“This could be the answer to my problems!”: Feasibility and acceptability of ingestible sensors for medication adherence in dementia

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Background

- Older adults with cognitive impairment can face challenges with medication adherence.
- Medication non-adherence leads to higher healthcare costs and higher rates of hospitalizations.
- ID-Cap is a digital technology designed to monitor and intervene upon medication adherence.
Current ID-Cap Operation
Objective

To determine the **feasibility** and **acceptability** of a new ingestible digital technology in caregiver and care recipients.
Methods

- Population: Older adults 65+ with mild cognitive impairment
- Recruitment via flyers and community health events
- 30 minute semi-structured interviews
- Unified Theory of Acceptance and Use of Technology
- Framework analysis to identify emerging themes
Results

● Most expressed openness to using ID-Cap while others had safety and ethical concerns
  ○ "And I have no problem with the fear of being tracked. If they track me, they're going to get bored"
  ○ "When I saw that thing hanging on the wall, I thought, "This could be the answer to my problems""
  ○ "My only concern is the health side of ingesting something else."

● Both expressed willingness and ability to receive smart device notifications

● Small pill size, portability, endorsement by clinicians, and additional clinical studies to support safety would enhance uptake
Significance & Next Steps

● Care recipients and their caregivers were willing to use the ingestible sensor.

● We plan to use these findings to plan a clinical trial that can address concerns surrounding safety, privacy, and ease of use.
Thank You

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