



Contributor

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The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 6,000 not-for-profit organizations dedicated to expanding the world of possibilities for aging.

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## Increasing Engagement, Social Networks and Quality of Life and Reducing Social Isolation, Depression and Feelings of Loneliness through a Captioned Telephone

### *Categories*

- Reduce Social Isolation and Depression
- Reduce Feelings of Loneliness
- Increased Resident Engagement and Satisfaction
- Increased Social Networks
- Increased Quality of Life
- Reducing Depression and other Health Outcomes

### *Organization Name*

Life Care Services

### *Organization Type*

Third-party senior living management, development and repositioning for Life Plan Communities (formerly known as continuing care retirement communities or CCRCs) and rental communities, and offer home health care, insurance, and national volume purchasing services.

### *Organization Description*

Life Care Services, An LCS<sup>®</sup> Company, manages and supports a variety of senior living communities nationwide, ranging from continuing care retirement communities to rental communities, serving over 33,000 older adult residents. For more information, visit <https://www.lifecareservices-seniorliving.com>.

### *Other Partners*

Hamilton CapTel is a service provided by Hamilton Relay – a division of Hamilton Telecommunications, a diversified communications and technology service provider based in Aurora, Nebraska. Founded in 1901, Hamilton Telecommunications encompasses seven primary company divisions that allow Hamilton to operate on a local, regional and national basis.

Hamilton CapTel is dedicated to making phone conversations simple and accessible for individuals with hearing loss. More than an amplified phone, the Hamilton CapTel captioned telephone allows users to listen while reading captions of what's said to them — similar to captions on television. A live captionist listens to the other party's side of the conversation and through the use of advanced voice recognition technology, repeats what is said to generate the captions, which display on the screen of the captioned telephone.

### *Project Description*

Hamilton CapTel has been working with Life Care Services (LCS) senior living communities for over two years, demonstrating to LCS staff members and residents the difference a Hamilton CapTel captioned phone can make for residents with hearing loss, their loved ones, friends and caregivers. Hamilton CapTel installed captioned telephones, at no cost, in the living spaces of qualified residents in LCS communities. Our goal is to compare the results of an individual's quality of life before and after using a captioned telephone.

### *System Type*

The Hamilton CapTel captioned telephone requires telephone service and a high-speed Internet connection – wired or wireless.

### *System Embodiment*

Hamilton CapTel phone

### *Business Model*

As a result of the Americans with Disabilities Act (ADA), telecommunications relay services (TRS), including captioned telephone, are mandated – providing 24/7 access to the telephone for individuals who are deaf, hard of hearing, deaf-blind or have difficulty speaking. Services are funded and regulated by the Federal Communications Commission (FCC) and are available at no cost to the users. While equipment charges may apply to access some services, in most cases equipment is made available at no cost to the user through professional third-party certification of hearing loss.

### *Implementation Approach*

The Hamilton CapTel team offered informative presentations to LCS senior living community residents interested in learning more about captioned telephone. Next, we installed phones in the living spaces of

participating residents. Finally, for purposes of this case study, we returned to the communities to give participants a chance to complete a Life Satisfaction Survey.

### *Advantages to the Approach*

#### *Benefit to Consumers and Providers*

##### **Ease**

The Hamilton CapTel phone is easy to use, and there are different models available to suit specific needs. Our staff visited LCS senior living communities to offer product demonstrations allowing residents to see just how simple it is to make calls with the different models of captioned telephones. Hamilton CapTel representatives also installed the phones and showed residents how to use them.

##### **No Risk**

There is no financial risk to the individual using a Hamilton CapTel phone. Additionally, should the resident feel that the phone is not a good fit, they can simply return it.

##### *Outcomes*

#### *Improved Quality of Life and Health Outcomes*

Our customers often tell us how much using a captioned telephone has changed their lives for the better. Participants in this case study had this to say:

#### **Ashlie Burnett (Director of Community Life Services)**

on how captioned telephones improve quality of life for residents with hearing loss:

“[Residents with hearing loss] become withdrawn and they isolate themselves. But when we... break down the barriers that their hearing loss puts up... it does improve their quality of life.”

#### **Brandy Lincoln (Care Purchasing Services, a division of Life Care Services)**

on captioned phones reconnecting individuals with hearing loss to the community:

“You know if they have that connection to the outside, [residents are] more likely to go out and socialize more with their community... and this serves a great purpose for our community and our residents.”

These statements are in keeping with the results of the Harvard Study of Adult Development (<http://www.adultdevelopmentstudy.org/>), which found that social connectedness significantly affects well-being. Results from the study showed the following:

- People who are more connected to their family, friends and community experience
  - More happiness
  - Better physical health
  - Better brain and memory function
  - Longer lives
- People who are lonely, experience
  - Less happiness
  - Declines in health sooner in life
  - Declines in brain and memory function
  - Shorter lives

Our study did not measure specific health outcomes. However, people who have hearing loss who use captioned telephones improve their ability to connect with others, which would make them more likely to experience the benefits of social connection and less likely to experience the adverse effects of loneliness illustrated by the Harvard Study of Adult Development.

#### *Increased Staff Efficiencies*

Captioned telephones may reduce time spent on calls and the number of calls needed to convey information to residents with hearing loss. Reading captions while listening on the phone gives an individual with hearing loss more clarity, reducing the need for repetitive conversations. Hamilton CapTel phones also store captions from conversations so that users can re-read what was said. Having a record of what was said may prevent residents from making additional calls to caregivers.

**Ruppa Grummon (Nurse Practitioner)** on how captioned telephones make calls to patients with hearing loss clearer and more efficient:

“When we’re trying to relay critical clinical information for our independent living residents, my nurse will call them on the phone... Say we’re working them up for some pathology...[Patients with hearing loss] need to know what’s going on. They need to understand the results, and if there is not that visual

cue and they only have the audible cue, there’s that ambiguity, but with the visual cue, that’s eliminated.”

Furthermore, if residents with hearing loss rely on staff members to make phone calls for them, installing captioned telephones will allow residents to regain their capacity to use the phone independently and free caregivers of the responsibility.

#### *Increased Satisfaction with Care*

As explained earlier, restoring the ability to use the phone without frustration can increase the likelihood of social connection, which can help a person feel less isolated and lonely and possibly lower depression and the health problems associated with it. If residents experience these benefits, they are likely to experience more satisfaction living in their senior living community.

**Larry Hogrefe (Resident)** on captioned telephones becoming a standard amenity in homes for individuals with hearing loss within senior living communities:

“I’m sure someplace down the road [the captioned telephone] will be in every unit when you move in to [help people who have hearing loss] stay connected with what’s going on here, and there are a lot of things going on here, and we miss some... I think it would make the community closer.”

#### *Cost of Care and Return on investment (ROI)*

While there is no cost to obtain a Hamilton CapTel phone, there may be a cost associated with visiting a professional hearing healthcare provider to qualify the individual’s hearing loss. This cost, however, is minimal while the benefits of regaining the ability to use the telephone and stay connected to family, friends, and the community are priceless.

**Mary Ann Schellhardt (Resident)** on the difference a Hamilton CapTel phone made in her life:

“I don’t know how I did without it!”

#### *Challenges & Pitfalls to Avoid*

##### *Preparing for Installation*

Each captioned phone has Media Access Control (MAC) addresses on the bottom (one for a wired connection and one for wireless connection). Before installation, register the MAC address you will be using with the campus WiFi system to ensure access. Hamilton CapTel representatives are available to assist in this process.

## Lessons Learned/Advice to Share with Others

### Individual Circumstances

While captioned telephones make it easier for individuals with hearing loss to connect socially, as with any other technology designed to improve social connectedness, the quality, and frequency of social interactions depend on the person using the technology, as well as family, friends, and caregivers.

### Advice to Share with Others

#### Model Selection

Before selecting a phone, read the descriptions below to see which model will suit the user best.

#### **Hamilton CapTel 840i**

This model features large backlit buttons, and a traditional receiver similar to phones seniors already have in their home. This phone is a favorite among older users.

#### **Hamilton CapTel 2400i**

This model offers touch-screen technology and has additional functionality. It's an excellent choice for those who have experience using a tablet or smartphone with a touchscreen.

### Installation

Hamilton CapTel phones work with either wired or wireless connections. Please note that in general, a wired connection to the Internet works more consistently than a wireless one. We have the best success installing them when working closely with the IT support, WiFi providers and phone experts, either on or offsite.

### Adjustment

For an individual with hearing loss, a captioned phone can be life-changing, making the phone accessible to them again. Some level of conditioning may be needed to adjust to telephone conversations with captions. Features on the phone can be modified to fit a user's visual and hearing needs – such as changing the font size and color or volume and tone control. Callers also may need to be educated in speaking as clearly as possible to enhance the captioning experience.

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- The Hamilton CapTel phone requires telephone service and high-speed Internet access. WiFi Capable.
- Internet Protocol Captioned Telephone Service (IP CTS) is regulated and funded by the Federal Communications Commission (FCC) and is designed exclusively for individuals with hearing loss. To learn more, visit HYPERLINK <http://www.fcc.gov>.
- Hamilton is a registered trademark of Nedelco, Inc. d/b/a Hamilton Telecommunications.