User-Centered Design of Lifeline Systems’ Documentation

With a Lifeline medical alarm, help is always just the press of a button away. For 30 years, we’ve enabled millions of people to live with greater confidence, peace of mind and dignity in their own homes - all for little more than a dollar a day. No wonder Lifeline’s personal response service is the most trusted choice of hospitals, professional caregivers... and families like yours throughout North America.
About Lifeline Systems

- Leader in the Personal Emergency Response System (PERS) industry for 30 years
- Subscribers can call for help 24/7 by pressing their Personal Help Button and speaking to the Lifeline Response Center through a Communicator
- More than 500,000 subscribers in U.S. and Canada
  - Typically 80+, majority are females
  - Demographics vary widely
  - Given the different rates of aging, increased age increases the probability someone needs our service, but their actual age does not reflect what aspects of our services they require
- Caregivers (and responders) often elderly themselves
About Lifeline Systems

- How the service works
  - Family member inquires or subscriber is referred to Lifeline
  - Lifeline takes basic information about subscriber over the phone and sets up an appointment for installation
  - A Lifeline Home Service Rep (HSR) installs the systems and trains the subscriber and family on its use
  - Subscriber makes a “welcome call” and provides additional information (names of responders, doctors, etc.)
  - Subscriber wears pendant, checks in with Lifeline on a monthly basis
  - In case of emergency, subscriber sends Help call to Lifeline, Lifeline responds through communicator, speaking with the subscriber to determine what type of help is needed, Lifeline sends the appropriate help
About Lifeline Systems

CarePartner Communicator

CarePartner Telephone Communicator

Classic Pendant

Slimline Pendant
About the project

- In Spring of 2005, Lifeline hired Bentley to help update their product documentation
- Lifeline, Bentley and an Ad Agency collaborated on research and shared findings
- Multiple methodologies:
  - Review of customer sales and customer service calls
  - Shadowing of Home Service Reps
  - Home interviews & observations
  - Focus groups with caregivers & subscribers
  - Review of existing documentation
  - Creation of document design guidelines for older consumers
  - Creation of revised documentation prototypes
  - Usability testing of revised documentation in homes
  - Refinement of final documentation
Shadowing of HSRs

- Lifeline, Bentley and Ad Agency teams conducted shadowing of home service representatives
  - Followed rep for a day, visiting several subscribers
  - Conducted activity in parallel, then merged our findings based on different perspectives

- Sample findings:
  - Subscribers varied widely in the physical and mental capabilities
  - Subscribers often formed a bond with their HSR
  - New subscribers didn’t always read the materials sent to them ahead of time
  - Moving furniture was often the most difficult part of installing the system
Shadowing of HSRs
Lifeline and Bentley teams conducted interviews

- Made notes regarding subscribers’ questions, concerns, and any areas of confusion
- Took video and photos of the products & environments
- Conducted in parallel, then merged our findings based on different perspectives

Sample findings:

- High level of subscriber satisfaction
- Subscribers had some concerns about wearing the call button in bed and in the shower
- Some ideas for making documentation more effective
- Number of documents could be reduced
Home interviews & observations
Revised Documentation

- Collateral pieces
  - Set-up Guide
  - User Manual
  - Quick Reference Magnet
  - Subscription Agreement

- User Manual
  - Spiral bound to lay flat
  - Sturdy covers
  - Sections identified with color-coded tabs
  - Clearly numbered steps
  - Increased font size to 14-pter (minimum)
  - Larger graphics and more white space
Usability testing of revised documents

- Bentley team conducted usability testing in homes
  - 10 pairs (elders and their caregivers)
  - Recruited caregivers first – a break-through!
  - Made notes regarding questions, concerns, and areas of confusion
  - Took video and photos

- Sample findings:
  - Very positive reaction to new documents
  - Participants said documents were easy to read
  - Participants had no trouble understanding the graphics
  - We could make some improvements to the organization of the document, mostly to reduce redundancy
Usability testing of revised documents
Usability testing of revised documents

Video clip from usability test
Take-Aways

- Interactive collaboration between Lifeline, Ad Agency, and Bentley was a strength of the project
- It is important to test documentation
- Parallel activities and learnings led to success
- Conducted several design and testing iterations, refining at each step
- Use of multiple methodologies resulted in rich data from various viewpoints

As a result of the collaboration, the product, documentation, sales collateral and packaging provide a consistent, integrated message to the consumer.
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