HOW CAN THE MYCOGNITIONPRO HOLISTIC DIGITAL HEALTH PLATFORM FOR MONITORING AND PREVENTING COGNITIVE DECLINE BE SUCCESSFULLY IMPLEMENTED INTO THE REAL-WORLD CONTEXT OF PEOPLE EXPERIENCING COGNITIVE DECLINE?

Methods

Mixed methods feasibility trial:
- Likelihood app can be used effectively (usability/experience data)
- Likelihood app can be implemented successfully (contextual data)

Participants (n=20):
- Over 50 years experiencing cognitive decline
- Diagnosed early-stage (MCI), mild dementia

Experience evaluation

Think aloud observation and semi-structured interviews captured qualitative data as the participant engaged with each part of the platform.

Engagement period

Participants asked to take MyCQ assessment once per week and play the AquaSnap training game for 15 mins per day (at home). Quantitative platform engagement & performance data was captured.

Onboarding evaluation

Think aloud observation and semi-structured interviews captured qualitative data as the participant was guided through how to download and use the MyCognitionPRO platform.

Qualitative results

Earlier identification & intervention
- Improved clinical monitoring
- Contextual needs
- Approachability
- Thematic map

Engagement
- Usability
- Content clarity
- Onboarding
- Support needs
- Effortful use

Quantitative Results

Performance

Usage patterns

Adherence

- 68% of participants diagnosed with CD took the MyCQ assessment weekly
- Compared to 80% of those experiencing subjective cognitive decline

- Participants with diagnosed cognitive decline used AquaSnap longer (16 ± 5.5 mins)
- Compared to those with subjective decline (10 ± 4 mins)

Conclusion

At present, the apps work best as a preventative, self-management tool for people experiencing subjective cognitive decline. The apps require significant developments to meet the needs of older people experiencing cognitive decline. This is summarised in the user-centred product roadmap.

User-centered product roadmap

Development track
- Onboarding
- MyCQ assessment
- AquaSnap training game
- New service model

Activities required to achieve growth opportunity
- Alleviate pain points (login, multiple apps, instructions)
- App demo/walk-through
- Push notification planning system
- Update age & diagnosis standardisation norms for scoring algorithm
- Improve visual clarity
- Reduce speed of tasks
- Validate against standard clinical assessments (MoCA, ACE-III, MMSE)
- Improve adaptability of task speed and difficulty (MyCQ & ongoing performance data)
- Improve progression reports
- Increase game/stimuli variety
- Improve mindfulness/relaxation element
- Shorten training loops
- Encourage private groups: parallel login and group-based reports
- Incorporate social engagement: allow sharing
- Operational advice/CPD webinars for group-based delivery

REFERENCES