



10/16/2001 - New Concept Brainstorm
Micah Alpern, Keywon Chung, Erika Persson

Problem Statement

Various Caretaking Communities

GRIP at Jewish Community Center (JCC)

- Senior (caree)
- Case manager
- Medical personnel
- Family members

West PA School for the Deaf (WPSD)

- Student: K–12th grade (caree)
- Classroom teacher
- Medical personnel
- Audiologist
- Therapists, intervention specialists
- Family members

WP School for Blind Children (WPSBC)

- Student: 2–21 years old (caree)
- Classroom teacher
- Art, music and gym teachers
- Medical personnel
- Various therapists
- Staff members
- Family members

Pittsburgh Vision Services (PGHVIS)

- Senior: Adult (caree)
- Carers to be determined



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Problem Statement

Commonalities of Caretaking Communities

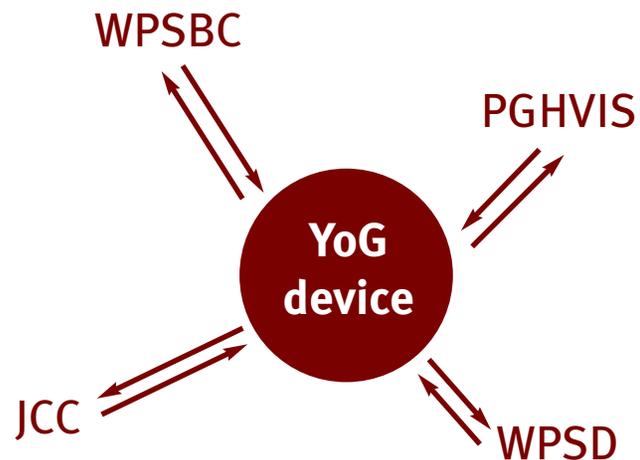
- Consist of a *caree* and multiple *carers*
- Caretaking happens in three levels
 - Private: Family members
 - Institutional: School, MediCare
 - Public: General society
- Caree is under medical care
 - Preventative care: Prevent disabilities
 - Maintenance care: Keep using deteriorating functions
 - Corrective care: Fix or heal damaged functions
- Caree's mobility is limited
- Exposed to additional risk factors such as injury and security
- Caree is in great need and short supply of
 - Routine activities
 - Communication
 - Interaction
- Make use of assistive technologies in various level, yet such technologies are
 - Expensive
 - Unattractive and alienating
 - To resolve functional aspects only
 - Little concern for the emotional aspects
 - Mostly for very specific use
 - Possess little marketability
 - Mostly for caree
 - No device or technology that help organize carer's responsibilities

Design Opportunity

Adaptable “Caretaking” Device

Definition

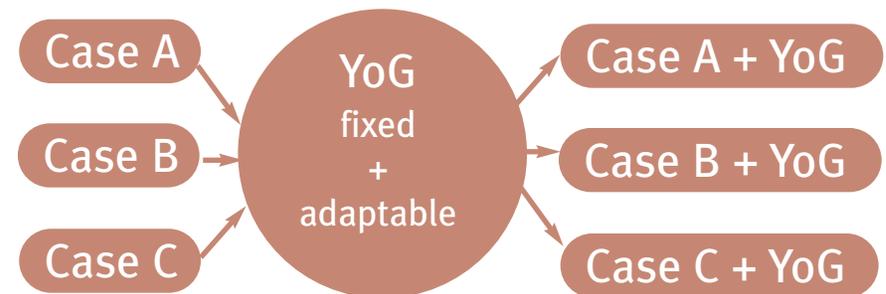
- Based on the commonalities of such caretaking communities



- Reconfigured and adapted by carers to suit their specific needs (e.g., DynaVox)

Process Scheme

1. Study specific cases in multiple caretaking communities
2. Identify commonalities
3. Portray fixed vs. adaptable parts based on specific scenarios





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Design Opportunity

Adaptable “Caretaking” Device

User Group

- Intensive caretaking communities
- Mainly for carer
- With functional and emotional needs
- Consumer product (informal) vs. institutional product? (formal, liability, database)

Broader Marketability

- Families with members with disabilities
- Institutions for members with disabilities
- Families with senior citizens
- Senior care facilities
- Medical facilities
- Babycare

Potential Functions and Goals: Brainstorm

- Make administrative tasks easier
- Track medical regiment
- Avoid leaving the well-being of a caree to one carer (failsafe)
- Make communication and responsibilities of carers seamless
- Emergency use to carer/to a third party
- Focused on improving the end-care of the caree, or, focused on improving the administration side of the carers.



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Functionality Brainstorm

What Are Carers' Responsibilities?

Craig

Primary Carer of His Mother

- Responsibility of transport
- Medicine & hospital visits
- Emergency contact
- Have good meal? (checkup)
- Emotional support (daily conversation)
- Communication with other primary carers (wife)
- Two levels of comm: monitoring (passive) intervention (active)
- Peer networking with other carers

Vasu and Mary

Teachers of blind children

- Daily notebook to parents
- Organize recreational activities and contact
- Assign device/tech
- Customize device/tech
- Track progress
- Curriculum
- Physical/Basic needs (hungry, bathroom, tired...)
- Emergency calls: to parents, to medical
- Comm. w/staff
- Schedule
- Physical belongings
- Continuing self-education

Betty

Nurse

- Care
Physical vs. mental
Regular, irregular, constant
- Comm. with patients
- Comm. with patient's family
- Structure/liability/hierarchy
Doctor, nurse, practitioner
- More...