**Introduction**
- Dementia is associated with loss of memory
- Older adult often lose ability to accomplish everyday task
- Living alone becomes more and more difficult

**Methods**
- Conducted literature review
- Conducted 30 minute in situ interview
- Administered online (email) interview
- Analyzed data
- Developed several design ideas
- Designed technology
- Rendered final design using Autodesk Inventor 2014

**Participants**
- 1 older adult living alone in an assisted living facility
- 2 caregivers (Daughters of primary participant)

**Design Requirements**
- Needs noiseless alerts
- Needs to remind her of the day
- Need to remind her of morning/evening
- Capable of notifying distant caregivers
- Capable of keeping an updated log of pills taken
- Has ability to set reminders

**3D Prototype**
- Displays day in color corresponding to morning/evening
- Colored mats for pill boxes corresponding to morning/evening
- Mat sends time stamp to database when medication is taken
- Mat sends notification to distant caregivers when medication is taken

**Results**
- Older adult takes pills twice a day
- Caregivers refill the participant's pill boxes twice a week
- Older adult has difficulty remembering what day it is
- Caregiver don't know when/if older adult takes medication
- Older adult does not like loud noises
- Older adult does not like being interrupted during a task

**Conclusion**
- Our participant had trouble remembering to take her medication and what day it was
- Her daughters worried because they didn't know when/if she took her medication
- First part of our design displays the day in a color that corresponds with which medication to take
- Second part is a mat that sends a notification to her daughters when the pill dispenser is placed back on the mat

**Future Work**
- Build working prototype
- Test prototype in situ with older adult and caregivers
- Document any changes
- Build more devices
- Continue testing on a larger scale

**Participants**
- Ginger White, Participants, Prof. David Crandall, Nathan Potts