EFFECT-AD
Everyday Frequent Functional Evaluation with Crosscutting Technology for Alzheimer’s Disease
We will transform the effectiveness of our ADRD research (and ultimately clinical care and support) by changing the way we assess function.

Using home-based activity sensing and experience sampling will:

• Provide continuous, objective, measures of everyday function
• Accelerate the development of new therapies reducing sample sizes or time to complete trials. This saves time and money.
• Increase accessibility and equity in our research as this person-specific functional assessment can be deployed widely outside of clinic-based settings.
OVERVIEW

Location, Activity & Life Events Define Function

- **Location, Activity & Life Events**
  - Define Function
  - Online Queries Answered
  - Life & Health Events Tune Outcomes

- **Motor Function**
- **Sleep**
- **Cognitive Function**
- **Social Interaction**
- **Activity Level & Sleep Location**
- **Beacon RSSI**

**Activity Count**

**Activity Level & Sleep**

**Activity Outdoors**

**Kitchen Activity**

**Bathroom Activity**

**Bedroom Sleep**

**Living Room Activity**

**Bracelet Sensors + BT Beacons Generate**
**OVERVIEW - The Team**

A collaborative team with decades of experience deploying technology in clinical studies of ADRD

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FEASIBILITY

WHY THIS IS ACHIEVABLE

• Our remote functional assessment paradigm - proven scalable in >25 ADRD relevant studies including in ADRCs; deployed to thousands of participants including URM
• This experience has provided ready templates for rapid multisite start-up (IRB approvals, contracting, training etc.) and protocols for sustainable follow-up.
• Panoramic system is successfully deployed globally (USA, Europe, Africa).

• **Aim:** To affirm feasibility of adopting our objective functional assessment paradigm using the PDH system across ADRCs
• Our stringent feasibility test - deploy in diverse populations:
  o Low-income older adults with/at risk for MCI
  o bvFTD
  o Mexican American older adults with DLB

https://www.linkedin.com/pulse/elderly-bath-chairs-market-size-assessment/,2024
SCALABILITY

• Urgent Need – Developing Meaningful Therapies – A Substantial Global Market
  o Initial target: clinical research including clinical studies of new therapies.
  o Second market: patient management / personalized treatment / risk management.

• Scale-up
  o Remote assessment paradigm - Easily Deployed
  o Approach already in 5 ADRCs + in PDH studies globally
  o Relevant business expertise:
    ▪ Rapid manufacture ramp up.
    ▪ Clear regulatory path for the DHT to support drug development to medical device; FDA QMS and documentation in place.

• Sustainability
  o Unlike with consumer devices, data transparency and access to raw data enables a device agnostic approach.
EFFECT-AD
Everyday Frequent Functional Evaluation with Crosscutting Technology for Alzheimer’s Disease

THANK YOU!

University of California San Francisco