

Honeywell's Independent LifeStyle Assistant™ (I.L.S.A.)

Florida Participant Reactions

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Background

- i Partnership with Industry
 - ñ To study the use of home monitoring technology to promote independence among the elderly
- i The RERC-Tech-Aging beta tested ILSA in the homes of elders in Florida.

Florida Project Sample

Goal:

- i Select a convenience sample of 10 elders from the RERC-Tech-Aging Consumer Assessment participant pool
 - ñ 310 frail elders living in North Central Florida
 - ñ Have at least one ADL deficit

Florida Project Sample

- i ILSA inclusion criteria
 - ñ Living alone
 - ñ MMSE > 24
 - ñ Access to high speed internet service
 - ñ Agreement of participation from a family member/caregiver

Florida Project Sample

- i Of 10 consenting elders, 4 withdrew prior to the installation process

- i Two withdrew during the installation process

Florida Project Sample

- ï Difficulty with recruitment
 - ñ Procedure sounded too invasive
 - ñ Difficulty understanding the technology
 - ñ No willing family/caregiver involvement
 - ï Participant often felt it would be an imposition
 - ñ Fear of impending cost
 - ñ Fear that someone is watching

N=4

| | |
|---------------------------------------|-------------------|
| Mean Age 3 Female 1 Male | 70 (56-76) |
| Mean MMSE | 28 (27-29) |
| Mean # Medications | 5 (1-8) |

Florida Project Sample

- i Types of Impairments
 - ñ Diabetes
 - ñ Arthritis
 - ñ Asthma
 - ñ Depression
 - ñ Thyroid Disorder
 - ñ Thalassemia
 - ñ Hypertension

Caregiver distribution

Participant 1: Son

Participant 2: Two sons (twins)

Participant 3: Daughter

Participant 4: Friend/neighbor

Qualitative Review

- i A semi-structured focus group was conducted to assess participant reactions to the ILSA system

Reaction Categories

- ï Initial Reactions
- ï Perceived need
- ï Changed behaviors
- ï Communication with family/caregiver
 - ñ Type of communication

Reaction Categories

- i Participant monitoring
- i System control
- i Device Recommendations
- i Caregiver reactions

Initial Reactions

- i ì Excitement, it sounded important for people, and it has to get started somewhere.î
- i All participants expressed little concern about the installation process

Perceived need

ï All said yes

ñ ì I have a hard time remembering to take my medicationî

ñ ì I live alone; it would be nice to know someone is keeping an eye on me (in a sense)î

ñ ì It would be good for my family to have contact or receive informationî

ñ ì I recently got out of the hospital, it would be good to have someone checking on meî

Changed behaviors

- ï ì I pay more attention to my medicationî
- ï ì I don't like being confined to a routineî
- ï ì I had to remember to turn it on and offî

Communication with family/caregiver

- ii ì It increased communication between me and my family; they called all the time when they would get messages that I haven't moved for 5 hours. I went out and forgot to turn it off.

Participant monitoring

- ï All participants felt comfortable with the type of monitoring used
- ï A uniquely male perspective:
 - ñ ì You need cameras to truly see whatís going on with the personî

Ö and the ladiesí responseÖ

NO

Who's Monitoring?

- i The responses changed slightly when asked how they would respond to cameras when access was restricted to only family and health professionals

- ì Ö alright, but not in the bathroomî

System Controls

- ï All participants reported the touch screen controls were easy to use and understand
- ï All participants understood how the system functioned
 - ñ ì I like to watch the light on the sensor flash as I walk byÖ î
 - ñ ì I like to take my medication and run to the web pad to see it register the timeî

Device Recommendations

- ï The web pad is too heavy
 - ñ Two participants would use the pad to access e-mail or play solitaire
- ï ì I wish ILSA would sync with my computerî
- ï ì More color choices would be niceî
- ï ì Proximity sensorî

Caregiver reactions

- i One family member described what he termed a "crying wolf" phenomenon
 - ñ "At first, I was very concerned when I was constantly receiving alerts for no movement over 5 hours. The more and more alerts I received, the less and less I believed them."

Caregiver reactions

- ï ì I was fine until the phone calls startedÖ I was so annoyed, I almost quit the studyî

- ï All family/caregivers felt ILSA increased communication, but not always in a positive way

Summary

- i Despite a high incidence of technical difficulty, false alerts, and family/caregiver frustration, all elders in the group feel remote home monitoring is important.

Would you do it again?

- i All 4 responded: Yes
 - ñ 3 definitely
 - ñ 1 only if the bugs were worked out
- i Family/caregivers
 - ñ 3 hesitantly would agree if it was improved
 - ñ 1 No

Future Research Considerations

- i It was the elders with the most technical/computer knowledge who remained in the study
- i All those who dropped out did not own a computer or rarely to never used one
- i Needs and barriers to technology for the elderly

Future Research Considerations

- i Family/caregiver participation is very important
 - ñ Three withdrawals were attributed to family/caregiver conflict
- i Underlying family/caregiver frustration threatened continued participation for the remaining four

ii I think as a pilot project it has worked very well; kinks will always have to be worked out and I think it has great potential. I think the idea is great and its time has come.

Special Thanks

The Fab 4

Acknowledgement

This research was supported through funding from Honeywell Laboratories, the Advanced Technology Program at the National Institute of Science and Technology, U.S. Department of Commerce under agreement #70NANBOH3020, and the

National Institute on Disability and Rehabilitation Research of the U.S. Department of Education and the Administration on Aging of the Department of Health and Human Services.

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