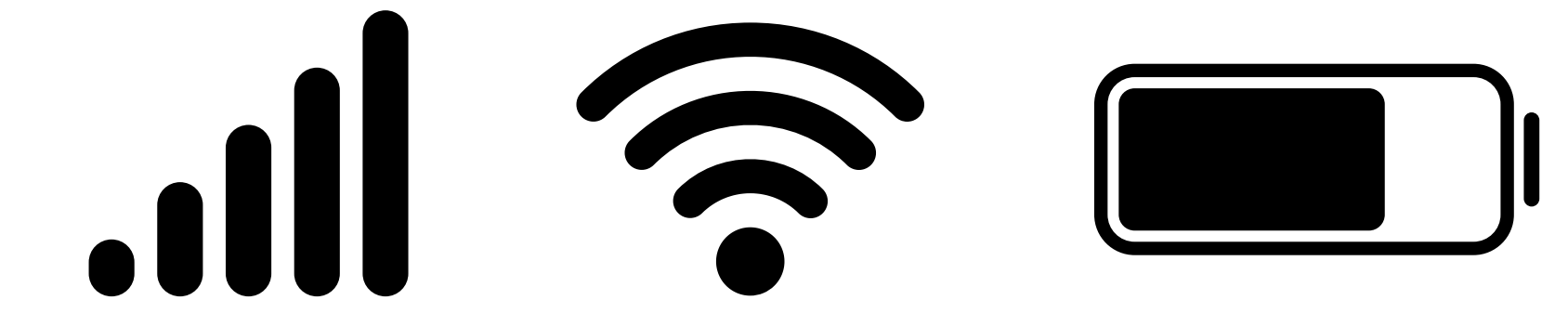


4:33



CO-DESIGNING ALIVIADO CAREGIVING: AN AI-POWERED MOBILE APP FOR SUPPORTING CARE PARTNERS IN MANAGING BPSD



Ab Brody, PhD, RN, FAAN¹; Moroni Fernandez Cajavilca, MS, BSN, RN¹; Shih Yin Lin, PhD¹; Kimberly Hom, MPA¹; Denise Lawson, MBA²
¹HIGN, New York University Rory Meyers College of Nursing, New York, NY; ²POP Services, Inc., White Plains, NY
 PennAITech AD/ADRD Focus Pilot Core

Background

- Care partners (CP) of persons living with dementia (PLWD) face complex caregiving responsibilities
- CPs lack access to evidence-based non-pharmacological interventions and decision support for behavioral and psychological symptoms of dementia (BPSD)
- Mobile health interventions offer promising solution to aid CPs in daily management of BPSD

Pilot Project Highlights

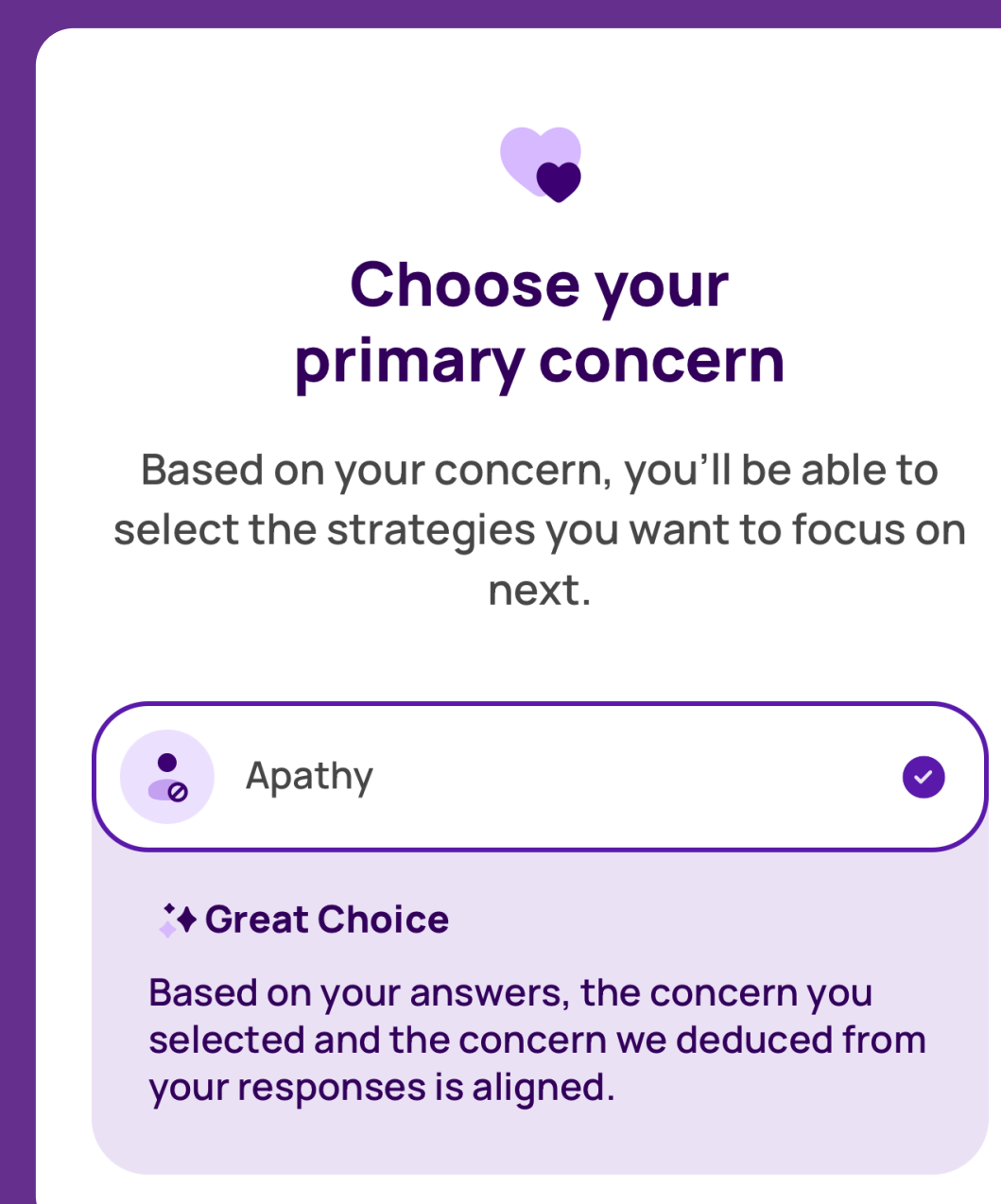
- Developed 8 member CP Advisory Board
- Two focus groups & eight interviews to co-design and iteratively refine app
- Conducted reflexive thematic analysis, we identified four qualitative themes:
 - 1) User-interface design preferences and suggestions,
 - 2) User-Friendly Language,
 - 3) User-Concern Prioritization
 - 4) Future Application Features

Implications/Conclusions

- 8 CP advisors pre-tested the app for 4 weeks, reporting high satisfaction and providing recommendations for caregiver-friendly app instructions
- Partnering with diverse CPs improved our ability to enhance the acceptability and usability of the app for future testing
- NACC data is a rich source for predictive algorithms regarding AD/ADRD characterization and meaningful predictive nudges was found to be acceptable by our CP advisory board

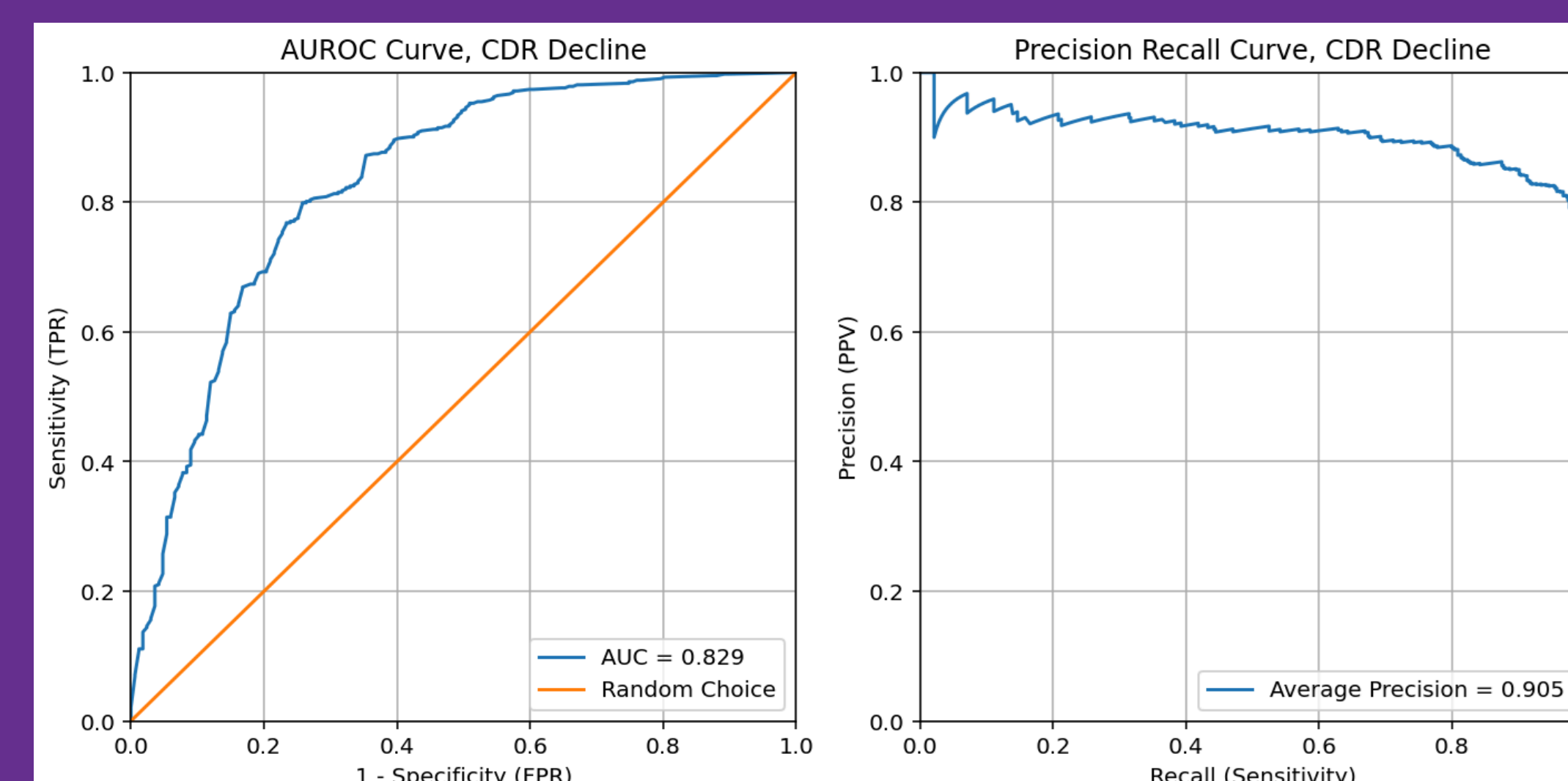
Objective

Development of a precision heuristic machine learning algorithm and human-centered design of Aliviado Caregiving, a mobile health application designed to support CPs' self-management and prioritization of BPSD

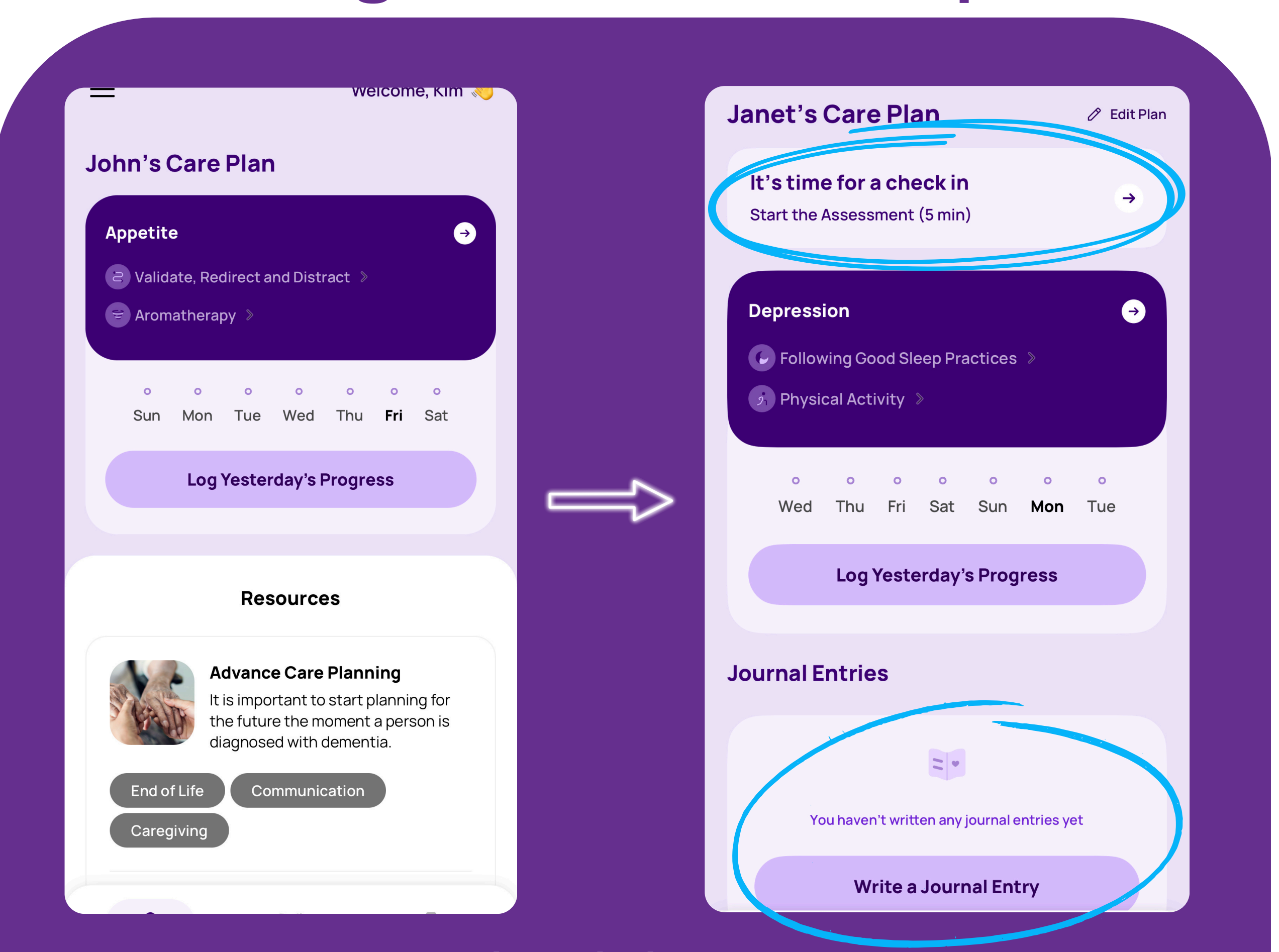


Pilot Project Highlights

Used the NACC Uniform Data Set to create an XGBoost model of symptom to cognitive decline, trained it on 2360 patients (80% of the final cohort) and testing it on 590 patients (20%)



Design Revisions Example



Acknowledgements

PennAITech - National Institute on Aging grant P30AG073105
 New York University Discovery Research Fund for Human Health