

Incorporating the Preferences for Everyday Living into Ohio's Nursing Homes to Improve Resident Care

Final Progress Report to the Ohio Department of Medicaid

Timeframe: July 1, 2016 through June 30, 2019

Executive Summary

In 2015, the Ohio Department of Medicaid included the Preferences for Everyday Living Inventory (PELI) as a quality measure in the Medicaid nursing home reimbursement formula to speak to the person-centered care emphasis that the Centers for Medicare and Medicaid Services (CMS) supports through regulations. Providing person-centered care is an abstract concept, but assessing resident preferences offers an important concrete way for providers to meet CMS mandates for comprehensive care planning and Quality Assurance Performance Improvement (QAPI). The PELI was selected because it is the first comprehensive preference assessment tool to undergo rigorous scientific testing and it has been shown to be a reliable and valid measure. Sixteen PELI questions are consistent with the MDS 3.0, which is used in every skilled nursing facility in the nation.

When the PELI was first selected, Ohio providers lacked access to guidance on how to use the tool to improve their person-centered care delivery. At the same time, our interdisciplinary team had many years of practical experience implementing the PELI in various provider communities but we lacked a formal system to disseminate our knowledge. The overarching purpose of this project was to provide Ohio nursing home providers with regular opportunities to learn how to assess resident preferences and incorporate information gleaned from the PELI into each person's plan of care. The project had three primary aims: 1) guide providers on ways to integrate the PELI assessment into daily care practices in Ohio nursing homes; 2) provide education/training for providers about methods to use PELI data to inform care; and 3) evaluate the barriers providers face when they try to offer preference-based, person-centered care, and develop solutions for long-term sustainability. The goal of this statewide project was to promote the adoption of preference assessment for nursing home residents through education/training and sustainability through quality improvement strategies.

During the 36-month project, we reached over 15,000 individuals through our webinars, presentations, newsletter, website, YouTube videos, PAL Card QIP, and helpline. We developed and

disseminated materials to directly address 32 barriers that providers report encountering as they strive to provide preference-based person-centered care. Through our Quality Improvement Project (QIP), we learned that Preferences for Activities and Leisure or PAL Cards assist providers to communicate a resident's important preferences among care team members. Providers gave a strong endorsement to the cards as an acceptable, feasible, and appropriate tool. In fact, the 27 organizations that participated in our pilot project succeeded in creating PAL Cards for more than 400 residents. Our project manager offered over 1,400 minutes of coaching to the pilot sites, which translated to about an hour per site or 3.5 minutes per PAL card. Data from the 2017 Scripps Biennial Survey indicated that 20% of providers using the PELI chose to ask the 16 preference items found in Section F of the MDS along with the PELI's detailed follow-up questions that elicit key specifics to inform the plan of care. In addition, 18% of providers selected additional items from the PELI, beyond the 16 MDS preferences, while 34% were asking all 72 PELI items. Finally, 53% of providers reported using the information from the PELI in their quality improvement efforts. To streamline use of the PELI, we developed, tested, and launched *Care Preference Assessment of Satisfaction (ComPASS-16)* web app, making this new technology available at no cost to all providers.

During the project, we saw that providers have a strong desire to provide preference-based, person-centered care, yet they face challenges in doing so. *The close collaboration between providers and our team to develop solutions to barriers resulted in highly successful partnerships that translate to better quality of care and quality of life outcomes for residents.* We found that continuous outreach and support assists providers with problem solving, particularly given the industry-wide problem of high turnover among staff. Our project team was responsive to providers' real-world concerns, and engaged with them to reduce and remediate many substantial barriers to providing preference-based, person-centered care, ultimately leading to better quality of care and quality of life for the nursing home residents of Ohio.

Background

For this project, Ohio nursing home providers received regular training and education (e.g., monthly newsletters, webinars, training videos, etc.) regarding how to successfully implement and use data collected via PELI interviews to inform and shape daily preference-based, person-centered care practices that improve resident care outcomes. Through our telephone hotline as well as interviews and consultations with nursing home providers, we identified the major barriers and facilitators that communities encounter as they use the PELI. To highlight just one example, to streamline PELI interviews, and speed incorporation of preferences into care plans, we developed a mobile responsive website entitled, “Care Preference Assessment of Satisfaction” (ComPASS-16). This web-based app can be used to conduct PELI interviews, enter individual data in real time, and track resident satisfaction with the way their 16 MDS preferences for everyday living are being. The web app produces user-friendly “at a glance” reports that providers can use for person-centered care quality improvement efforts. This is a major advance over the original pencil and paper format.

Overall RE-AIM Results

We applied the widely used RE-AIM framework to evaluate the program’s effectiveness according to five key outcomes: reach, efficacy, adoption, implementation, and maintenance.

Reach

We reached over 15,000 individuals through our website (8,300+ unique users), YouTube videos (3,000+ views), monthly eNewsletter (2,000+) subscribers with an excellent open rate (average 32% with an industry standard of 20%), helpline (emails and phone calls), in-person presentations (1,000+ attendees), virtual seminars (webinars, 1,000+ attendees), and the PAL Card Quality Improvement Project (involving a total of 43 provider organizations). Figure 1 below summarizes the number of individuals we have engaged during the course of the project.



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The PELI-Can Project has reached long-term services and supports practitioners as well as academic and policy audiences through diverse dissemination strategies.

Online Platforms



8,300+ UNIQUE WEBSITE USERS

Since its launch in July 2017, over 8,000 users have accessed PELI resources on

PreferenceBasedLiving.com

3,000+ VIEWS ON YOUTUBE

Providers can access our 21 videos, including professionally produced training videos & virtual seminar recordings.

Our most watched videos are:

Why Preferences Matter

Integrating Preferences into Care Planning

How to Make a PELI PAL Card

2,000+ eNEWSLETTER SUBSCRIBERS

Our monthly eNewsletters highlight upcoming conferences and training events, new Preference Based Living resources, and provider tips to honor preferences.



Follow us on Social Media!



#PBLtips

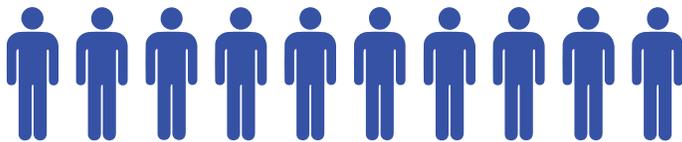
Weekly Tip Tuesday posts on Twitter & Facebook feature successful PELI implementation strategies.

PrefBasedLiving @PrefBasedLiving · Nov 13
We're back with another #PBLTip. Join the #Prefbasedliving movement and visit the link for more tips about how to conduct a PELI interview: ow.ly/fF4450jyFbB #personcenteredcare #PCC #PBLTips



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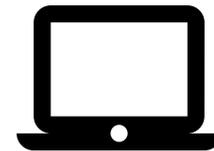
Live Presentations



1,000+ In-Person Attendees

The PELI-Can team presents to diverse audiences that include:

- Nursing Home Administrators
- Directors of Nursing
- Activity Professionals
- Social Workers
- Long-Term Care Ombudsmen
- Legal Guardians
- LTSS Researchers



1,000+ Virtual Seminar Viewers

Content highlights practical evidence-based strategies to honor resident preferences.



Thank you for this extremely important webinar. Resident preferences are the key to happier, healthier residents.



-Seminar Attendee

Efficacy & Adoption

The Preferences for Activity and Leisure (PAL) Cards were co-developed with substantial provider input to communicate important resident preferences across care team members. In 2018, the Ohio Department of Aging approved the PAL Card Quality Improvement Project (QIP), which would assist Ohio nursing home providers in creating PAL Cards and using them to promote preference based care in their communities. Participating providers received coaching to utilize the PELI's recreation and leisure items to assess important resident preferences and produce PAL cards for 15 to 20 residents per organization. A total of 43 provider care communities registered for the project and 26 (60%) providers completed all of the project requirements, which involved participating in monthly virtual learning circle conference calls and an end-of-project telephone interview. The PAL Card QIP project illustrates the power of having a credible tool that providers can implement quickly with modest resources, yet it has a visible impact on resident daily life and relationships with staff.

The project attracted diverse provider care communities: the group included an equal number of for-profit and not-for profit organizations (12 each, 46%) and 2 communities (8%) were government owned. On average, the communities had 87 beds and 50% (13) of providers had five-star ratings from CMS, with a range from 1 to 5 stars. Participants attempted 439 PAL card interviews with residents and completed 414 (94.31%). The project manager provided participating communities with 1,428 minutes of support through training and problem solving via learning circles over the telephone. Most providers were successful in developing PAL Cards for residents with support from the project manager.

In addition, we assessed the acceptability, feasibility, and appropriateness of the PAL Card intervention. The data came from monthly logs and phone interviews completed by 26 nursing home providers. Staff from multiple departments contributed to the PAL card implementation (e.g., Activities, Social Services, Nursing, Volunteers). Providers could choose to use either the 33 Activities and Leisure items from the PELI or the 8 items from the MDS Section F. More than half of providers (57%) chose to use the 33 items and 41% used the 8 MDS items. Nursing homes reported

that PAL cards typically were placed on wheelchairs, walkers, doors, and in closets. Over 90% of residents reviewed and approved the accuracy of the information presented in their PAL cards. Providers gave very strong positive ratings to their experience with PAL cards. Acceptability ratings ranged from 96% to 100%; appropriateness from 93% to 100%; and feasibility ranged from 90 to 100%. On average, participants reported that they devoted 30 minutes to completing the 8-item resident interview and 43 minutes to complete the 33-item interview. Interestingly, staff said it took them an average of 26 minutes to create PAL Cards when the data came from the 8 MDS items, and slightly less time -- an average of 23 minutes -- to create PAL Cards derived from the 33 items. They explained that the 8-item version took slightly longer because they had less information to work with.

Finally, the PAL Card QIP Project sought to understand the intervention characteristics that were associated with effective implementation. We used the Consolidated Framework for Implementation Research (CFIR) Guide as an a priori coding scheme to identify factors associated with effective implementation. At the end of the project, we conducted telephone interviews with providers that were audio recorded, transcribed verbatim, checked for accuracy, and then coded.

Major themes emerging from the data related to the:

- *Evidence of strength and quality* of the intervention
- *Relative advantage* of assessing preferences (as compared to not assessing preferences) -- for example, "It turns out she doesn't even like TV and we have just been having her watch TV"
- *Adaptability of the intervention* to the resources of each provider community
- *Trialability*, such as the ability to expand the offering of intervention after initial success
- *Complexity* of the intervention, such as sharing the work across departments, difficulty using unfamiliar technology.
- Providers reported the *design quality and packaging* was useful ("*I didn't have to reinvent the wheel*") and that the *Costs* could be used to advocate for additional resources.

Sample of Provider Quotes by Theme

Evidence Strength & Quality	Stakeholders' perceptions of the quality and validity of evidence supporting the belief that the intervention will have desired outcomes.
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"[Residents] really like it [PAL Card] because people are having conversations with them about their lives now. Even the residents among each other, it gives them more information about each other."

"We've got great feedback from therapy about how PAL Cards helped them engage [residents] and get them motivated in therapy."

"We had one family member say that she noticed that her mom seemed to be happier since we were able to engage her in conversation about things that were meaningful to her."

Relative Advantage	Stakeholders' perception of the advantage of implementing the intervention versus an alternative solution. Includes statements that demonstrate the innovation is better (or worse) than existing programs.
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"Well the thing that's different about the PAL cards is that they're actually on the walkers or the wheelchairs. The cards that we had before were kind of like 5 by 8 cards that we had in a little binder that sat on the nurse aide desk. So the nurse aides would have to actually pick the book up and look through it, whereas the PAL cards are right there."

Adaptability	The degree to which an intervention can be adapted, tailored, refined, or reinvented to meet local needs. Include statements regarding the (in)ability to adapt the innovation to their context, e.g., complaints about the rigidity of the protocol.
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"Since we have to update the PELI every year [for] the residents that have been here a while, when it comes time to redo their PELI, then we'll do their PAL Card [too]. And then as new residents come in we'll do their cards right then."

Interviewer: "So what was the rationale for having the PAL Card on the bathroom door instead of the entryway door?"

Participant: "For one, it keeps the card more intact....The rationale was as the [STNAs] are waiting for the resident to go to the bathroom, it would be user-friendly for them just to be near but they'd still be able to read it."

Trialability	The ability to test the intervention on a small scale in the organization, and to be able to reverse course (undo implementation) if warranted.
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"We are continuing on with the program. We actually kept on going after we did our initial start for you folks. I think we have 22 people that we constantly kept track of [and now] we have also continued on to do the rest of the facility."

Complexity	Perceived difficulty of the intervention, reflected by duration, scope, radicalness, disruptiveness, centrality, and intricacy and number of steps required to implement.
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"At one point there was a lot on our plate....And we did stop serving in the dining room because there's other people that come from different departments to help serve the residents their lunch. So that is when we worked on some of it because you have to have some time to condense it into the cards, get it saved, get it printed, get it laminated. There has to be some time in the day to do that. And so we worked it out where there was a time we could. So something did change a little bit for that."

Design Quality & Packaging	Perceived excellence in how the intervention is bundled, presented, and assembled.
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"I didn't have to reinvent the wheel. It was nice to have you all say, "Here do it this way." And I'm like "That's brilliant, I will do it that way." We had done some sheets kind of like that, but [the PAL Card] was just designed really thoughtfully and easily. It made it a lot easier for me to not add so much information but to break it down into the vital parts."

Cost	Costs of the intervention and costs associated with implementing the intervention including investment, supply, and opportunity costs.
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“I averaged out how many PAL cards we were doing and the average time it took... I was able to go to my supervisor and say, ‘This is the time that you've added to the activity department... in the PELI interviews.’ And so we had those statistics to show and that helped [get approval] that ‘Okay, we can give you guys some more help’ because we were able to show how we were allocating those resources.”

Implementation

Data from providers (n=499) responding to the 2017 Biennial Survey indicate that they use the PELI in a variety of ways. Approximately 14% use only the 16 MDS items, while 20% use the MDS Section F items with the PELI’s detailed follow-up questions that provide more in-depth information for care planning purposes. An additional 18% go beyond the 16 MDS preferences and use some additional PELI items, while 34% ask all 72 PELI items (See Table 1 below).

Table 1. Implementation – Ohio Nursing Homes: Choice of PELI Format

<i>PELI Format</i>	<i>N</i>	<i>%</i>
MDS 3.0 Section F 16 items only	72	14.4
MDS 3.0 Section F 16 items with follow-up questions from the PELI	100	20.0
MDS 3.0 Section F 16 items plus some additional items from the PELI	88	17.6
We are asking all 72 items from the PELI	169	33.9
Other	17	3.4
Missing	45	9.0
Total	499	100.0

Maintenance

Of the 499 providers who responded to the 2017 Ohio Biennial Survey question, 53% stated that they use PELI information for quality improvement initiatives. This is a striking statistic and a strong indicator of the value and sustainability of the PELI as part of quality assurance and performance improvement efforts.

Project Administration

To accomplish its goals, the PELI-Can team held weekly team meetings with all project investigators, staff and students participating in person and via the web throughout the year, and we held three annual face-to-face meetings. We utilized Agile methodologies, including standups and retrospectives, to keep on pace with our objectives.

We developed a new website dedicated to the concept of preference-based, person-centered care. PreferenceBasedLiving.com is the primary method for disseminating our extensive resources -- tools, tip sheets, brochures, webinars, training videos and other materials – all available at no cost to help provider communities implement preference-based, person-centered care. Using Google analytics, we have tracked website usage in order to understand more about our audience and their needs. In addition, we worked with a Miami University student to create a logo and branding for the website and all associated resources and publications. We created social media accounts on [Facebook](#), [Twitter](#), and [LinkedIn](#) and we developed a preliminary social media plan for the project. The “About Us” section highlights the interdisciplinary team members as well as the members of the technical advisory panel for translational research.

We successfully engaged Miami University, Tennessee Tech University, and Pennsylvania State University graduate and undergraduate students interested in learning about person-centered care to assist with the PELI-Can project. Thirty-nine students (23 Undergraduates, 9 Masters, 7 Doctoral) worked on the project, either through completing their senior capstone projects, independent study courses, or through their graduate assistantship work. Notably, students

represented a variety of disciplines from gerontology, nursing, computer science, social work, business, and undergraduates who were pre-med majors. Domestic as well as international students studied person-centered care and learned how to conduct PELI interviews and create PAL Cards with residents. Students also were involved in coding qualitative responses from the QIP PAL Card Project to identify implementation barriers and facilitators as reported by nursing home providers. Training students in these skills and topic areas has built their sensitivity to the needs of our rapidly growing population of older adults and their loved ones. The students' experiences and the knowledge they gained as part of the project team will help them lifelong in their future careers in health care, social work, technology, and virtually any service profession, whether in the for-profit, non-profit or public sector.

Summary of Barriers and Solutions Developed During the Project

We successfully met our three primary aims – 1) provide ways to translate PELI data into daily care practices; 2) education and training; and 3) understand facilitators and barriers to preference-based, person-centered care implementation – through several interlocking strategies. A central feature of the project was our active dialogue and partnership with the provider community to co-design the training and resources they need. Our quarterly progress reports break down the details by goal, but in this final report we decided to identify the multiple ways we remediated each barrier. (See Table 2).

Table 2. List of Barriers and Solutions Developed

<p>1. Barrier: Unclear what the PELI is, how it was developed, how much it costs, and what the benefits are.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>What is the PELI?</u></p>
<p>2. Barrier: Lack of guidance on where to start with the PELI.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>PELI-How to Get Started</u> and <u>Webinar</u></p>

<p>3. Barrier: The lack of a PELI policy.</p>	<p>Solution: We solicited samples of policies from providers and posted the information on the <u>website</u>.</p>
<p>4. Barrier: Unclear how to conduct PELI interviews.</p>	<p>Solution: Developed and disseminated Tip Sheets: <u>Interview Tips</u>, <u>Training Video and Video Guide</u>, and related <u>Webinar</u></p>
<p>5. Barrier: Residents and/or family members don't understand why they are asked about preferences for daily living. Also, they had concerns about how PELI information would be used and therefore were reluctant or refused to participate in PELI interviews.</p>	<p>Solution: Developed and disseminated a downloadable, <u>customizable brochure</u> explaining the goals of preference-based care. The brochure discusses how the PELI helps to personalize care for residents and improve their quality of life. Organizations can insert their name and contact information on the brochure's back panel.</p>
<p>6. Barrier: The 16 MDS Section F preference questions elicit useful information, but providers need more details to help them tailor care to each resident effectively.</p>	<p>Solution: We created a version of the full PELI with only the 16 MDS items and posted the tool on the <u>website</u>.</p>
<p>7. Barrier: The original PELI was created as research tool and it needed updating for easy use as a clinical tool.</p>	<p>Solution: We created a version of the full PELI that is more intuitive and simpler to administer; it is now available on the <u>website</u>.</p>
<p>8. Barrier: Difficulty engaging family and friends (proxies) for residents who are unable to express preferences themselves.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Working with Proxies</u> as well as <u>Training Video and Video Guide</u>, <u>Webinar</u>.</p>
<p>9. Barrier: No information provided about the PELI for the Core of Knowledge Nursing Home Administrator in Training or the Ohio State Tested Nurse Aides (STNA) Training.</p>	<p>Solution: Developed a three-minute animated video about <u>Why Preferences Matter</u>, which meets these requirements.</p>

<p>10. Barrier: Lack of guidance on ways to engage staff in learning and honoring preferences.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Helping Staff Engage</u> and <u>Webinar</u>.</p>
<p>11. Barrier: Difficulty cultivating a culture that facilitates choice and satisfaction.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Ensuring Resident Choice</u> and <u>Webinar</u>.</p>
<p>12. Barrier: Too many PELI questions, difficulty selecting items.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Top Preferences Across LTSS Settings</u> and <u>Webinar</u>.</p>
<p>13. Barrier: Lack of guidance on how to integrate preferences into the plan of care.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Integrating Preferences into Care Plans</u>, <u>Training Video</u> and <u>Video Guide</u>, <u>Webinar</u>.</p>
<p>14. Barrier: Fear that honoring preferences that involve risk might lead to citations or being sued by family.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Honoring Preferences When the Choice Involves Risk</u>, <u>Training Video</u> and <u>Video Guide</u>, <u>Webinar</u>.</p>
<p>15. Barrier: Unclear how to ask about the preferences of Lesbian, Gay, Bisexual, Transgender (LGBT) older adults.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Sexual Orientation and Gender Identity</u>, <u>Webinar</u>, and <u>Rainbow PELI</u>.</p>
<p>16. Barrier: Low rates of social interaction in nursing homes, unclear why resident social preferences may shift.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Recommendations to Strengthen Social Connections in Nursing Homes</u>.</p>
<p>17. Barrier: Difficulty utilizing the PELI with short stay residents.</p>	<p>Solution: Developed and disseminated Tip Sheets: <u>Using the PELI in Short-Stay Settings</u>, <u>Webinar</u>, and <u>Introducing the PELI to Short-Stay Residents</u>.</p>
<p>18. Barrier: Lack of knowledge about quality improvement processes around preferences.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Using the PELI for your Quality Assurance Performance Improvement (QAPI) Program</u> and <u>Webinar</u>.</p>

<p>19. Barrier: Perception that resident preferences change so they can't be assessed.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Do Resident Preferences Change Over Time?</u> and <u>Webinar</u>.</p>
<p>20. Barrier: Unsure how to use PELI to improve dining satisfaction.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Strategies to Improve Dining Satisfaction Using the PELI</u> and <u>Webinar</u></p>
<p>21. Barrier: Materials not accessible to guardians and advocates seeking to use the PELI.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Using the PELI to Advocate for Person-Centered Care</u> and <u>Webinar</u></p>
<p>22. Barrier: Unclear how to honor the preference for giving gifts in the nursing home environment.</p>	<p>Solution: Developed and disseminated Tip Sheet: <u>Holiday Gift Giving</u>.</p>
<p>23. Barrier: Lack of time to determine ways to honor preferences</p>	<p>Solution: Published six <u>case studies</u> sharing creative ways Ohio providers have honored resident preferences. Also, we detailed ways providers can replicate the "<u>As you Wish</u>" program, developed by a provider and the issue brief includes fundraising ideas.</p>
<p>24. Barrier: Providers reluctant to communicate preferences for personal care via PAL cards due to concern about violating HIPAA privacy and resident dignity considerations.</p>	<p>Solution: Spoke with several lawyers and the ODM HIPAA Privacy Officer. All expressed similar statements that preferences are not protected health information. However, concerns with violating HIPAA continue to be a barrier to providers seeking to communicate important preferences via PAL Cards. Future work will continue to address this barrier.</p>
<p>25. Barrier: Lack of knowledge about the evidence-based nature of PELI.</p>	<p>Solution: Published <u>Research</u> Tab on website.</p>

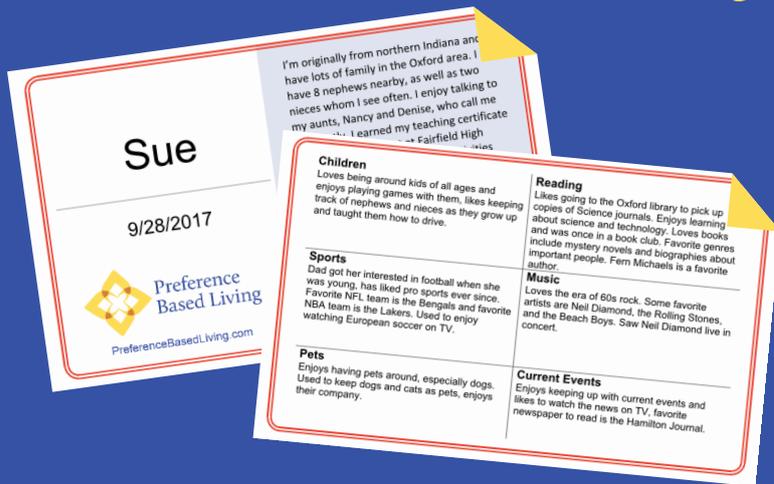
<p>26. Barrier: Lack of familiarity with the PELI tool and resources.</p>	<p>Solution: Presented to over 40 conferences and through webinars, reaching over 1,500 individuals.</p>
<p>27. Barrier: Unable to hear from other providers about strategies for success in assessing and honoring resident preferences.</p>	<p>Solution: Created and emailed monthly PELI-Can <u>e-newsletters</u> to 2,011 individuals. The National Nursing Home Quality Campaign featured our work in the February 2019 newsletter, which was sent to over 8,700 people.</p>
<p>28. Barrier: Conducting assessments via paper and pencil is inefficient because it requires duplicate data entry; providers wish to track preferences electronically.</p>	<p>Solution: Developed <u>Care Preference Assessment of Satisfaction (ComPASS-16)</u>, a mobile responsive website to collect and track the 16 MDS preferences in Section F. The app also tracks how satisfied residents are with their preference fulfillment over time.</p>
<p>29. Barrier: Difficulty communicating preferences across shifts, departments, and volunteers</p>	<p>Solution: Preferences for Activities and Leisure (PAL) Cards. Co-developed and pilot tested PAL Cards with the Knolls of Oxford. PAL Cards are 5x7 “at-a-glance” activity preference cards tailored for each nursing home resident’s responses to a subset of items from the PELI. Information on the cards can serve as a conversation starter for staff and volunteers interested in engaging residents in meaningful discussions and activities. An individualized, colorful, laminated card (to be attached to a wheelchair or a walker) was created so staff, volunteers and families can easily engage with residents about their preferences.</p>
<p>30. Barrier: Did not know if PAL Cards would work in other provider communities beyond our initial pilot group.</p>	<p>Solution: Conducted proof-of-concept testing of PAL cards in three new provider communities. The response from administrators, activity directors, and residents was extremely positive.</p>
<p>31. Barrier: Providers didn’t have time to create a PAL Cards from scratch.</p>	<p>Solution: We developed a downloadable template with instructions that providers can use to implement this intervention in their organization.</p>

32. **Barrier:** Can providers implement PAL Cards? Do providers view PAL Cards as acceptable, feasible, and appropriate?

Solution: Launched PAL Card QIP with ODA. Applied for and received approval to lead a six-month Quality Improvement Project (QIP) through the Ohio Department of Aging. The PELI PAL Card Project coached provider communities in the creation of PAL Cards for 15 to 20 residents each. To assess the feasibility of PAL cards as a routine tool in nursing homes, providers collected data regarding the appropriateness, acceptability and ease of implementation in their communities. Twenty-eight providers successfully fulfilled all of the project requirements and received a certificate of completion. This 70% completion rate is outstanding for this type of project (See Figure below).

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The PAL Card Quality Improvement Project



WHAT ARE PAL CARDS?

PAL (Preferences for Activity and Leisure) Cards are an innovative person-centered communication intervention that supports staff in engaging residents in meaningful conversations that promote relationship building.

ABOUT THE PROJECT

The PAL Card Project is an Ohio Department of Aging approved Quality Improvement Project (QIP) that offered training and support to Ohio nursing home providers striving to implement a person-centered quality initiative.



35

Ohio Nursing Home Providers Participated



81

Average Bed Size



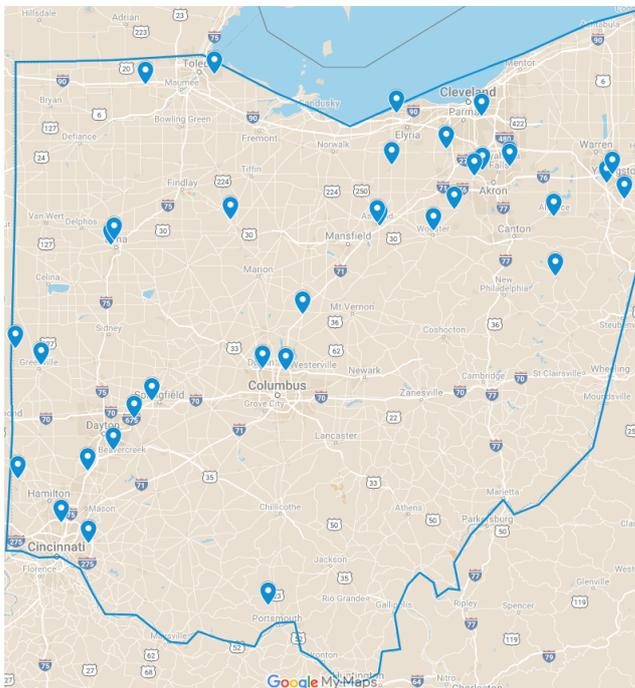
57% Not for Profit

38% For Profit

5% Government Owned

Map of Participants

Click the image below to view the interactive map with each participant's information.



Star Ratings

17 ★★★★★

3 ★★★★★

9 ★★★★★

5 ★★★★★

3 ★★★★★

581

PAL Cards Created

Based on the number reported by participating providers.

7

Months of Support Provided

Extended to accommodate the needs of our participants.

1,428

Minutes Coaching Participants

Does not include one-on-one coaching provided as needed between monthly group consultation calls.

"You really dropped everything to make sure that we had the information we needed when we needed it. So that was really appreciated."

— On the support provided by our team

Improving Quality of Life & Quality of Care

PAL Card QIP Outcomes

- Communicate residents' preferences regarding important recreation and leisure interests
- Successfully initiate conversations between residents and staff or volunteers
- Assist agency staff in quickly learning about the residents they are providing care for
- Provide opportunities for staff and residents to develop stronger relationships
- Increase resident's well-being knowing their voices are heard and preferences understood
- Build capacity to be able to implement PAL Cards with all residents in the community



It is very useful. For me, almost everything is about relationships. And this is a tool that could be used to increase our relationship with people, people who are in dire need of a relationship."

— Activities Director



"[Physical Therapy was] able to engage with the new admissions and help motivate them in therapy because they were able to talk about the specific things that the resident wanted to [talk about] and build that commonality, that trust between the two of them."

— Administrator



"I can tell you that when the dietary manager brought me their [PAL Card and] they were like "Did you know that this resident did..." I mean it was like a whole new world opened up because they got to find out things specific to that resident. They weren't just preparing a meal for them, now they know some things that they can go talk to them about and have a meaningful conversation."

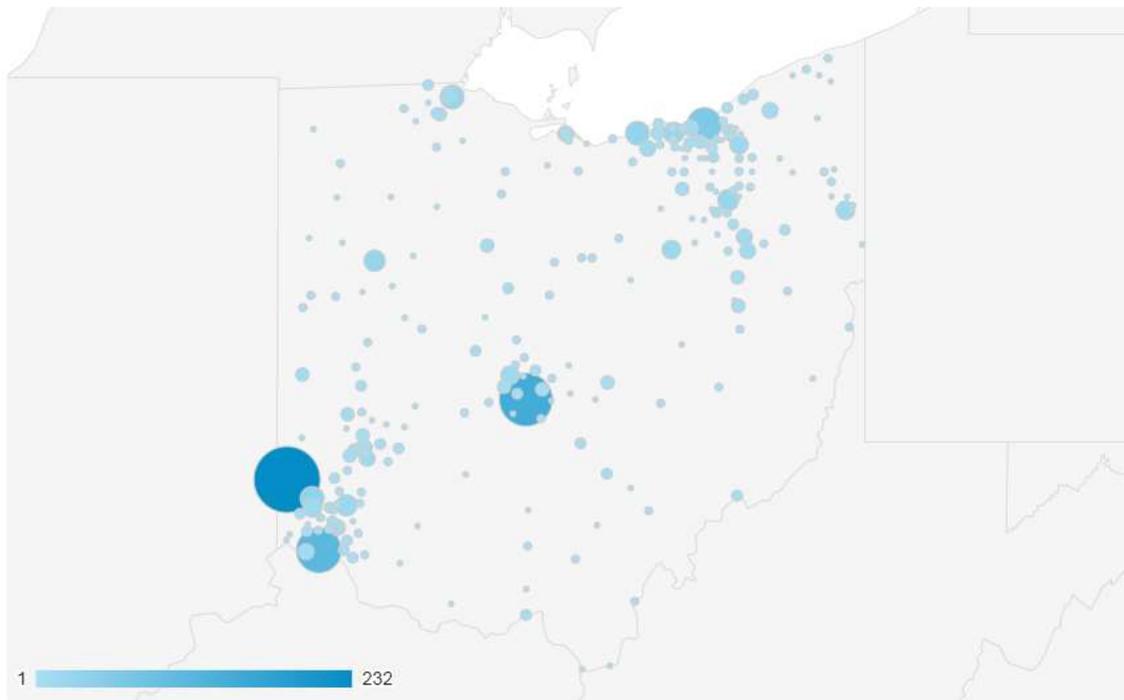
— Life Enrichment Director

Technology Infrastructure Support

Preference Based Living Website

The Preference Based Living website is our main mode for disseminating resources. Analytics for the period when the website was launched, July 2017 through Sept. 15, 2019, show a total of 8,320 new users, accounting for 13,792 sessions and accessing 42,562 page views. Most users (85%) were in the United States and 21% were from Ohio. As Figure 3 shows, providers from across the state were accessing content on the Preference Based Living website. Most users access our website via a desktop computer (81%) while smaller percentages use a mobile device (16%) or a tablet (3%). From the period of August 1-31, 2018 vs. August 1-31, 2019, we experienced year-over-year growth in users of 42.96%. This rate shows the continued and increasing interest in our materials.

Figure 3. Website usage across the state of Ohio between July 2017 and September 15, 2019.



ComPASS-16

The Care Preference Assessment of Satisfaction (ComPASS-16) tool is a mobile-responsive web application (heretofore referred to as a web app) for collecting and tracking responses to the 16 MDS preference items. ComPASS-16 can be accessed [here](#) and has three key components:

1. An electronic version of the Preferences for Everyday Living Inventory (PELI)-Nursing Home-MDS-Section F. This questionnaire asks about the 16 daily living and activity preferences covered in the federal Minimum Data Set 3.0-Section F, plus detailed follow-up questions.
2. Satisfaction questions that ask nursing home residents how satisfied they are with the way their important preferences are fulfilled.
3. Graphic reports that show care team members at-a-glance how well they are providing preference-based, person-centered care.

We focused on a number of key areas during this project:

Maintenance of existing Excel tool. The team worked on maintaining an existing Excel-based tool for tracking 16 MDS preference items as a means to provide data management options for providers and for facilitating knowledge transfer to the ComPASS-16 tool. The National Nursing Home Quality Improvement Campaign uses the tool to track responses to the 16 MDS preference items over time. Providers can utilize this tool for data management and quality improvement reports. The Person Centered Care Tracking Tool can be found [here](#). However, the CMS contract that supported the tool was not renewed in July 2019. Therefore, there is no longer support for the tool and providers can no longer use the campaign website to trend data over time.

User Studies and Evaluation. The team iteratively studied and evaluated user experiences with the ComPASS-16 system in order to improve its usability. This activity included face-to-face meetings and demonstrations of ComPASS-16 with nursing home activities directors to seek their feedback about the tool. One visit included working with Abramson Senior Care, North Wales, PA, a

community that has used the PELI to assess residents' recreation and leisure preferences for over five years. Project manager Alex Heppner along with three technical team members -- Dr. Gannod and two computer science students -- met with Therapeutic Recreation staff and observed them using ComPASS-16. This experience validated the usefulness of ComPASS-16 in a nursing home context. Also, the team saw that additional navigation features would help users shift among PELI questions and enhance the conversational flow of the assessment interview.

A major part of the effort was devoted to using a *heuristic evaluation* to study usability of the web app within the context of its expected usage scenarios. We examined 7 different areas as shown in Figure 4: *visibility of status, match between system and real world, user control and freedom, consistency and standards, recognition rather than recall, aesthetic and minimalist design, and error recognition and recovery.*

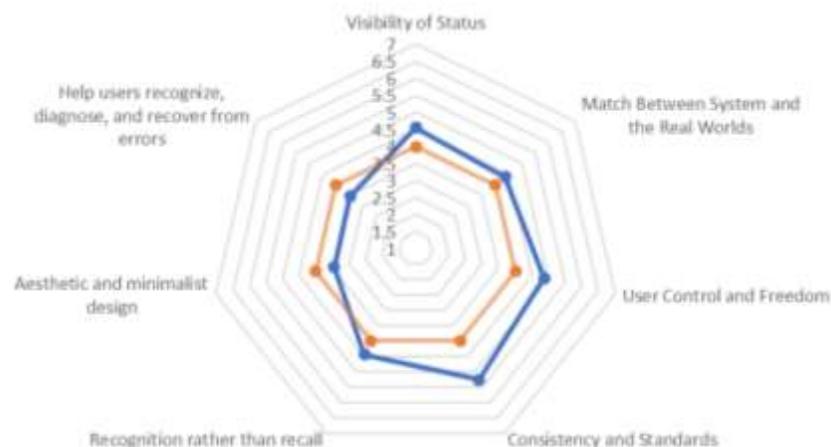


Figure 4 Heuristic Evaluation Summary

User Interface and User Experience. The project team devoted significant effort to improving the user interface based on the lessons learned from the evaluations. This included:

- Establishing dashboards to display both individual and aggregate information on preferences and satisfaction.

- Developing various online and printable reports for inclusion in resident care conferences.
- Creating support for different user types (i.e., support for having family-member/guardian users that act as proxies).
- Improving the web app language in order to better suit the terminology used in real world settings, including a clearer definition of the types of users and the relationship to staff roles in nursing homes,
- Designing a new overall look-and-feel presented to users in order to better streamline the task flow used when navigating through the system.

The following screenshots show key screens that comprise the interview process (including nested questions that refine a resident's expression of preferences), and status screens that summarize individual and aggregate preferences and satisfaction.

Figure 5. Screen Shot of ComPASS-16 with an MDS 3.0 Interview Question

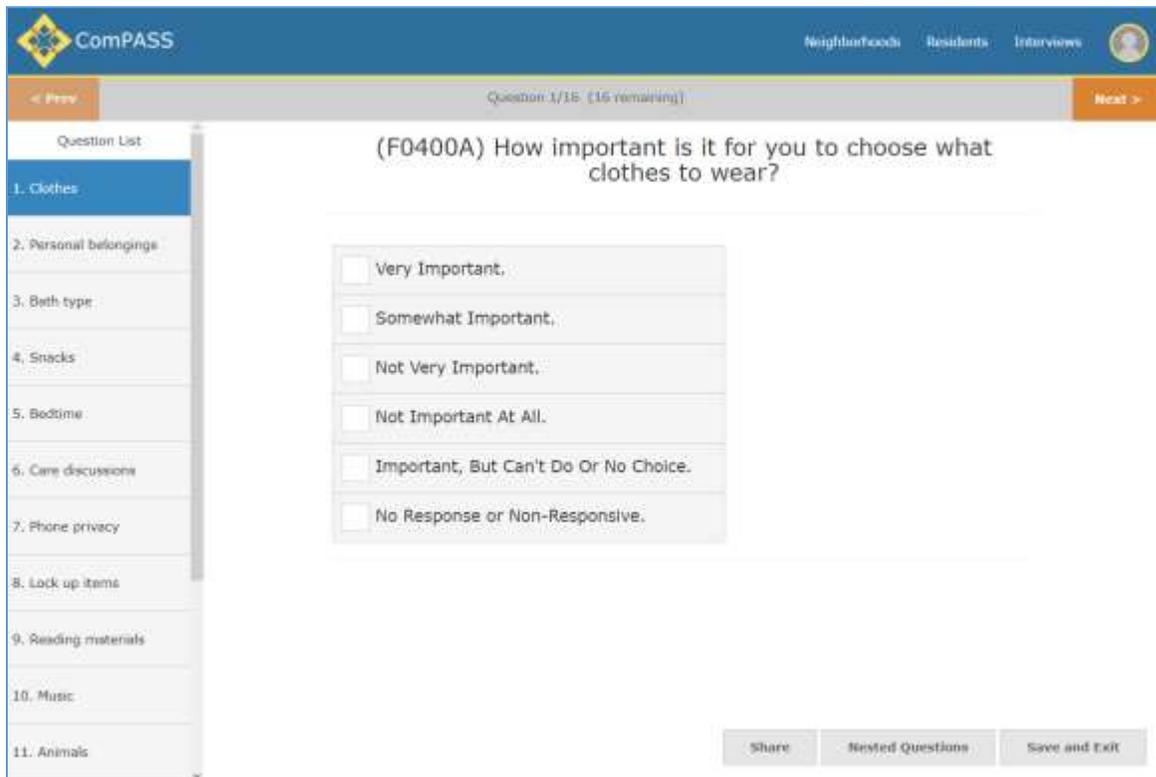


Figure 6. Screen Shot of ComPASS-16 with a Detailed Follow-up Questions from the PELI.

The screenshot shows the ComPASS-16 interface. At the top, there is a navigation bar with 'ComPASS' logo and 'Neighborhoods', 'Residents', and 'Interviews' tabs. Below the navigation bar, there is a 'Question List' sidebar on the left with items 1 through 10. The main content area displays a question: '(F0400A) How important is it for you to choose what clothes to wear?'. A blue button labeled 'Very Important.' is visible. Below the question, there are three follow-up questions, each with a text input field and a 'Clear' button: 'What do you usually like to wear for the day?', 'What do you like to wear to sleep?', and 'What jewelry do you like to wear?'. At the bottom, there is a 'Do you carry a bag, watch, or wallet?' question and three buttons: 'Share', 'Nested Questions', and 'Save and Exit'.

Figure 7. Screen Shot of ComPASS-16 Provider Dashboard.

The screenshot shows the ComPASS-16 Provider Dashboard. The dashboard is divided into several sections:

- Satisfaction Over Time:** A line graph showing the percentage of residents satisfied over time from 03/19 to 06/19. The y-axis is labeled '% Satisfied' and ranges from 0 to 100. The x-axis is labeled 'Month'. The data points are approximately: 03/19 (30%), 04/19 (30%), 05/19 (25%), and 06/19 (30%).
- Interesting Facts:** A section titled 'Most satisfied preference:' with the question 'How important is it for you to lock things up to keep them safe?'. It states '15% Responded with Satisfied'.
- Community Report March-June:** A pie chart showing the distribution of satisfaction levels. The legend indicates: Satisfied (34.7%), Somewhat Satisfied (34.7%), Unsatisfied (20.8%), and Important, But Can't Do Or No One (10.8%).
- Remaining Interviews:** A section showing '0 Residents need an initial interview.' and '0 Residents need a follow-up interview.' The total number of residents is 192.
- Resident Preferences:** A section showing 'How important is it for you to choose between a tub bath, ...' with a value of '62'. It also states 'Times this preference was marked as very important out of 201 interviews.'

Figure 8. Screen Shot of ComPASS-16 Individual Resident Report.

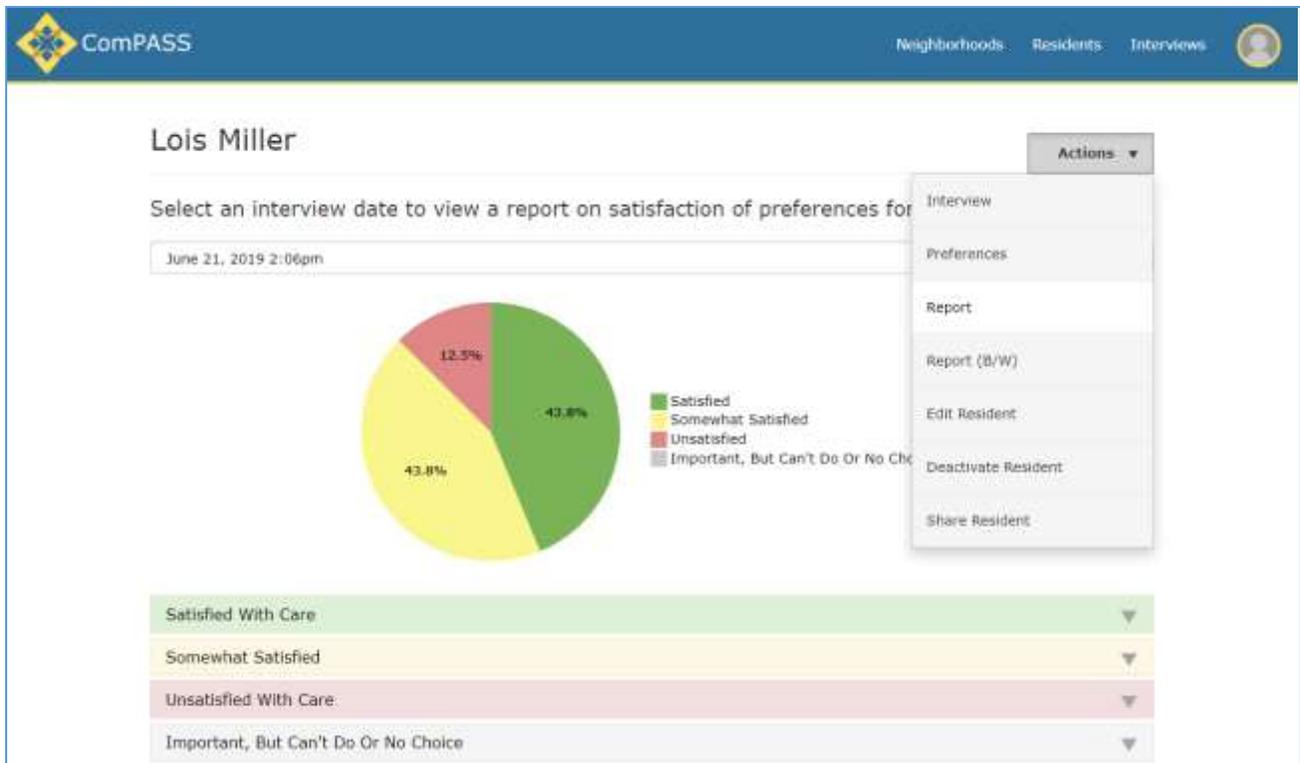


Figure 9. Screen Shot of ComPASS-16 Neighborhood Report.



Video Training. We developed video training materials for the ComPASS-16 web app to help with internal team training, as well as a detailed user's guide meant to help end-users become acquainted with the system.

Technology Transfer. We developed code needed to ensure that the software could be transferred to a third-party (Linked Senior, see next section below) for long-term deployment to customers and consequent corrective maintenance (i.e., removal of errors and bugs) and perfective maintenance (i.e., addition of new features). These activities included ensuring that the database design was sufficient for future changes, and that our systems followed modern development practices.

Description of Partnership with Linked Senior

In February 2017, we were approached by Charles De Vilmorin, the CEO of Linked Senior regarding our work. Linked Senior is the leading resident engagement platform for senior care. The objective is to personalize engagement for older adults living in residential settings. Linked Senior provides a digital tool that enables staff to assess, plan, implement and evaluate engagement for the entire resident population -- providing both a population health management dashboard and evidence-based resident engagement applications (games, brain fitness, music therapy, reminiscing),.

After multiple discussions, we entered into a Memorandum of Understanding with Linked Senior in January 2018 to pursue formal working agreements on the long-term sustainability of ComPASS-16. Linked Senior performed a source review and test of the system for commercial viability and made a number of detailed recommendations for improvements. The improvements were performed and completed by the Tennessee Technology Team in January 2019. Some included shortening page views, cleaning up page views for features that don't belong, and removing embedded JavaScript.

Along with these activities, Linked Senior advertised our webinars to their client base, allowing us to reach additional provider communities. We were presenters for two webinars hosted by Linked Senior in 2018 and 2019.

Linked Senior's project manager attended weekly team meetings and offered feedback on the usability and user experience of ComPASS-16 training videos. The CEO of Linked Senior attended our face-to-face project meetings in May 2019 to discuss progress on ComPASS-16 and ways the tool can be integrated into the Linked Senior software platform at no cost to providers.

Lessons Learned

- **Working closely with providers on the co-development of solutions to the barriers they face leads to successful interventions.** During the three-year project, we listened to the ideas and “pain points” of providers who seek to assess and honor resident preferences. Their input shaped every aspect of our work. Providers helped us determine which tip sheets, webinars, training videos, presentations, newsletter topics and other resources were needed most. Our technical advisory panel of stakeholders (Administrators, Nurses, Activity Professionals, etc.) reviewed drafts of our materials to ensure that we were using accessible and appropriate terminology as well as targeting the most important points from the standpoint of those on the ground planning and delivering care. Providers helped us come up with and design PAL Cards. The PELI-Can team was able to spend the time to develop the proof-of-concept and pilot test the model to work out feasible and acceptable implementation processes. Further testing with additional providers led to the recognition of the resources providers would need in order to be successful. Our team had to be flexible in collaborating with providers, whose days are often unpredictable given the urgent needs of resident care. Often previously scheduled appointments were canceled at the last minute due to high priority matters that required a provider's immediate attention. From these experiences, we learned to plan for more time for providers to review and test our materials, which ultimately leads to a

stronger, more feasible, acceptable and appropriate product that can become part of daily nursing home practice.

- **Throughout the duration of the project we heard from providers that one of their biggest pain points is staff turnover.** We quickly found out that this issue would be a pain point for us as well as we tried to network and form partnerships. Many of the connections we made early in the project were lost due to individuals leaving their organization or the industry entirely. The lesson learned from this experience is that projects such as ours are not immune to industry-wide issues and it is important to consider how challenges practitioners face may also affect the goals of the project.
- **Providing hands-on support to participants of the PAL Card QIP allowed us to not only form valuable partnerships but also understand the level of effort required to maintain them.** We did not anticipate the level of support the QIP participants would require with tasks such as downloading materials from our website, utilizing Microsoft Word for the PAL Card template, and solving problems that arose during the project. Being able to access our project manager to answer questions and provide support as needed was crucial to the success of these providers. The availability and reliability demonstrated by our team helped us develop relationships as providers felt more comfortable calling or emailing with questions when they knew who they were speaking with and that they would receive a prompt response. *As a result, at the end of the project the providers we worked with closely expressed interest in continuing to collaborate in the future and offered their expertise as needed.* The lesson learned from the QIP is that while providers may require substantial support to implement a new initiative, the benefit of providing hands-on support is developing strong and trusting partnerships.
- **We proposed to create a discussion board on our website where providers could post questions about assessing and honoring resident preferences but soon discovered another approach was better.** Our goal was to create an on-line community where providers

could share ideas, problem solve, and celebrate successes. However, the reality of having to log into yet another system to post questions and seek responses was not feasible. Providers have little time and access to engage with this type of resource. Therefore, we decided to invest our efforts in engaging providers with social media platforms they already use.

Specifically, we developed accounts on Facebook (104 followers), Twitter (128 followers), and LinkedIn (17 followers). The lesson learned in this process is that social media is a time consuming endeavor that requires a detailed action plan and strategic efforts to reach the targeted audience.

- **We are committed to moving the PELI into the digital world through the development of ComPASS-16 as well a partnership with a leading technology company that shares our goals.** A lesson learned is that the move to tracking data digitally will require additional education and training for providers, plus a partner to scale up the product for commercial viability and long-term sustainability. Therefore, we have partnered with Linked Senior to assist us with these goals. Linked Senior already has partnerships with many Ohio providers and electronic health records through Point, Click, Care. Partnering with organizations experienced in the commercial technology arena complements our team's expertise in the research and development arena.

Conclusion

Funding for this project resulted in the development of a significant infrastructure of education and training tools supported by dissemination to over 15,000 individuals in 36 months. In addition, we developed resources to remediate 32 barriers to assessing and integrating preferences into care. These resources are available at no cost to providers via our new website www.PreferenceBasedLiving.com. We learned that PAL Cards are an acceptable, feasible, and appropriate communication intervention that can be used to spark conversations with residents about meaningful activities. Successful implementation strategies had support from leadership, multiple staff members from different nursing home departments involved, and a process for integrating PAL Card

development into standard operations. Finally, the ComPASS-16 web app was developed and launched to assist providers in electronically capturing and tracking preferences over time as well as integrating preferences into quality improvement initiatives. All of these endeavors are used in service to our ultimate aim: advancing person-centered care that improves the quality of life for residents of Ohio's nursing homes.