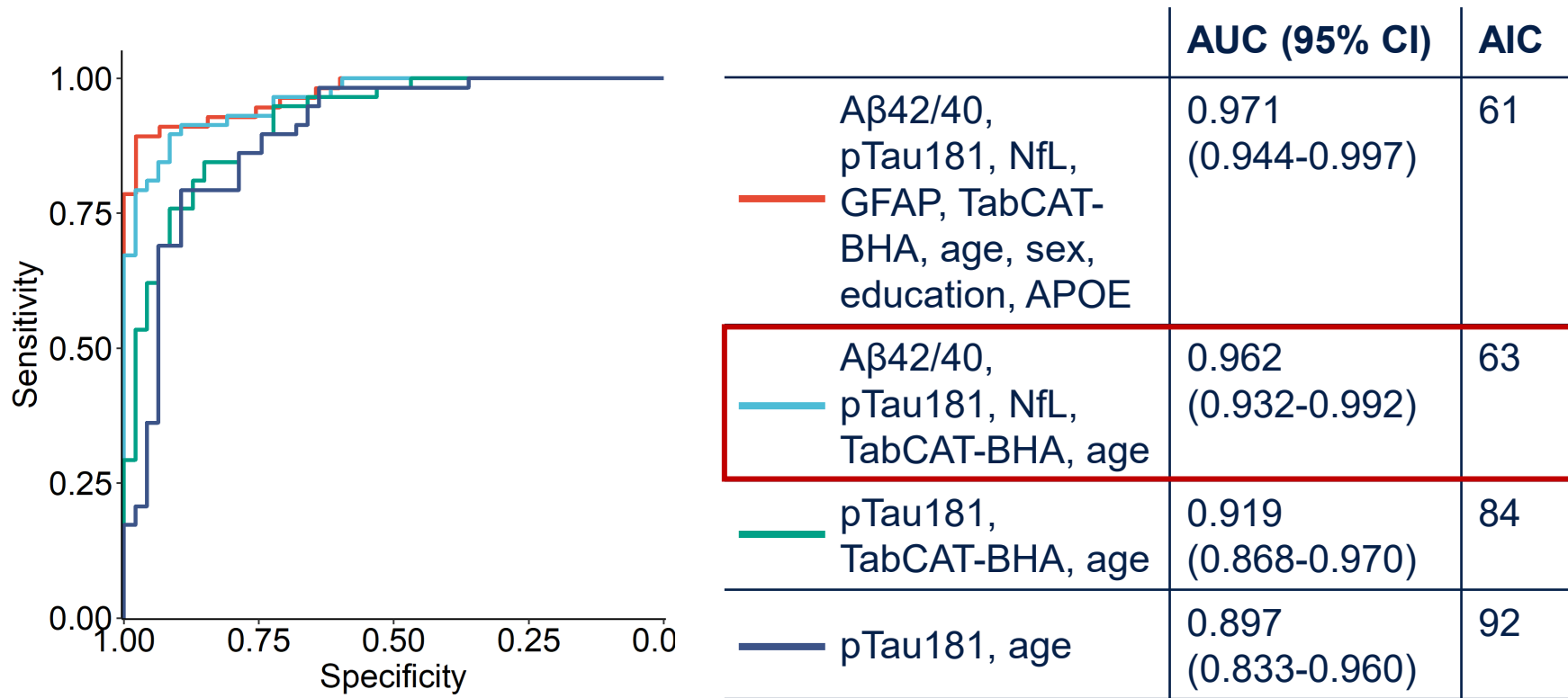


- 889 Education 16+
- 131 Education ≤12
- 175 Education 13-15



The future of diagnosis: TabCAT-BHA + plasma

predicting A β -PET in 309 older adults with cognitive impairment



TabCAT-BHA at UCSF Primary Care (Detect-CID Round 1)

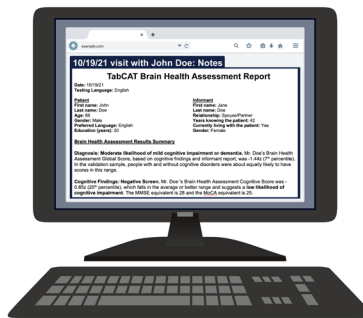
Primary Care Workflow for Detecting MCI and Dementia



1. Patient, relative, or care provider expresses concern



2. Patient completes the TabCAT-BHA with clinical staff



3. PCP reviews results and turn-key guidance in EMR



4. PCP evaluates, provides care, and orders referrals

TabCAT Brain Health Assessment Report

Patient Code: D
Date: 02/09/16
Testing Language: English

Patient
First name: Diana
Last name: Diamondback
Age: 60
Gender: Female
Preferred Language: English
Education (years): 14

Brain Health Assessment Results Summary

Diagnosis: High likelihood of mild cognitive impairment or dementia. The key differential between mild cognitive impairment and dementia is that in dementia, the deficits significantly interfere with independence in everyday activities. Her Cognitive Score was -5.91z (<1st percentile).

Mood Findings: Positive screen. Ms. Diamondback's PHQ-9 score was 15, which falls in the "Moderate to Severe Depression" range.

Next Steps

The 5-Step Dementia Workup is a tool designed to assist providers with evaluating brain health and diagnosing dementia. Your progress and next steps for completing this workup for the patient is summarized here.

Step 1. Identify concern. Complete.

- This evaluation was prompted by a memory or other cognitive concern expressed by the patient or someone who knows the patient well, or by your own observations.

Step 2. Evaluate for objective cognitive impairment. Complete.

- The patient has objective evidence based on the Brain Health Assessment Cognitive Score.

Step 3. Evaluate for treatable causes of the cognitive decline.

- Evaluate for delirium, sleep problems (e.g., apnea), medications, hypothyroidism, vitamin B12 deficiency, psychiatric conditions, substance use disorders, comorbid health conditions, and dehydration.
- Order laboratory tests for brain health, specifically CBC, CMP, TSH, Vitamin B12; possible HIV, RPR.
- If you think that the patient has cognitive impairment that is reversible, diagnose mild cognitive impairment (G31.84) or delirium (F05 or R41.0) and treat. Evaluate for cognitive impairment again following treatment, and then go to Step 4.

Step 4. Assess functional change to determine if a diagnosis of mild cognitive impairment or dementia is appropriate.

- Please conduct a clinical interview to assess the degree to which cognitive and behavioral changes interfere with everyday functions (e.g., paying bills, managing medications, shopping, working, driving).
- If the symptoms have no impact or a mild impact on everyday functions, then a diagnosis of mild cognitive impairment (G31.84) is appropriate.
- If the symptoms have a significant impact, then a diagnosis of dementia (F03.90 or F03.91) is appropriate.

Step 5. Disclose the diagnosis and start a care plan.

- Dementia and mild cognitive impairment are syndromic diagnoses and have many causes. While the cause is often neurodegenerative, this is not always the case. Many patients remain stable, and some experience recovery.
- Consider referral to a specialist to determine etiological diagnosis.
- Select from the resources below to give to the patient and family (e.g., print or paste URLs into an after-visit summary).

Resources for Patients and Families

A Patient's Guide to Mild Cognitive Impairment (PDF) and A Patient's Guide to Dementia (PDF) provide an overview of cognitive disorders and some community resources. Additional resources that may be valuable are the Alzheimer's Association, the Family Caregiver Alliance, and Prepare for Your Care.

Test Results by Cognitive Domain

Mr. Diamondback's Brain Health Assessment test results are as follows:

- Executive function and speed was low average (<1st percentile).**
- Memory was low average (<1st percentile).**
- Language generation was not assessed.
- Visuospatial was not assessed.

Domain: Test Name	Measure	Raw Score	Z-Score	Percentile
Memory: Favorites	Trial 1 (max = 8)	1	-1.64	5
	Trial 2 (max = 8)	2	-3.38	<1
	10 Min Recall (max = 8)	0	-4.29	<1
	Total Correct (max = 24)	3	-3.38	<1
	Recognition dPrime	0.67	-2.94	<1
Executive function and speed: Match	Total Correct	11	-6.17	<1
	Total Errors	2	—	—

All scores are corrected for age and animal fluency is additionally corrected for education. Persons in the normative sample all speak English and most have moderate to high education (12 or more years). Please see the TabCAT Interpretive Guide for details.

*Lower Threshold Raw Scores represent better performance. For all other scores, including all z-scores and percentiles, higher scores represent better performance.

Impaired scores are z-score less than or equal to -1.5 and percentile less than or equal to 7. Low average scores are z-score less than or equal to -1 and percentile less than or equal to 16. Average or better scores are z-score greater than -1 and percentile greater than 16.

Informant Survey Results

Ms. Diamondback does not have a completed Informant Survey.

TabCAT-BHA EHR Integration Options

- Direct via SmartLink
 - Requires institutional approval for entry of DOB & MRN into TabCAT
- Swivel Chair
 - Download report from tabcathealth.com
 - Upload, or copy/paste into the EMR

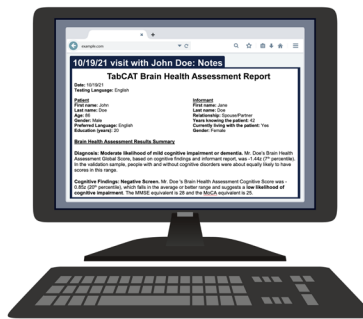
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Enhancing Turn-Key Recommendations



Our 5-step Dementia Work-up + Patient-Facing Educational Handouts are not enough

“My wife’s PCP told us she had dementia, gave us a handout on Alzheimer’s disease, and said there was nothing she could do.”

Family Advisory Council

The Family Advisory Council is comprised of family caregivers who care, or have cared, for persons with dementia.



Optional Nurse Consultation Following Positive TabCAT-BHA

BHC brain health consultation

Telephone encounter with a nurse

- *Answer questions about diagnosis*
- *Evaluate and address immediate needs*
- *Review workup to ensure completeness*
- *Provide education and community referrals*
- *Document findings and guidance for PCP*

- PCPs had the option to refer families for a BHC after diagnosis was completed.
- We found that all patients and care partners had questions or lacked understanding about the results and diagnosis.

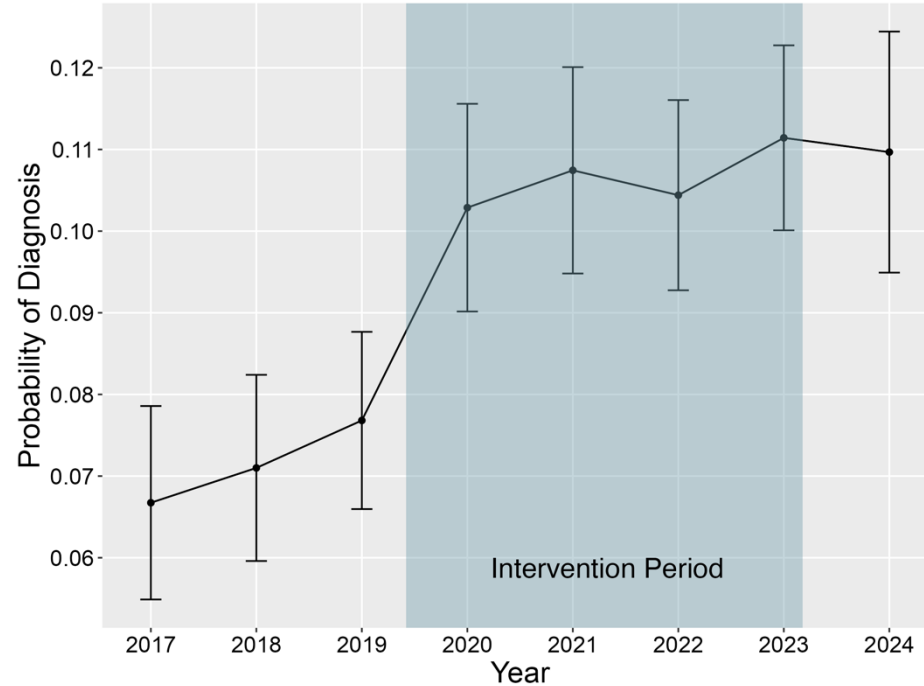
Demographic information of all patients over the age of 65 seen by Lakeshore Family Medicine PCPs during the intervention period

Patient Demographic Information	No. (%)
N	2,733
Gender	
Female	1530 (56%)
Male	1203 (44%)
Age	
Average	73.0
Median	71
Interquartile Range	10
Minimum to Maximum	65 to 100
Race and Ethnicity	
Asian	1129 (41.3%)
Black or African American	145 (5.3%)
Hispanic or Latino	232 (8.5%)
Native American or Alaska Native	3 (0.1%)
Native Hawaiian or Other Pacific Islander	33 (1.2%)
White	1039 (38.0%)
Other*	123 (4.5%)
Unknown or Declined	25 (0.9%)

The Effect of the TabCAT-BHA on Provider Diagnosis and Referral

- Providers increased their odds of diagnosing cognitive impairment or dementia by 72% (aOR 1.72, 95% CI [1.13, 2.62], $p = 0.01$).
- The effect of the intervention did not vary significantly among different race/ethnicity groups ($p = 0.49$).
- The odds of specialist referral increased as well but was not statistically significant (aOR 1.66, 95% CI [0.83, 3.324], $p = 0.15$).

Practice-wide effects at Lakeshore Family Medicine: Marginal probability of cognitive impairment diagnosis across time



Acceptability and Sustainability

- After the intervention, PCPs reported significantly higher confidence and reduced stress in diagnosing and managing dementia
- PCPs preferred TabCAT-BHA over traditional assessments (MoCA)
- TabCAT-BHA use spread to other clinics, and is now used at 5 UCSF primary care clinics

TabCAT-BHA at KPSC Primary Care (Detect-CID Round 2)

Kaiser Permanente Southern CA

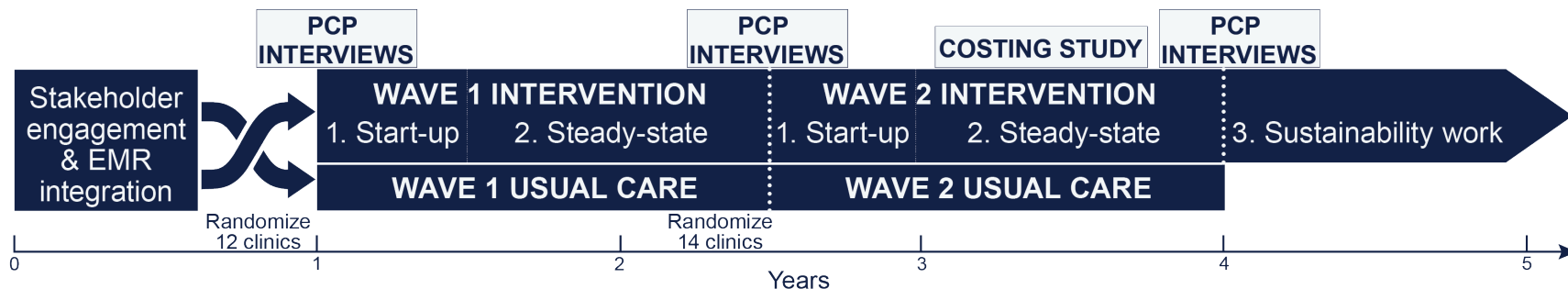
- Large integrated healthcare delivery system serving a diverse patient population throughout southern CA
- AD RD prevalence (5.5% > age 65) below populations estimates
- Nearly half of incident dementia diagnoses were made at a hospital encounter
- Of the 55% diagnosed as outpatients, when cognitive assessments were used, they indicated moderate stage AD RD



Huong Nguyen, PhD

Pragmatic Cluster Randomized Trial at Kaiser Permanente Southern CA

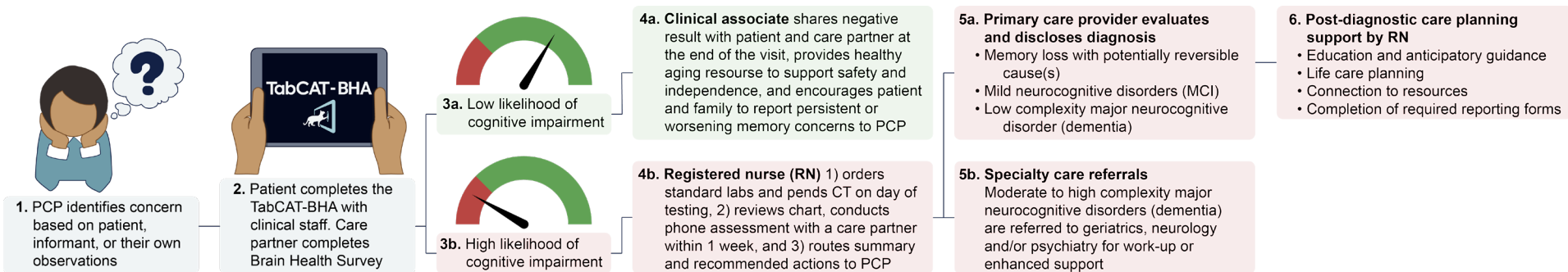
September 15, 2023 – September 14, 2026



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KPSC TabCAT-BHA Workflow



Important adaptations from UCSF workflow:

- **RN role is central** to the diagnosis and care planning
 - PCPs will not adopt the paradigm without nurse support
- RN schedules a **disclosure visit** for all impaired patients with PCP
 - Nudges the PCP to finalize the diagnosis and talk to the family about it

Threat to sustainability, if we can't sustain the RNs?

Example: RN EMR assessment summary and recommendations to PCP for a patient with probable low complexity dementia

Brain Health Assessment Summary

Patient Name: *** (88 year old female; 6 years of education, Spanish testing language)

BHA Date: 4/25/2024

Informant/Care partner: *** daughter.

PCP: *** (M.D.)

Chief Complaint: Memory problem

Summary: *** has a high likelihood of **major neurocognitive disorder (mild dementia, FAST Stage 4)** based on her performance on the cognitive tests and impairments in her daily function as reported by her daughter ***. **PHQ-9:** 3.

If you agree with this assessment, consider using new **dementia ICD-10 code = F03.90 (Major Neurocognitive Disorder due to unspecified disease)**

Action:

- ☐ Your patient is scheduled to discuss BHA results on 6/6/2024.
- ☐ Review labs and CT results below to identify any relevant treatable issues or causes.
- ☐ Please use these smartphrases for the f/u visit documentation and after visit summary (AVS)

Major Neurocognitive Disorder (Dementia) Disclosure Guidance and Documentation .BHADEMENTIAPCP

Major Neurocognitive Disorder Patient Instructions/After Visit Summary .BHADEMENTIAAVSSPANISH

- ☐ If patient/family need additional support post-diagnosis, message the Brain Health Nurse pool @ML BRAIN HLTH NRS SPEC

DETAILED SUMMARY

History: Patient reported worsening short term memory loss since 2020. She stated she has forgotten things people tell her like at Dr appointments so she has her family come so they can remember for her. She has lost her keys a few times.

IADLs: Daughter reported that patient requires assistance with IADLs and would not feel comfortable leaving the patient alone for a few days.

- **Medications:** Requires assistance. Sprycell MRAR is 43% (low adherence).
- **Driving:** Does not drive-relies on others now, e.g. attends senior center M-F. Got lost back in 2018 while on the bus. She ended up at a laundromat and asked a worker to call her family.
- **Shopping, meal prep, housekeeping:** Does not shop, relies on others; can prepare simple meals; needs help with laundry; able to keep house organized.
- **Finances:** Aware of social security earnings but cannot make bill payments.
- **Phone:** Able to make calls

Use phone	Shop	Prep Meals	Housekeeping	Laundry	Transport	Meds	Finances	Total
1	0	1	1	0	NA	1	0	5/8

Bathing	Dressing	Toileting	Transfer	Continence	Eating	Total
1	1	1	1	1	1	6/6

Note: 0 = Needs Assistance/Unable to Perform, 1 = Complete Independence, ? = N/A

- **BPSD:** Daughter reports that patient once in a while refers to a little girl that is near her and the patient states she hears and sees the shadow of the child. They don't argue with the patient but don't really know what to say about it either.

- **Care partner stress:** 2/5. Daughter cried when asked about her stress. She loves the patient very much and wishes the patient understood that she would do anything for her and the family just wants her to be safe and happy. She is upset and how much the patient will state she is "useless" or "her life is almost over".
- **Living situation:** The patient lived with daughter a few months back but was not happy and wanted her independence and is currently living in her own home though daughters visit daily.

CT RESULTS

CT HEAD NO CONTRAST 5/12/2024

Ventricles and sulci are unremarkable for age.

No acute ischemia/infarction or intracranial hemorrhage.

Moderate white matter changes, similar to prior.

No intracranial mass or mass effect.

IMPRESSION:

No significant abnormality or interval change from prior.

RECENT LABS

Lab Results

Basename	Value	Date
WBC	7.4	04/25/2024
RBC	4.28	04/25/2024
HGB	13.4	04/25/2024
PLT	214	04/25/2024
K	3.3 (L)	04/25/2024
NA	143	04/25/2024
CL	106	04/25/2024
CO2	27	04/25/2024
RBS	90	04/25/2024
CA	9.2	04/25/2024
CR	0.54	04/25/2024
ALB	4.3	04/25/2024
TSH	0.80	04/25/2024
B12	390	04/25/2024
FOLATE	9.5	04/25/2024
HIV	Nonreactive	04/25/2024

DETAILED BRAIN HEALTH ASSESSMENT (BHA) RESULTS

Test date: 4/25/2024

Examiner: xxx

Testing language: Spanish

Overall Assessment Results: High likelihood of cognitive impairment. Ms. ** Brain Health Assessment Global Score, based on the cognitive test findings and informant report, was -7.35z (<1st percentile). The MoCA equivalent is < 23 based on the cognitive test findings.

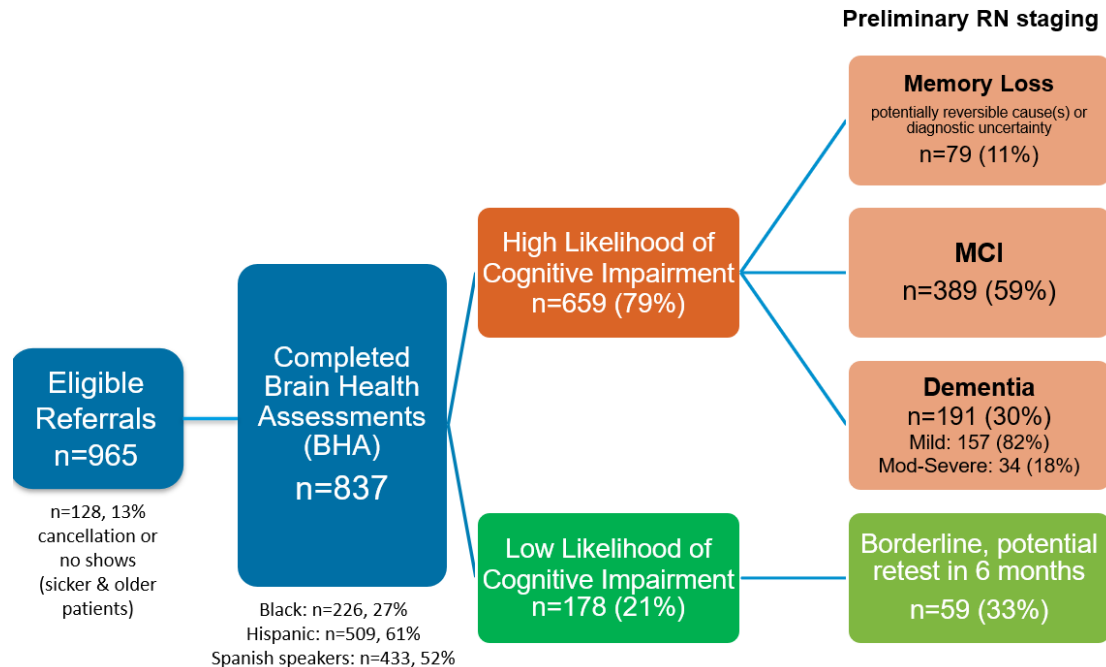
Functional impairment: High likelihood of significant functional impairment. Ms. ** informant endorsed significant functional impairment that is likely interfering with everyday activities (ECog-12 mean = 3.25). The presence of cognitive impairment with significant functional impairment (e.g., trouble paying bills, managing medications, shopping, working, driving) suggests dementia. Dementia and mild cognitive impairment are syndromic diagnoses that exist on a continuum and have many causes.

Delirium Findings: Negative Screen. Ms. ** informant denied a sudden change in how Ms. ** thinks or acts (over days or weeks), which suggests delirium is unlikely.

Test Results by Cognitive Domain

Ms. ** Brain Health Assessment test results are as follows:

KPSC Wave 1 Experience



How should diagnostic pathways be initiated?

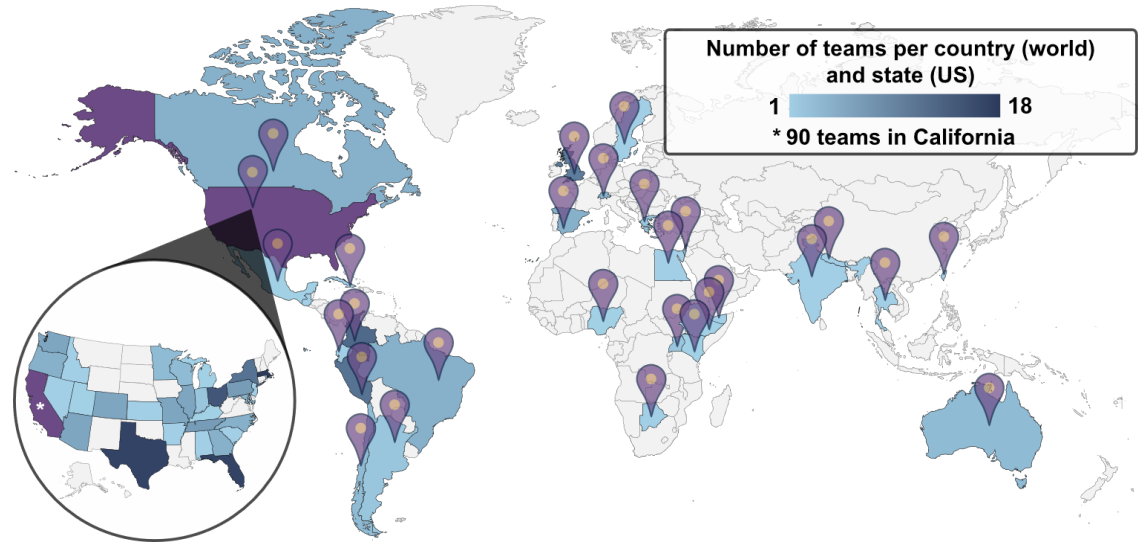
- Screen everyone with cognitive tests (IU Choice Trial)
 - USPSTF says insufficient evidence

How should diagnostic pathways be initiated?

- Screen with 3 questions about cognitive concerns (Verghese – Boustani – Fowler)
 - 9,074 screened, 3,682 endorsed, 3,002 tested.
 - We don't know yet how many screened positive or were diagnosed.
 - Opportunity to identify many true cases, but also likely to require evaluation of many true negatives, and may result in higher false positive rate
- Based on a concern that emerges from a primary care encounter (TabCAT-BHA)
 - 965 referred, 837 completed (87%), 79% positive on TabCAT-BHA, RNs recommended MCI or dementia diagnosis on 89% of those who tested positive
 - The 965 represents only about 2-3% of the 65+ population
 - Expect many missed cases, but high rate of true positives among those tested

Scaling the TabCAT-BHA & Brain Health Consultation

TabCAT Around the World



Since TabCAT3.0 launched in 3/2022: **31,850 encounters completed**

- 27,500 research encounters for 164 research projects
- 4,350 clinical encounters at 40 clinical sites
- EPAD, ALLFTD, LEADS, 25 ADRCs, GBHI

Support for Primary Care Practices

Future direction??

- Build a Brain Health Consultation Guide
 - Training for MAs, nurses, and PCPs
- Offer free consultations to primary care practice innovators
- Facilitate collaborative learning sessions for primary care champions
- Continue to optimize the TabCAT user experience and provide it free of charge to primary care



Cognitive Assessment in Diverse Populations Interest Group



REDUCING THE SCALE AND IMPACT OF DEMENTIA WORLDWIDE



APPLY NOW!

arts · economics · journalism · law · policy · sciences · & more

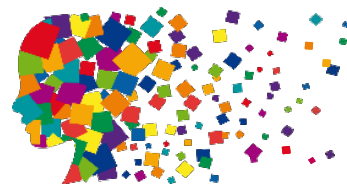
How do I register for the ADRD Summit?

Registration link can be found at:

<https://www.ninds.nih.gov/news-events/events/adrd-summit-2025>

Virtual meeting on April 29, April 30, and June 2

Opportunity to provide comments after each session.



Alzheimer's Disease-Related
Dementias Summit 2025

Thank you TabCAT Team and Collaborators!

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Cognitive Assessment in Diverse Populations Interest Group

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