Implementation of The Birdsong Tablet in a Skilled Nursing Setting

**Categories**
- Reduce Social Isolation
- Reduce Feelings of Loneliness
- Reduce Depression
- Reduce Use of Antipsychotics
- Increased Resident Engagement and Satisfaction
- Increased Social Networks
- Increased Quality of Life
- Increased Staff Efficiencies

**Organization Name**
Westminster-Canterbury on Chesapeake Bay

**Organization Type**
Westminster-Canterbury on Chesapeake Bay is a single site Life Plan Community of more than 600 independent living residences, 75 assisted living residences, 13 memory care residences, and 95 skilled nursing residences.

**Technology Partner**
TMM Software is a global technology company that is headquartered in France with expertise in e-health software solutions for healthcare organizations, professionals and patients. The company partnered with Westminster-Canterbury on Chesapeake Bay to create The Birdsong Tablet, a state of the art mind revitalization software. It is built on awarding-winning research about the impact of 24/7 engagement through technology upon the daily life of seniors. The Birdsong Tablet brings easy access to family video conferencing, exercise videos, brain fitness programs, therapy tools, plus hundreds of hours of fun games, videos, music, news, and lifelong learning to older adults.

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**Contributor:**
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Coordinator of The Birdsong Initiative

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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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Organization Description

Westminster-Canterbury on Chesapeake Bay was founded in 1982. Located right on the Chesapeake Bay in Virginia Beach, Virginia, we are a non-profit Life Care community sponsored by the Episcopal Diocese of Southern Virginia and The Presbytery of Eastern Virginia of the Presbyterian Church. We provide a vibrant lifestyle for seniors 62 years of age and older who worked hard their entire lives and deserve not just beautiful homes, but peaceful, lively and pleasant experiences. We also view our purpose to be of service to the families of our residents, as well as the broader community. Our Mission is creating community to foster joy and well-being and have values of Respect, Passion and Professionalism. As a Life Care community, Westminster-Canterbury offers all levels of care to include, independent living, assisted living, long term care, skilled nursing care, home health and hospice care.

Project Description

Westminster-Canterbury, a senior living community on the Chesapeake Bay, participated in a clinical study called The Birdsong Initiative to study the impact of 24/7 engagement with a simple touchscreen device — a digital tablet. The study found high hours of voluntary usage/enjoyment, elevation in mood, increases in cognitive ability, and a reduction in caregiver stress. Unfortunately, the software used for the study was simply too expensive for most families and providers to afford for individual bedside use. Out of a moral obligation to find a way to bring the benefits we found in the study to the field, we partnered with TMM Software, a global healthcare technology company, to create our own in-room engagement tool called “The Birdsong Tablet: No mind left behind”. This technology costs less than a discounted in-house cable TV service to operate and offers so much more.

Business Model

Westminster-Canterbury on Chesapeake Bay provided the technology to all skilled nursing residents at free of charge to them.

Socialization Modality

The Birdsong Tablet offers Social Network, Video Chat, Audio Chat, Photo Sharing, Event/Activity Sharing, E-Mail, Text Chat, Picture Chat, Life Stories, Community App, Activity Calendar, Electronic Books, Art, Games, Exercise, Rehabilitation, Music, and much more.

System Embodiment

The Birdsong Software is offered on both medical grade and commercial grade tablets of various screen sizes (10 inch, 18 inch, and 21 inch).

Implementation Approach

In February 2018, Westminster-Canterbury on Chesapeake Bay began implementing The Birdsong Tablet in every room in The Hoy Center (Skilled Nursing Center). With the deployment of these tablets, we focused on three key factors:

- Enhance existing intergenerational programming by using engagement technology to attract younger talent.
- Determine which sorts of content will be most used by our skilled nursing residents. Due to higher age and lower cognitive functioning in this setting, we hypothesized that passive content such as music or videos would be most utilized.
- Lower rejection rate- The rejection rate with our previous technology was 50%. With The Birdsong Tablets, our aimed to reduce this rejection rate to less than 10%.

Outcomes

Intergenerational programming—Utilizing local resources

About half of our residents started using The Birdsong Tablet on their own without any prior training. For the other half, we recruited volunteers from high schools and church youth groups to train residents one-on-one. Most of our volunteers training time was spent getting residents over the fear of technology. Once residents overcame their own fears, they took off with the technology. We also saw relationships and bonds form between residents and their tech buddies. The residents took on a natural mentorship role towards their buddies and shared their life experiences and wisdom with the younger generation. This was an added benefit for both the residents and their tech buddy volunteers.

Usage by Content Category

We were eager to see what type of content got used the most by our residents. Since The Hoy Center residents are around 94 years old and have lower cognitive functioning, we hypothesized that passive content such as listening to music or watching videos would be most utilized. To our surprise, the most utilized section of the
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software was the “Explore” section. This section contains complex content such as online courses, educational materials, lectures and sermons, encyclopedias, travel documentaries, the bible, spiritual podcasts, etc. We had envisioned that our independent living or assisted living residents would use this more and it would barely get used by our skilled nursing residents. However, 54% of the total usage was for the Explore section. Take a look at the charts below for more information:

<table>
<thead>
<tr>
<th>Games</th>
<th>Includes games, quizzes and programs designed to maintain brain function in areas of memory, attention, language, executive function and visual/spatial acuity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td>Includes thousands of musical selections curated by certified therapeutic recreation specialists to enhance any environment and produce research-based outcomes.</td>
</tr>
<tr>
<td>Video</td>
<td>Includes classic TV shows, films, exercise videos, therapeutic &amp; humorous videos. These programs are designed to specifically match the eras of the past.</td>
</tr>
<tr>
<td>Communicate</td>
<td>Includes a Family App that is designed to enable and foster communication between family members and residents. Easy access to video conferencing, email and other tools for telling life stories are also included in this section.</td>
</tr>
<tr>
<td>Explore</td>
<td>Includes more interactive content such as travel documentaries, spirituality sermons, and lifelong learning.</td>
</tr>
<tr>
<td>Internet</td>
<td>This button leads to the world wide web with just a touch!</td>
</tr>
</tbody>
</table>

**Rejection Rate reduced to 6.25%**

Westminster-Canterbury on Chesapeake Bay has had over 7 years of experience experimenting with engagement technology. We began by interviewing our residents who had previously rejected engagement technology to see how we could enhance our solution to overcome the obstacles they brought to our attention. We noticed that most obstacles were centered around the mounting solution for the tablet and in not understanding the purpose of the technology.

*Mounting Options: “I don’t have enough space for this in my room”.*

The engagement technology we had previously used was on a large movable cart that took up extra space in resident’s rooms. Many residents did not want to sacrifice floor space for the new technology. For The Birdsong Tablet to have a high adoption rate, we needed a solution that didn’t take up extra floor space. We trialed numerous mounting solutions including carts, over the bed tables, wall arms, and table arms. After extensive trials and research, we settled on a mounting arm that attached to our existing over the bed tables. Our residents are happy with the $30 arm that mounts to their existing table and love that it’s mobile and doesn’t take up extra space in their room.
**Purpose and benefit:** “I have never used a computer in my life and I don’t plan on beginning now”.

Even after we shared the numerous scientific findings from the Birdsong research studies, some residents still didn’t see how this technology could benefit them. To ensure that all residents received the same opportunity, we used a team approach to engagement and trained resident’s family members and all staff who regularly visited resident rooms. This included staff in nursing, housekeeping, dining, therapeutic recreation, and administration. We also formed an interdisciplinary leadership team of staff called The Birdsong Tablet team to address each resident's concern on an individual basis. We found that when residents were trained by staff who they already had strong bonds with, they were more likely to give the technology a try.

**Challenges and Pitfalls to Avoid**

**Large screen sizes are necessary in skilled nursing settings.** After trailing 10-inch screen tablets with residents in our skilled nursing setting, we found that only 65% of residents could see a screen that small. We found that larger screen sizes are necessary for some residents, and hence, we only implemented 18-inch screen tablets in our skilled nursing center. A cost analysis also determined that the resources involved in managing different screen sizes are greater than implementing a larger screen size for all residents.

**Don't introduce extra furniture into resident's rooms!** Residents will reject the technology if the mounting solution takes up too much space in their rooms.

**Lessons Learned/Advice to Share With Others**

**Don't underestimate your residents.** We found that residents are more capable than we had originally thought. The content that got used most is much more complex than what we had anticipated. We also have residents over 100 years old who navigate The Birdsong Tablet on their own.

**Address resident fears strategically.** Some residents will need more prompting getting over their fear of using technology. Don’t be hesitant in leveraging local resources to initiate a tech buddy program. It’s a cost-effective way of attracting young talent to enhance the community's intergenerational programming.