

RESIDENT AND FAMILY SURVEYS FOR ASSISTED LIVING PROJECT FINAL REPORT 2021



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2021-2022

INTRODUCTION

Since 2006, the Minnesota Department of Human Services (DHS) has measured resident quality of life and family satisfaction connected with the Nursing Home Report Card. Building on this experience, DHS and the Minnesota Board of Aging are developing a report card to measure quality in Assisted Living (AL) settings. The purpose of the Resident and Family Surveys for Assisted Living Project was to develop and pilot test one survey that measures resident quality of life in AL facilities and another that measures family satisfaction with AL facilities. These instruments will be implemented statewide and will contribute to the forthcoming AL Report Card. Report card results will be made publicly available to assist Minnesota residents in locating care and to support AL facilities in quality improvement efforts.

The University of Minnesota (UMN) conducted the first phase of work related to the report card, which involved conducting a comprehensive literature review to identify AL quality measurement domains and subdomains. UMN identified nine quality domains including resident quality of life and resident and family satisfaction. Furthermore, the literature review indicated 14 subdomains for quality of life and 11 subdomains for resident and family satisfaction. Based on the results of the literature review, the UMN team coordinated stakeholder engagement to understand which of the domains and subdomains identified in national work were also supported by Minnesota stakeholders including residents, advocacy groups, providers, and family members. Additionally, this process identified gaps in domains. At the conclusion of this work, Vital Research, LLC (Vital) developed two surveys in collaboration with the DHS project team and UMN: (1) Resident Quality of Life and (2) Family Satisfaction.

The following report presents two phases of the design and development of the AL resident and family surveys. **Phase 1** details research activities related to the initial design, development and pilot testing of the Resident Quality of Life and Family Satisfaction surveys from 2020. **Phase 2** describes additional testing of the Resident Quality of Life survey in a sample of memory care residents, conducted in June 2021 due to restrictions imposed by the coronavirus pandemic and the need to test feasibility of in-person implementation among memory care residents.

PHASE I: INITIAL SURVEY DESIGN, DEVELOPMENT +PILOT TESTING

KEY PROJECT ACTIVITIES

Item Bank + Initial Survey Development

Vital began by developing a comprehensive item bank that listed items found in each of the resident quality of life and resident and family satisfaction tools identified in UMN's literature review. Items were entered into an Excel spreadsheet along with relevant information such as the response scale used, the intended respondent, the domain and subdomain of the item as listed in the original tool, and any psychometric properties of the tool that could be found.

After populating the item bank, Vital conducted an initial review of items to remove low quality and/or redundant items. The remaining items were then labeled using the sub-domains prioritized through the UMN-led stakeholder engagement process. Finally, groups of items were assessed according to the MN-specific sub-domains to ensure that sub-domains had an adequate representation of items and for those that did not, new items were drafted.

Vital created draft instruments based on the highest quality items within each MN-prioritized sub-domain. After several iterations of feedback and refinement among the DHS, UMN, and Vital teams, Dr. Jane Straker, Director of Research at Scripps Gerontology Center at Miami University, shared the draft survey instruments externally to gain feedback from key stakeholders via focus groups. Dr. Straker facilitated two focus groups held in March 2020: one with 11 AL providers and the other with 10 representatives of advocacy groups. DHS, UMN, and Vital teams used feedback from the focus groups regarding the survey length, the diversity of residents in terms of the level of support they receive, and suggested revisions for specific items to further refine the instruments in preparation for cognitive testing with residents. Just after focus groups took place, the COVID-19 pandemic shut down the country. The pandemic caused project implementation to pause until June 2020.

Cognitive Testing

In June 2020 project implementation resumed in a modified format. Initially, Vital intended to conduct cognitive testing via in-person interviews. However, given the risks involved with in-person contact throughout the pandemic, the Vital team conducted resident cognitive interviews over the phone. In addition, interviews with family members were added to the scope of work. Vital also conducted family satisfaction interviews over the phone with the objective of learning whether family members could even answer questions about the facilities where their residents lived, given they had likely not been able to visit in-person in the preceding months due to visitor restrictions.

Vital completed 11 resident cognitive interviews, along with 14 family interviews. Results from the resident interviews contributed to important survey modifications including the decision to use a 3-point response scale rather than a 4-point scale, determining which items needed probes or examples to facilitate resident understanding, and removing redundant items. Another important outcome of conducting resident cognitive interviews was learning that residents and facilities were willing and able to participate in the pilot test effort even with the ongoing challenges the pandemic presented. Family interview results indicated that families too were willing and able to respond to questions about their resident's facility and many family members had been to the facility for socially distanced visits. Given these promising results, pilot testing on a somewhat larger scale was approved with modifications as compared with the original design.

Pilot Testing

The goal for pilot testing was to obtain 400 completed surveys for each instrument under development, for a total of 800 completed surveys. Initially, pilot testing of the resident quality of life survey was intended to be conducted via in-person interviews. However, given the COVID-19 pandemic, resident survey pilot testing was done via mailed surveys. The family satisfaction survey had always been intended to be tested and administered as a mailed survey, which was maintained. Additionally, family members had the option of completing their survey online using a unique access code that was shared with them in the cover letter that was sent with the hard copy of the survey.

METHOD

Sample

Facility Recruitment

In August 2020, a subset of 150 facilities were initially invited to participate in pilot testing. Facilities with occupancies of fewer than 6 residents were excluded from this initial round of sampling. The remaining facilities were randomly sampled within strata with the aim of securing proportional representation of facilities of differing capacities (i.e., facilities that were small - 6-15 residents; medium – 16-50 residents; and large – more than 50 residents) and those located in urban and non-urban areas. Invitation emails were sent to facility contacts at the 150 sample sites by DHS. Fourteen facilities responded to the initial DHS email right away expressing interest in participating. Vital followed up with the non-respondents via email to continue recruiting. However, participation numbers were low, so Vital began a round of phone calls to facilities to generate additional participation. After conducting calls to 65 sites without any facilities agreeing to participate, phone call follow-up was suspended.

At the end of September 2020, participation was opened to all AL facilities in Minnesota due to low participation. DHS again sent an initial email to 598 facility contacts to invite them to participate in the pilot study. Vital followed-up via email to continue recruitment efforts.

Facility participation rates and resident response rates were closely monitored throughout the pilot test period. In December 2020, it was clear that the target of 400 complete resident surveys would not be reached so a final round of recruitment was conducted. In this recruitment effort, Vital reached out to provider organizations that had already volunteered for the pilot to see if any additional facilities managed by their organization could participate. This final round of recruitment resulted in several additional facilities agreeing to participate in the pilot study. Over the course of the pilot study, 58 facilities agreed to participate yet surveys were received from 46 facilities. About half of the participating facilities were in urban areas and the other half were in non-urban areas. Participating facilities also ranged in size. Fourteen had occupancies of 6-15 residents, 21 had 16-50 residents and seven had more than 50 residents.

Resident + Family Respondents

Over the course of pilot testing, 1,649 resident surveys were sent, and 1,636 family surveys were sent. A total of 441 resident surveys and 548 family surveys were received. Response rates for the two surveys are presented in the Table 1.

TABLE I. RESPONSE RATES FOR RESIDENT AND FAMILY SURVEYS DURING PILOT TESTING

	Resident Quality of Life	Family Satisfaction
Surveys Sent*	1,649	1,636
Surveys Received	441	548
Response Rate	26.7%	33.5%
Margin of Error	+/- 3.55%	+/- 3.21%

*Note: Surveys that were not able to be delivered were subtracted from the total number of surveys sent.

Residents who participated in pilot testing ranged in age from 40 to 104 years old with an average age of 84.9. Residents had lived at the facilities about which they were surveyed on average for 4.0 years, yet the range for years in residence at facilities was from less than one year to 46 years. Ninety-four percent of respondents identified as White/Caucasian/European American. Approximately 1% of respondents identified as American Indian or Alaskan Native, Asian or Asian American or Hispanic or Latino/a/x. Most respondents, 72%, identified as female. Additionally, 89% of respondents were not in a memory care unit. Forty-one percent of respondents had a high school diploma while 22% had studied some at the post-secondary level and 19% had a bachelor's degree or higher. In terms of residents' rating of their own health, 6% said their health was excellent, 28% stated their health was very good, 40% felt their health was good, and 22% said their health was poor. Residents were also asked to rate their memory at the time of survey administration. Six percent of respondents rated their memory as excellent, 25% said their memory was very good, 31% good, 22% fair, and 15% poor. In the month prior to survey administration 80% of resident respondents had used a cane, walker, or scooter and 52% of respondents had gotten some help with

eating, bathing, using the toilet or getting dressed. Finally, 63% of respondents filled out the survey independently while 27% had help from a family member or friend.

Family members who participated in pilot testing ranged in age from 26 to 90 years old with an average age of 63.6 and 66% identified as female. In terms of race or ethnicity, 94% of respondents identified as White/Caucasian/European American. Approximately 1% of respondents identified as American Indian or Alaskan Native, Asian or Asian American, Black or African American, or Hispanic or Latino/a/x. Respondents were asked their relation to the resident and could check multiple options, if relevant. Most respondents, 64%, were the child or son/daughter-in-law of the resident while 14% were guardians/conservators/power of attorney/case managers. Nine percent of respondents were another type of relative and 7% were spouses/partners. Under half of respondents were retired from employment while 33% were employed full-time and 10% were employed part-time. Finally, 56% of respondents visited the resident once a week or more often while 16% visited a couple of times a month and 7% visited about once a month. Not surprisingly respondents communicated with residents slightly more by phone, video chat, or text. Seventy-two percent of respondents communicated once a week or more with the resident.

Procedures: Data Collection

In the first phase of data collection, Vital received resident and family member census lists from participating facilities and directly mailed surveys with postage paid business reply envelopes directly to each resident and family member. In cases where two residents had the same family member listed as their primary contact, only one family satisfaction survey was sent to the family member.

In November 2020 a facility expressed concerns about sharing census lists for the project. Based on this concern, the mailing strategy was adjusted to ensure resident and family members' privacy. Through the new mailing strategy, a box of resident and family surveys was sent to the facility where a staff member was asked to distribute the surveys. Resident surveys were either hand delivered or left in residents' mailboxes. The family surveys were sent already sealed in postage paid envelopes, so facilities only had to address the envelopes. Postage paid business reply envelopes were included with all surveys so completed surveys only had to be put in the mail to be received at the Vital office. Throughout data collection, residents had the option of completing the survey by phone and families had the option of filling out their survey on-line.

Instruments

Resident Quality of Life

The initial resident quality of life survey had 51 items. In October 2020, an additional item to assess the perceived impact of the COVID-19 pandemic on residents' quality of life was added. Then, in November 2020, when the mailing strategy was adjusted, several demographic items that had been collected with the contact information provided by facilities, were added to the survey. The survey utilized in the final mailings of Phase I pilot testing can be found in Appendix A. The 57 items were grouped in the nine domains listed below plus a demographics section:

1. The people who work here
2. Physical environment
3. Food
4. Meaningful activities/Social engagement
5. Choice/Autonomy
6. Religion/Spirituality
7. Security, safety & privacy
8. Finances
9. Overall

Responses for most items besides Overall and Demographic items were provided on a scale that included: *Yes, always/most of the time*; *Yes, some of the time*; and *No, rarely or never*. Respondents could also mark *Not applicable/Don't know* for any given item.

Family Satisfaction

The family satisfaction survey initially consisted of 49 items split into the nine domains listed below. However, in October 2020 an additional item to assess the perceived impact of the COVID-19 pandemic on quality of their life was added. A demographics section captured respondents' relationship to the resident, gender, race, ethnicity, age, employment status and how often they visit or speak with the resident. The family satisfaction items (Appendix B) were grouped into the nine domains listed below:

1. Care experience
2. Choice/Preference
3. Personal care needs
4. Cost of care
5. Housekeeping
6. Meals
7. Physical environment
8. Quality of staff care
9. Overall

Responses for most items besides the Overall and Demographic items were provided on a scale that included *Strongly Agree*, *Agree*, *Disagree* and *Strongly Disagree* with an option for *Not Applicable/Don't Know*.

Analytic Plan

Descriptive statistics were calculated to understand variability in responses and use of the full response scale as well as the extent to which residents and family members could answer each of the items on the survey by examining the rate of *Not Applicable/Don't Know* and missing responses.

To understand the underlying factor structure of the items a common factor analysis (principal axis factoring) with varimax rotation was conducted. This method was used because it assumes that total variance is comprised of common and unique variance among items. It is a statistical method that allows researchers to measure complex, unobservable constructs utilizing a set of items that conceptually are linked to the underlying construct. Through factor analysis a larger set of items can be distilled down to fewer factors that can be better interpreted by the intended audience.

The goal was also to understand any latent constructs that define the relationships among items. Missing data was handled by substituting the mean of answered items within a sub-domain when just one item in any given sub-domain was missing. Internal consistency, or reliability, was assessed by calculating Cronbach's alpha for each of the identified factors. A Cronbach's alpha of 0.60 or higher is considered acceptable. In addition, item-level correlations for items within sub-domains were compared to item-level correlations with items outside of the sub-domain. These results are not presented here, but the strength of correlations of items within sub-domains was higher than correlations with items in other sub-domains.

RESULTS

Resident Quality of Life

Descriptive Statistics

Descriptive statistics for each item in the resident quality of life instrument are presented in this section by sub-domain, as organized on the survey instrument. The first sub-domain, "The People Who Work Here," contained ten items. Most responses, 65%-88% were *Yes, always/most of the time* (Table 2). However, respondents did use the full response scale across the nine items although did not often answer *No, rarely or never*. The items with the highest rates of *Not Applicable/Don't Know* and missing responses had to do with medication management and help with everyday activities at 20% and 9%, respectively. This was not surprising given the range of independence that residents of AL facilities have. The tenth item asked residents, "Do you have friends here?" using a *yes* or *no* response scale. Seventy-eight percent of respondents indicated they did have friends at the facility.

TABLE 2. DESCRIPTIVE STATISTICS FOR ITEMS IN THE PEOPLE WHO WORK HERE SUB-DOMAIN (N=440)

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Do the people who work here try to get to know you?	329	74.8%	92	20.9%	12	2.7%	3	0.7%	4	0.9%
Do the people who work here treat you with respect?	389	88.4%	43	9.8%	5	1.1%	0	0.0%	3	0.7%
Do you feel comfortable asking for help when you need it?	354	80.5%	73	16.6%	9	2.0%	1	0.2%	3	0.7%
Do the people who work here come quickly when you need help?	299	68.0%	107	24.3%	11	2.5%	19	4.3%	4	0.9%
Do the people who work here follow through when you have a complaint or problem?	288	65.5%	103	23.4%	18	4.1%	26	5.9%	5	1.1%
Do you get enough help with your everyday activities if you need it?	340	77.3%	48	10.9%	11	2.5%	37	8.4%	4	0.9%
Are you confident the people who work here can address your healthcare needs?	341	77.5%	67	15.2%	11	2.5%	15	3.4%	6	1.4%
Are you satisfied with how your mediations are managed?	300	68.2%	37	8.4%	13	3.0%	74	16.8%	16	3.6%

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Are you confident the people who work here know what to do if you have a medical emergency?	332	75.5%	74	16.8%	10	2.3%	16	3.6%	8	1.8%

NOTE: Bolded items are those that had combined NA/DK and No Response close to or above 10%.

Table 3 presents the frequencies for the three items in the “Physical Environment” sub-domain. Seventy-four percent or more resident responses were *Yes, always/most of the time*, yet the full response scale was used across items. Few *Not Applicable/Don’t Know* responses were selected although for the item regarding places for residents to socialize there were 10% of missing or *Not Applicable/Don’t Know* responses.

TABLE 3. DESCRIPTIVE STATISTICS FOR ITEMS IN THE PHYSICAL ENVIRONMENT SUB-DOMAIN (N=440)

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Are the common areas well maintained?	407	92.5%	18	4.1%	3	0.7%	5	1.1%	7	1.6%
Is it quiet enough for you to sleep here?	391	88.9%	36	8.2%	3	0.7%	1	0.2%	9	2.0%
Are there places for residents to socialize with other residents?	324	73.6%	55	12.5%	17	3.9%	23	5.2%	21	4.8%

Six items comprise the “Food” sub-domain (Table 4). As compared with the prior two sub-domains, residents tended to use the response options of *Yes, some of the time* and *No, rarely or never, more*. Between 24% and 43% of responses were either *Yes, some of the time* or *No, rarely or never, more*. The *Not Applicable/Don’t Know* option was not selected with frequency for most items. However, for the item asking if residents could eat when they want, 16% of respondents said *Not Applicable/Don’t Know* or the response was missing.

TABLE 4. DESCRIPTIVE STATISTICS FOR ITEMS IN THE FOOD SUB-DOMAIN (N=440)

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Does the facility offer access to healthy foods, like fruits and vegetables, if you want them?	310	70.5%	88	20.0%	19	4.3%	13	3.0%	10	2.3%
Is there enough variety in the meals offered here?	285	64.8%	108	24.5%	31	7.0%	7	1.6%	9	2.0%
Do you have enough choice in the meals offered by the facility?	254	57.7%	117	26.6%	45	10.2%	16	3.6%	8	1.8%
Do you look forward to mealtimes?	260	59.1%	119	27.0%	38	8.6%	11	2.5%	12	2.7%
Do you like the food served here?	223	50.7%	161	36.6%	36	8.2%	6	1.4%	14	3.2%
Can you eat your meals when you want to?	177	40.2%	93	21.1%	98	22.3%	50	11.4%	22	5.0%

Six items assessed residents' perceptions of activities offered and social engagement at their AL facility (Table 5). As with the "Food" sub-domain, responses related to "Meaningful Activities/Social Engagement" displayed a greater spread across the full response scale with 29%-62% of responses being either *Yes, some of the time* or *No, rarely or never*. The *Not Applicable/Don't Know* and missing responses were highest for the items asking if residents liked the activities provided and if there were enjoyable things to do on weekends (14% and 20%, respectively). These higher rates of NA/DK and non-response could be due in part to the pandemic, particularly given the items ask about activities which may have ceased all together during the pandemic.

TABLE 5. DESCRIPTIVE STATISTICS FOR ITEMS IN THE MEANINGFUL ACTIVITIES/SOCIAL ENGAGEMENT SUB-DOMAIN (N=440)

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Do you like the activities that are provided here?	183	41.6%	158	35.9%	37	8.4%	45	10.2%	17	3.9%
Are there things to do here on the weekends that you enjoy?	83	18.9%	137	31.1%	134	30.5%	60	13.6%	26	5.9%
Do you have enough activities to keep your mind active?	257	58.4%	120	27.3%	16	3.6%	32	7.3%	15	3.4%
Is there enough variety in the activities here?	169	38.4%	151	34.3%	62	14.1%	41	9.3%	17	3.9%
Do you enjoy the way you spend your time most days?	203	46.1%	180	40.9%	32	7.3%	13	3.0%	12	2.7%
Do you feel included in things that are happening here?	284	64.5%	106	24.1%	20	4.5%	17	3.9%	13	3.0%

Five items were developed to assess “Choice/Autonomy” (Table 6). Response patterns of items in this sub-domain were similar to other domains in that the majority of responses were *Yes, always/most of the time*, yet the full response scale was used. Three items had *Not Applicable/Don’t Know* and missing response rates higher than 10%.

TABLE 6. DESCRIPTIVE STATISTICS FOR ITEMS IN THE CHOICE/AUTONOMY SUB-DOMAIN (N=440)

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Can you decide how to spend your time each day?	332	75.5%	80	18.2%	7	1.6%	6	1.4%	15	3.4%
Do you spend as much time outdoors as you would like?	148	33.6%	129	29.3%	106	24.1%	36	8.2%	21	4.8%
Are you allowed to personalize your room?	364	82.7%	43	9.8%	7	1.6%	12	2.7%	14	3.2%
Are the services you receive here provided the way you want?	298	67.7%	71	16.1%	11	2.5%	35	8.0%	25	5.7%
Are you as involved in decisions about the services you receive here as you want to be?	228	51.8%	120	27.3%	42	9.5%	31	7.0%	19	4.3%

The “Religion/Spirituality” sub-domain was assessed by three items (Table 7). For these items, the full response scale was used with *Yes, always/most of the time* being the most common response. Interestingly, for each of the three items more than 10% of respondents indicated *Not Applicable/Don’t Know* as their response or the response was missing.

TABLE 7. DESCRIPTIVE STATISTICS FOR ITEMS IN THE RELIGION/SPIRITUALITY SUB-DOMAIN (N=440)

	Yes, always/ most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Are there enough opportunities for you to practice your religious or spiritual beliefs here?	270	61.4%	79	18.0%	37	8.4%	46	10.5%	8	1.8%
Are the people who work here respectful of your religious or spiritual practices?	324	73.6%	42	9.5%	6	1.4%	53	12.0%	15	3.4%
Are the people who work here respectful of your culture?	349	79.3%	22	5.0%	5	1.1%	51	11.6%	13	3.0%

Six items were included in the resident survey to examine residents’ perceptions of safety, security, and privacy at their AL facility (Table 8). Respondents used the full response scale across all items and just one item, Do the people who work here ever get angry at you, had a *Not Applicable/Don’t Know* and missing rate of more than 10%. That same item had a high rate of *Yes, always/most of the time* responses, which is quite negative if true of facilities. However, this high response of *Yes, always/most of the time* could be due to the wording of the item since it is one of the few items where a *No, rarely or never* response is the more positive response. During in-person cognitive testing that followed initial pilot testing, this item was assessed to ensure responses reflected residents’ experiences.

TABLE 8. DESCRIPTIVE STATISTICS FOR ITEMS IN THE SAFETY, SECURITY, AND PRIVACY SUB-DOMAIN (N=440)

	Yes, always/most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Are your personal belongings safe here?	369	83.9%	45	10.2%	9	2.0%	3	0.7%	14	3.2%
Do you feel safe here?	393	89.3%	26	5.9%	6	1.4%	1	0.2%	14	3.2%
Do the people who work here ever get angry at you?	290	65.9%	53	12.0%	37	8.4%	44	10.0%	16	3.6%
Do you feel comfortable voicing a complaint or concern?	255	58.0%	127	28.9%	27	6.1%	19	4.3%	12	2.7%
Do you feel you have enough privacy?	350	79.5%	56	12.7%	11	2.5%	3	0.7%	20	4.5%
Do the people who work here ask to come in before entering your room?	310	70.5%	76	17.3%	20	4.5%	7	1.6%	27	6.1%

To explore perceptions of financial aspects of AL facilities, residents were asked if they were involved in their own finances. Forty-four percent of residents were involved with their finances while 43% were not. Fourteen percent of respondents (n=61) did not reply to this item. If a respondent did indicate they were involved in their finances, they were instructed to answer two follow-up questions. Those who indicated they were not involved in their finances but may have still answered the follow-up questions were excluded from analysis of follow-up items. However, those who skipped the initial finance question but may have answered the follow-up questions were included in analysis. Results for the two follow-up items are presented in Table 9.

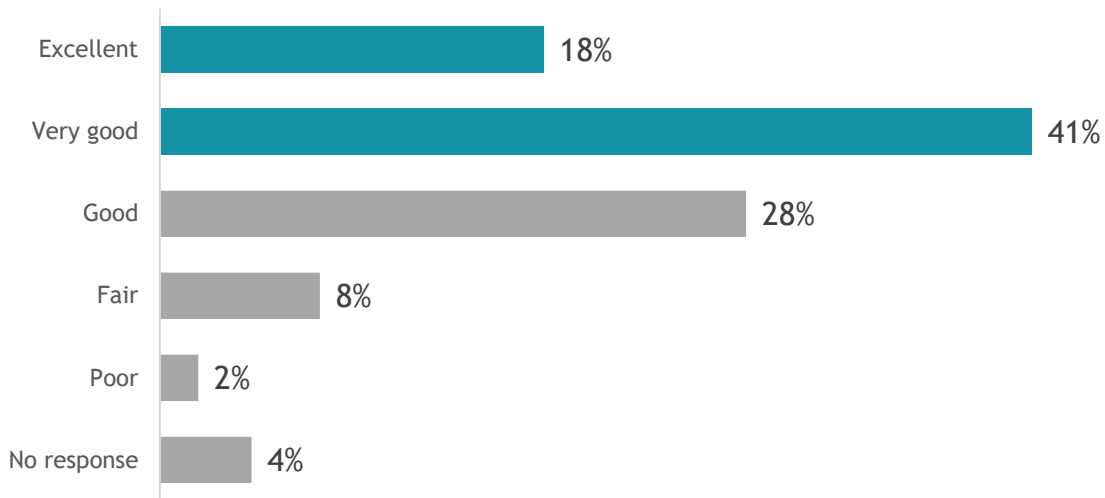
TABLE 9. DESCRIPTIVE STATISTICS FOR ITEMS IN THE FINANCES SUB-DOMAIN (N=440)

	Yes, always/most of the time		Yes, some of the time		No, rarely or never		NA/DK		No Response	
	n	%	n	%	n	%	n	%	n	%
Do you understand what is included in monthly fees?	163	37.0%	41	9.3%	7	1.6%	8	1.8%	221	50.2%
Do you believe you are getting value for money?	131	29.8%	65	14.8%	15	3.4%	7	1.6%	222	50.5%

Residents were asked two overall items about their quality of life and how they would grade the facility. Most residents rated their quality of life as *Excellent* or *Very Good* (Figure 1). Twenty-eight percent rated their quality of life as *Good*.

FIGURE 1. ASSISTED LIVING RESIDENT SELF-REPORTED QUALITY OF LIFE RATINGS.

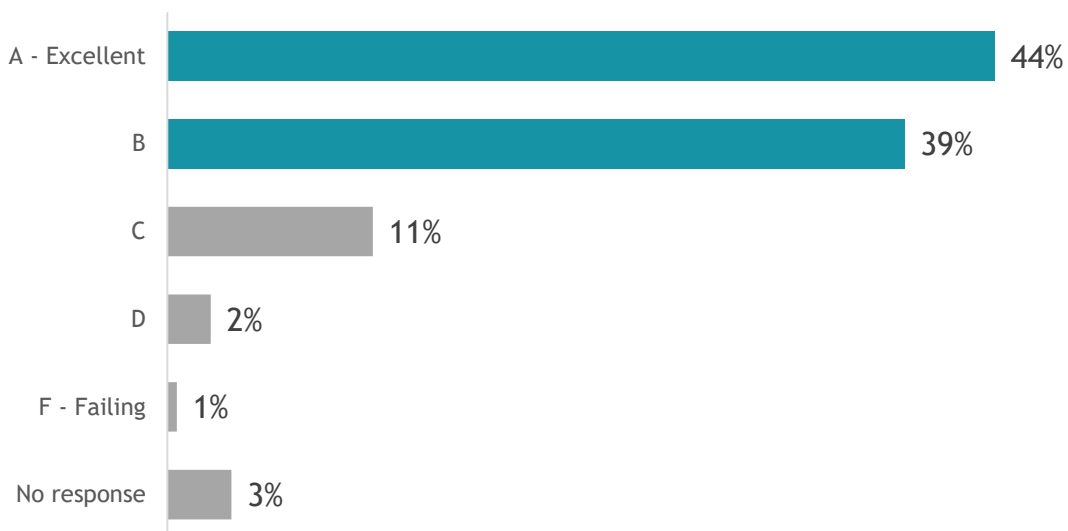
59% of residents rate their quality of life as excellent or very good (n=440).



Next, residents were asked to grade their facility on a scale ranging from A (*Excellent*) to F (*Failing*; Figure 2). More than 80% of residents graded their facility as A or B.

FIGURE 2. FACILITY GRADES ASSIGNED BY ASSISTED LIVING RESIDENTS.....

83% of residents graded their facility as A or B (n=440).



One item related to the COVID-19 pandemic was added to the resident quality of life survey part-way through pilot testing. Residents were asked: Overall, how has the COVID pandemic impacted your quality of life? Responses were provided on a 3-point scale that included: 1 – *To a great extent*; 2 – *To some extent*; and 3 – *Little or not at all*. Thirty-three percent of respondents felt the pandemic had impacted their lives to a great extent, 44% stated to some extent, 7% said not at all, and 16% were missing.

Factor Analysis

Results of the factor analysis are presented in Table 10. The items regarding finances were not included in the factor analysis because a large portion of respondents were not involved with their finances. Results are based on 254 responses. The initial solution was a 10-factor solution. However, in examining the scree plot 7-, 8-, and 9-factor solutions were explored with the 7-factor solution resulting in the best fit. Each of the seven factors had an eigen value >1.0 . The seven-factor solution explained 54.56% of the variance. The scree plot of the seven-factor solution indicated a leveling off after the seventh factor. The first factor explained 26.12% of the variance while the second and third factors explained 7.55% and 5.75% of the variance, respectively. The fourth and fifth factors explained 4.39% and 3.96% of the common variance, respectively.

TABLE 10. ROTATED FACTOR MATRIX RESULTS FOR RESIDENT QUALITY OF LIFE SURVEY (N=254)*

	Factor	Factor	Factor	Factor	Factor	Factor	Factor
	1	2	3	4	5	6	7
q7 Are you confident the people who work here can address your healthcare needs?	0.698	0.217	0.089	0.068	0.153	0.149	0.138
q5 Do the people who work here follow through when you have a complaint or problem?	0.649	0.114	0.173	0.091	0.293	0.148	0.126
q6 Do you get enough help with your everyday activities if you need it?	0.605	0.116	0.114	0.068	0.117	0.178	0.066
q9 Are you confident the people who work here know what to do if you have a medical emergency?	0.602	0.149	0.094	0.079	0.103	0.221	0.111
q3 Do you feel comfortable asking for help when you need it?	0.558	0.020	0.006	0.101	0.070	0.088	0.121
q4 Do the people who work here come quickly when you need help?	0.552	0.045	0.230	0.016	0.198	0.042	0.075
q13 Are there places for residents to socialize with other residents?	0.380	0.253	0.048	0.169	-0.014	0.020	0.112
q36 Do the people who work here ever get angry at you?	0.214	0.015	0.009	0.014	-0.008	0.078	-0.014
q16 Do you have enough choice in the meals offered by the facility?	0.070	0.818	0.140	0.102	0.053	0.163	0.086
q15 Is there enough variety in the meals offered here?	0.121	0.815	0.215	0.082	0.055	0.069	-0.002
q18 Do you like the food served here?	0.102	0.789	0.214	-0.009	0.009	0.027	0.096
q17 Do you look forward to mealtimes?	0.182	0.658	0.121	0.031	0.121	0.015	0.092
q14 Does the facility offer access to healthy foods, like fruits and vegetables, if you want them?	0.051	0.454	0.216	0.182	0.150	0.251	0.083

	Factor	Factor	Factor	Factor	Factor	Factor	Factor
	1	2	3	4	5	6	7
q19 Can you eat your meals when you want to?	0.204	0.397	0.080	0.060	-0.009	0.153	0.125
q23 Is there enough variety in the activities here?	0.106	0.176	0.766	0.229	0.084	0.117	-0.028
q24 Do you enjoy the way you spend your time most days?	0.174	0.210	0.619	0.043	0.154	0.195	0.376
q22 Do you have enough activities to keep your mind active?	0.055	0.187	0.584	0.116	-0.048	0.043	0.171
q21 Are there things to do here on the weekends that you enjoy?	0.176	0.325	0.549	0.078	0.133	0.058	0.089
q20 Do you like the activities that are provided here?	0.147	0.213	0.518	0.170	0.115	0.127	0.243
q32 Are the people who work here respectful of your religious or spiritual practices?	0.159	0.136	0.177	0.783	0.069	0.092	0.101
q33 Are the people who work here respectful of your culture?	0.049	-0.001	0.103	0.723	0.310	0.140	0.118
q31 Are there enough opportunities for you to practice your religious or spiritual beliefs here?	0.138	0.142	0.241	0.623	0.038	0.114	0.193
q12 Is it quiet enough for you to sleep here?	0.158	-0.011	0.101	0.112	0.706	0.041	0.039
q11 Are the common areas well maintained?	0.227	0.133	0.078	0.067	0.640	0.180	-0.010
q2 Do the people who work here treat you with respect?	0.258	0.156	0.034	0.191	0.630	0.202	0.219
q8 Are you satisfied with how your mediations are managed?	0.388	0.078	0.135	-0.053	0.186	0.558	-0.125
q35 Do you feel safe here?	0.148	0.086	0.062	0.295	0.335	0.549	0.069

	Factor	Factor	Factor	Factor	Factor	Factor	Factor
	1	2	3	4	5	6	7
q37 Do you feel comfortable voicing a complaint or concern?	0.274	0.196	0.183	0.037	0.036	0.452	0.233
q38 Do you feel you have enough privacy?	0.189	0.086	-0.026	0.212	0.148	0.415	0.279
q34 Are your personal belongings safe here?	0.353	0.163	0.096	0.040	0.259	0.408	0.095
q39 Do the people who work here ask to come in before entering your room?	0.228	0.090	0.076	0.080	0.022	0.339	0.037
q30 Are you as involved in decisions about the services you receive here as you want to be?	0.187	0.234	0.222	0.272	0.034	0.296	0.261
q28 Are you allowed to personalize your room?	0.079	0.046	0.139	0.219	-0.193	0.286	0.240
q26 Can you decide how to spend your time each day?	0.020	0.089	0.156	0.183	0.017	0.169	0.572
q1 Do the people who work here try to get to know you?	0.364	0.136	-0.071	0.010	0.229	0.018	0.390
q27 Do you spend as much time outdoors as you would like?	0.014	0.228	0.259	0.047	-0.110	0.027	0.373
q29 Are the services you receive here provided the way you want?	0.302	0.108	0.106	0.242	0.109	0.287	0.354
q10 Do you have friends here?	0.141	-0.006	0.124	0.052	0.113	-0.019	0.314
q25 Do you feel included in things that are happening here?	0.192	0.187	0.251	0.198	0.032	0.134	0.305

*NOTE: Items that load onto more than one factor are highlighted in light orange and bolded.

Reliability

The resident quality of life survey sub-domains were found to have adequate internal consistencies evidenced by Cronbach alphas ranging from 0.633 to 0.861 for each of the seven factors (Table 11).

TABLE 11. CRONBACH ALPHAS FOR EACH OF THE SEVEN FACTORS

Factor Number	Cronbach alpha	Number of Items
1	0.816	8
2	0.861	6
3	0.831	5
4	0.801	3
5	0.712	3
6	0.758	8
7	0.633	6

In addition, the corrected item-total correlations are presented below in Table 12.

TABLE 12. CORRECTED ITEM-TOTAL CORRELATIONS FOR RESIDENT QUALITY OF LIFE SURVEY

Factor 1	Corrected Item-Total Correlation
q7 Are you confident the people who work here can address your healthcare needs?	0.675
q5 Do the people who work here follow through when you have a complaint or problem?	0.644
q6 Do you get enough help with your everyday activities if you need it?	0.567
q9 Are you confident the people who work here know what to do if you have a medical emergency?	0.587
q3 Do you feel comfortable asking for help when you need it?	0.534
q4 Do the people who work here come quickly when you need help?	0.563
q13 Are there places for residents to socialize with other residents?	0.444
q36 Do the people who work here ever get angry at you?	0.224
Factor 2	Corrected Item-Total Correlation
q16 Do you have enough choice in the meals offered by the facility?	0.743
q15 Is there enough variety in the meals offered here?	0.763

q18 Do you like the food served here?	0.717
q17 Do you look forward to mealtimes?	0.650
q14 Does the facility offer access to healthy foods, like fruits and vegetables, if you want them?	0.548
q19 Can you eat your meals when you want to?	0.488
Factor 3	Corrected Item-Total Correlation
q20 Do you like the activities that are provided here?	0.613
q21 Are there things to do here on the weekends that you enjoy?	0.585
q22 Do you have enough activities to keep your mind active?	0.581
q23 Is there enough variety in the activities here?	0.717
q24 Do you enjoy the way you spend your time most days?	0.649
Factor 4	Corrected Item-Total Correlation
q31 Are there enough opportunities for you to practice your religious or spiritual beliefs here?	0.599
q32 Are the people who work here respectful of your religious or spiritual practices?	0.672
q33 Are the people who work here respectful of your culture?	0.631
Factor 5	Corrected Item-Total Correlation
q2 Do the people who work here treat you with respect?	0.528
q11 Are the common areas well maintained?	0.548
q12 Is it quiet enough for you to sleep here?	0.509
Factor 6	Corrected Item-Total Correlation
q8 Are you satisfied with how your medications are managed?	0.475
q35 Do you feel safe here?	0.518
q37 Do you feel comfortable voicing a complaint or concern?	0.556
q38 Do you feel you have enough privacy?	0.525
q34 Are your personal belongings safe here?	0.424
q39 Do the people who work here ask to come in before entering your room?	0.374

q30 Are you as involved in decisions about the services you receive here as you want to be?	0.477
q28 Are you allowed to personalize your room?	0.283
Factor 7	Corrected Item-Total Correlation
q26 Can you decide how to spend your time each day?	0.442
q1 Do the people who work here try to get to know you?	0.256
q27 Do you spend as much time outdoors as you would like?	0.330
q29 Are the services you receive here provided the way you want?	0.390
q10 Do you have friends here?	0.316
q25 Do you feel included in things that are happening here?	0.405

Family Satisfaction

Descriptive Statistics

Descriptive statistics for each item in the family satisfaction survey are presented in this section by sub-domain. As such, items are grouped in the order in which they appeared on the survey. Relatively few responses were missing across items, so we focus on *Not Applicable/Don't Know* response rates throughout this section rather than *Not Applicable/Don't Know* and missing. The first subdomain, "Care Experience," contained nine items (Table 13). Respondents answered using the full scale that ranged from *Strongly Agree* to *Strongly Disagree*. However, most responses for all items were either *Strongly Agree* or *Agree*. Less than 3% of respondents indicated *Strongly Disagree* for any of the items in this sub-domain. The extent to which respondents marked *Not Applicable/Don't Know* or responses were missing, varied across the items. For two items, both related to activities, the *Not Applicable/Don't Know* responses were over 10%. This could be related to the pandemic and family members not knowing what was happening in terms of activities, if anything. Otherwise, items were answered by most family members.

TABLE 13. DESCRIPTIVE STATISTICS FOR ITEMS IN CARE EXPERIENCE SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
I feel welcome when I visit.	361	65.9%	164	29.9%	6	1.1%	0	0.0%	17	3.1%	0	0.0%
People who work here try to get to know me.	198	36.1%	296	54.0%	24	4.4%	3	0.5%	26	4.7%	1	0.2%
The leaders of this facility are available to speak with me, if needed.	300	54.7%	230	42.0%	13	2.4%	1	0.2%	3	0.5%	1	0.2%
I am comfortable voicing a complaint or concern.	280	51.1%	239	43.6%	9	1.6%	3	0.5%	13	2.4%	4	0.7%
People who work here respond promptly to my concerns.	259	47.3%	252	46.0%	21	3.8%	1	0.2%	9	1.6%	6	1.1%
I am pleased with how the people who work here treat my resident.	315	57.5%	213	38.9%	6	1.1%	1	0.2%	11	2.0%	2	0.4%
This facility offers enough meaningful activities my resident enjoys.	155	28.3%	244	44.5%	63	11.5%	12	2.2%	68	12.4%	6	1.1%
My resident looks forward to participating in activities.	149	27.2%	218	39.8%	55	10.0%	16	2.9%	101	18.4%	9	1.6%
My resident seems happy at this facility.	238	43.4%	261	47.6%	23	4.2%	1	0.2%	21	3.8%	4	0.7%

For the “Choice/Preference” sub-domain, five items were descriptively analyzed (Table 14). For each item, over 80% of responses were either *Strongly Agree* or *Agree*. For three items, no *Strongly Disagree* responses were provided. For three items, *Not Applicable/Don't Know* were selected by more than 10% of respondents.

TABLE 14. DESCRIPTIVE STATISTICS FOR ITEMS IN CHOICE/PREFERENCE SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
I have enough opportunities to provide input into decisions about my resident's care.	234	42.7%	266	48.5%	27	4.9%	4	0.7%	14	2.6%	3	0.5%
My resident's spiritual beliefs are respected.	230	42.0%	232	42.3%	3	0.5%	0	0.0%	81	14.8%	2	0.4%
People who work here respect my resident's culture.	234	42.7%	233	42.5%	2	0.4%	0	0.0%	77	14.1%	2	0.4%
People who work here care about my resident.	306	55.8%	230	42.0%	5	0.9%	0	0.0%	7	1.3%	0	0.0%
My resident has a choice in the care they receive.	209	38.1%	235	42.9%	18	3.3%	6	1.1%	77	14.1%	3	0.5%

Six items were descriptively analyzed in the “Personal Care Needs” sub-domain (Table 15). Two items related to staffing levels during the week and on weekends were harder to answer for family members, such that 18-22% of respondents marked *Not Applicable/Don't Know*. Generally, family members tended to select *Strongly Agree* or *Agree* when responding to items in this sub-domain and used *Disagree* and *Strongly Disagree* for less than 15% of responses.

TABLE 15. DESCRIPTIVE STATISTICS FOR ITEMS IN PERSONAL CARE NEEDS SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
I receive timely updates about changes in my resident's status.	238	43.4%	247	45.1%	38	6.9%	6	1.1%	14	2.6%	5	0.9%
I am satisfied with the amount of information I receive about my resident.	214	39.1%	261	47.6%	49	8.9%	9	1.6%	9	1.6%	6	1.1%
My resident is given the opportunity to be as independent as they can be.	255	46.5%	257	46.9%	6	1.1%	0	0.0%	27	4.9%	3	0.5%
I am confident that my resident's service plan is being delivered as promised.	220	40.1%	259	47.3%	26	4.7%	6	1.1%	33	6.0%	4	0.7%
There is enough staff during weekdays.	165	30.1%	234	42.7%	36	6.6%	5	0.9%	100	18.2%	8	1.5%
There is enough staff on weekends.	112	20.4%	217	39.6%	65	11.9%	17	3.1%	123	22.4%	14	2.6%

Cost of care was explored by first asking family members if they were involved in the resident's finances. If the family member responded yes, then they were asked about understanding what is covered in monthly fees and if fees are appropriate considering the quality of services provided (Table 16). Respondents who answered no to the first question about cost were removed from analysis. However, if a respondent skipped the first question about cost and then answered the follow-up questions, their responses were included in the analysis. Eighty-three percent of respondents ($n=456$) indicated they were involved with the resident's finances. Of eligible responses to the follow-up cost-related items, 81% *Strongly Agreed* or *Agreed* they understood what was covered in monthly fees. However, 69% *Strongly Agreed* or *Agreed* that monthly fees were appropriate for the quality of services provided.

TABLE 16. DESCRIPTIVE STATISTICS FOR ITEMS IN COST OF CARE SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
I understand what is covered in my resident's monthly fees.	221	40.3%	223	40.7%	18	3.3%	3	0.5%	2	0.4%	81	14.8%
Monthly fees are appropriate for the quality of services provided.	142	25.9%	234	42.7%	43	7.8%	14	2.6%	32	5.8%	83	15.1%

Housekeeping was another sub-domain on the family satisfaction survey, which contained four items (Table 17). As with items in other sub-domains most respondents used *Strongly Agree* or *Agree* as response categories. Few respondents chose *Disagree* or *Strongly Disagree* for the housekeeping items. Similarly, few respondents marked *Not Applicable/Don't Know* for these items.

TABLE 17. DESCRIPTIVE STATISTICS FOR ITEMS IN HOUSEKEEPING SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
My resident's living unit/personal space is well maintained.	208	38.0%	287	52.4%	20	3.6%	2	0.4%	27	4.9%	4	0.7%
The common areas in and around the facility are well maintained.	292	53.3%	234	42.7%	1	0.2%	1	0.2%	17	3.1%	3	0.5%
The facility is clean.	299	54.6%	225	41.1%	2	0.4%	0	0.0%	18	3.3%	4	0.7%
The facility is free of offensive odors.	290	52.9%	223	40.7%	9	1.6%	0	0.0%	23	4.2%	3	0.5%

Three items related to the variety in meals and whether residents like meals were included in the “Meals” sub-domain (Table 18). Approximately 15% of responses regarding variety in meals were *Not Applicable/Don’t Know*. Otherwise, *Strongly Agree* and *Agree* were common responses although more *Agree* responses were logged compared with *Strongly Agree*. Compared with most other items in other sub-domains, family members indicated they disagreed with statements about meals to a greater extent.

TABLE 18. DESCRIPTIVE STATISTICS FOR ITEMS IN MEALS SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
There is enough variety in the meals.	157	28.6%	243	44.3%	54	9.9%	8	1.5%	84	15.3%	2	0.4%
My resident looks forward to mealtimes.	168	30.7%	247	45.1%	58	10.6%	14	2.6%	58	10.6%	3	0.5%
My resident likes the food served here.	155	28.3%	258	47.1%	66	12.0%	19	3.5%	44	8.0%	6	1.1%

The facility’s “Physical Environment” was assessed by three items on the family satisfaction survey (Table 19). Almost all respondents (>95%) *Strongly Agreed* or *Agreed* with positive statements about resident safety at the facility.

TABLE 19. DESCRIPTIVE STATISTICS FOR ITEMS IN PHYSICAL ENVIRONMENT SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
This facility has accommodations to ensure my resident's physical safety.	296	54.0%	235	42.9%	5	0.9%	0	0.0%	11	2.0%	1	0.2%
I feel confident my resident is safe.	293	53.5%	240	43.8%	10	1.8%	0	0.0%	4	0.7%	1	0.2%
My resident's belongings are safe.	247	45.1%	254	46.4%	23	4.2%	2	0.4%	17	3.1%	5	0.9%

Six items comprise the “Quality in Staff Care” sub-domain (Table 20). The pattern of results for Quality in Staff Care was similar to items across other sub-domains. Most respondents chose *Strongly Agree* or *Agree* for their answers with very few selecting *Strongly Disagree*. The *Not Applicable/Don’t Know* option was selected by more than 10% of respondents for the item related to a sense of community and regarding people working at the facility being knowledgeable about the resident’s service plan.

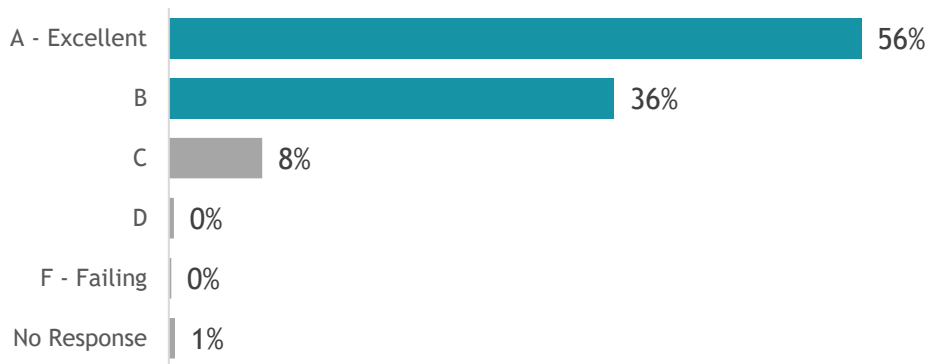
TABLE 20. DESCRIPTIVE STATISTICS FOR ITEMS IN QUALITY OF STAFF CARE SUB-DOMAIN (N=548)

	Strongly Agree		Agree		Disagree		Strongly Disagree		NA/DK		No Response	
	n	%	N	%	n	%	n	%	n	%	n	%
People who work here seem happy to work here.	212	38.7%	284	51.8%	18	3.3%	2	0.4%	31	5.7%	1	0.2%
There is a sense of community among the people who live and work at this facility.	228	41.6%	233	42.5%	18	3.3%	0	0.0%	66	12.0%	3	0.5%
I have peace of mind about the care my resident is getting.	270	49.3%	247	45.1%	20	3.6%	3	0.5%	4	0.7%	4	0.7%
People who work here treat my resident with respect.	277	50.5%	248	45.3%	2	0.4%	0	0.0%	15	2.7%	6	1.1%
People who work here take the time to get to know my resident.	248	45.3%	227	41.4%	19	3.5%	4	0.7%	44	8.0%	6	1.1%
People who work here are knowledgeable about my resident’s service plan.	199	36.3%	246	44.9%	24	4.4%	2	0.4%	73	13.3%	4	0.7%

Three items asked family members to rate the facility in a global manner. The first item asked respondents to grade the facility on a scale ranging from A (*Excellent*) to F (*Failing*). Results showed that respondents used the range of response options, yet the majority rated their resident's facility as an A or B (Figure 3).

FIGURE 3. FACILITY GRADES ASSIGNED BY RESIDENTS' FAMILY MEMBERS, (N=548)

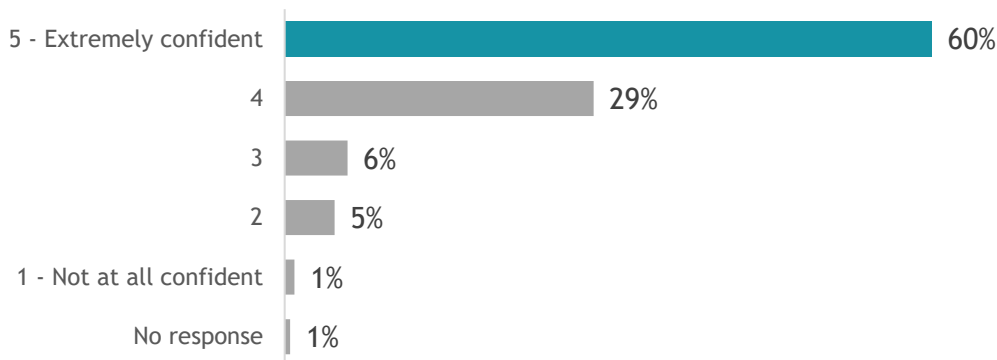
92% of respondents graded their resident's facility as an A or B.



The next two items for rating global quality of AL facilities are also used on the Nursing Home family satisfaction survey. The first item asked respondents how confident they are that the resident is well cared for whether the family member is present. Eighty-nine percent of respondents were 5 or 4 in confidence on a scale of 5 (*Extremely Confident*) to 1 (*Not At All Confident*) that their resident was well cared for (Figure 4).

FIGURE 4. FAMILY MEMBER CONFIDENCE THEIR ASSISTED LIVING RESIDENT IS WELL CARED FOR, (N=548).

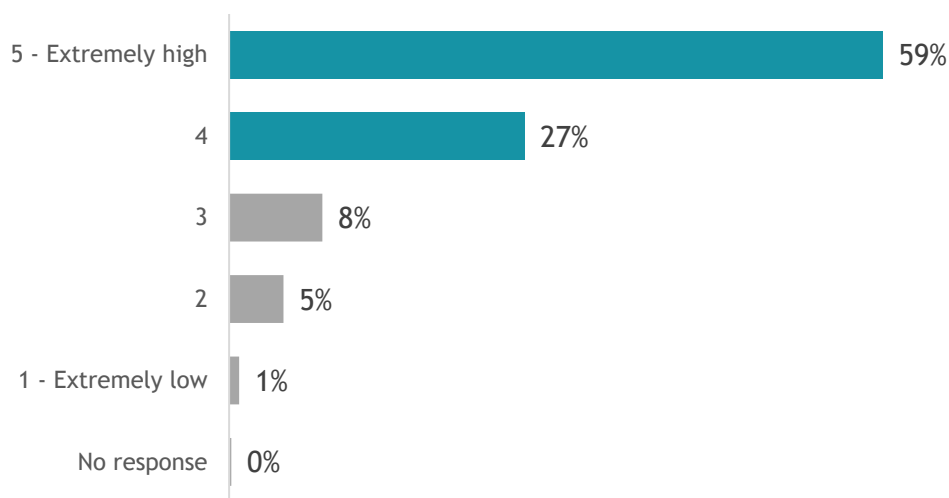
88% of respondents were extremely confident or confident that residents were well cared for.



Additionally, 85% of respondents said they were a 5 or 4 in terms of how enthusiastically they would recommend the facility to another family on a scale ranging from 5 (*Extremely High*) to 1 (*Extremely Low*; Figure 5).

FIGURE 5. FAMILY MEMBER RECOMMENDATION OF ASSISTED LIVING FACILITY TO OTHERS, (N=548).

86% of respondents would enthusiastically recommend their resident's facility to others.



One item related to the COVID-19 pandemic was added to the family satisfaction survey part-way through pilot testing the instrument. Family members were asked: Overall, how has the COVID pandemic impacted your quality of life? Responses were provided on a 3-point scale that included: 1 – *To a great extent*; 2 – *To some extent*; and 3 – *Little or not at all*. Thirty-nine percent of respondents said the pandemic had impacted them *To a great extent*, 42% stated that the pandemic had impacted them *To some extent*, 5% of respondents said *Little or not at all* and 13% of responses were missing.

Factor Analysis

Results of the factor analysis are presented in Table 21. Analyses are based on 395 responses. Here too the items related to finances were excluded from analyses due to low response rates.

Additionally, two items related to activities and two items related to staffing were excluded due to low response rates. A four-factor solution was the default structure defined with each of the factors having an eigen value >1.0. However, we settled on a five-factor solution that explained 70.53% of the variance. The scree plot of the five-factor solution indicated a leveling off after the fifth factor and the fifth factor's eigen value was just under 1.0. The first factor explained 53.25% of the common variance while the second and third factors explained 6.09% and 4.34% of the common variance, respectively. The fourth and fifth factors explained 3.82 % and 3.03% of the common variance, respectively. The first four factors had eigen values greater than 1.00 and the fifth factor had an eigen value of 0.971.

TABLE 21. ROTATED FACTOR MATRIX RESULTS FOR FAMILY SATISFACTION SURVEY (N=395)*

	Factor				
	1	2	3	4	5
q37 People who work here treat my resident with respect.	0.723	0.274	0.265	0.163	0.244
q36 I have peace of mind about the care my resident is getting.	0.706	0.281	0.263	0.226	0.177
q39 People who work here are knowledgeable about my resident's service plan.	0.692	0.379	0.188	0.162	0.124
q38 People who work here take the time to get to know my resident.	0.679	0.378	0.217	0.149	0.132
q35 There is a sense of community among the people who live and work at this facility.	0.657	0.314	0.261	0.184	0.179
q34 People who work here seem happy to work here.	0.610	0.316	0.229	0.255	0.143
q13 People who work here care about my resident.	0.584	0.297	0.208	0.133	0.400
q32 I feel confident my resident is safe.	0.564	0.302	0.379	0.122	0.289
q18 I am confident that my resident's service plan is being delivered as promised.	0.535	0.484	0.285	0.152	0.169
q6 I am pleased with how the people who work here treat my resident.	0.507	0.423	0.193	0.172	0.245
q31 This facility has accommodations to ensure my resident's physical safety.	0.470	0.260	0.444	0.148	0.405
q33 My resident's belongings are safe.	0.462	0.314	0.284	0.098	0.377
q9 My resident seems happy at this facility.	0.371	0.317	0.149	0.305	0.214
q15 I receive timely updates about changes in my resident's status.	0.359	0.708	0.198	0.088	0.129
q5 People who work here respond promptly to my concerns.	0.298	0.694	0.166	0.189	0.155
q16 I am satisfied with the amount of information I receive about my resident.	0.378	0.667	0.191	0.048	0.146

	Factor				
	1	2	3	4	5
q4 I am comfortable voicing a complaint or concern.	0.259	0.651	0.251	0.137	0.231
q10 I have enough opportunities to provide input into decisions about my resident's care.	0.285	0.621	0.209	0.176	0.291
q3 The leaders of this facility are available to speak with me, if needed.	0.188	0.572	0.224	0.210	0.212
q2 People who work here try to get to know me.	0.337	0.506	0.176	0.189	0.263
q1 I feel welcome when I visit.	0.351	0.483	0.256	0.098	0.190
q14 My resident has a choice in the care they receive.	0.439	0.460	0.186	0.137	0.417
q25 The common areas in and around the facility are well maintained.	0.298	0.245	0.789	0.169	0.111
q26 The facility is clean.	0.259	0.300	0.783	0.192	0.178
q27 The facility is free of offensive odors.	0.295	0.241	0.706	0.169	0.277
q24 My resident's living unit/personal space is well maintained.	0.360	0.293	0.487	0.251	0.161
q30 My resident likes the food served here.	0.134	0.128	0.099	0.908	0.097
q29 My resident looks forward to mealtimes.	0.176	0.147	0.138	0.870	0.088
q28 There is enough variety in the meals.	0.218	0.166	0.230	0.712	0.155
q11 My resident's spiritual beliefs are respected.	0.265	0.350	0.221	0.180	0.696
q12 People who work here respect my resident's culture.	0.303	0.370	0.258	0.215	0.672
q17 My resident is given the opportunity to be as independent as they can be.	0.397	0.373	0.362	0.142	0.415

*Note: Items that loaded onto two factors are highlighted in light orange and bolded.

Reliability

The family satisfaction survey sub-domains were found to have adequate internal consistencies evidenced by Cronbach alphas ranging from 0.874 to 0.952 for each of the five factors (Table 22).

TABLE 22. CRONBACH ALPHAS FOR EACH OF THE FIVE FACTORS

Factor Number	Cronbach alpha	Number of Items
1	0.952	13
2	0.920	9
3	0.907	4
4	0.915	3
5	0.874	3

In addition, the corrected item-total correlations are presented below in Table 23.

TABLE 23. CORRECTED ITEM-TOTAL CORRELATIONS FOR FAMILY SATISFACTION SURVEY

Factor 1	Corrected Item-Total Correlation
q37 People who work here treat my resident with respect.	0.833
q36 I have peace of mind about the care my resident is getting.	0.829
q39 People who work here are knowledgeable about my resident's service plan.	0.796
q35 There is a sense of community among the people who live and work at this facility.	0.786
q38 People who work here take the time to get to know my resident.	0.801
q34 People who work here seem happy to work here.	0.747
q13 People who work here care about my resident.	0.766
q32 I feel confident my resident is safe.	0.767
q18 I am confident that my resident's service plan is being delivered as promised.	0.768
q6 I am pleased with how the people who work here treat my resident.	0.717
q31 This facility has accommodations to ensure my resident's physical safety.	0.740

q33 My resident's belongings are safe.	0.711
q9 My resident seems happy at this facility.	0.592
Factor 2	Corrected Item-Total Correlation
q15 I receive timely updates about changes in my resident's status.	0.764
q5 People who work here respond promptly to my concerns.	0.740
q10 I have enough opportunities to provide input into decisions about my resident's care.	0.755
q4 I am comfortable voicing a complaint or concern.	0.745
q16 I am satisfied with the amount of information I receive about my resident.	0.747
q3 The leaders of this facility are available to speak with me, if needed.	0.659
q2 People who work here try to get to know me.	0.680
q14 My resident has a choice in the care they receive.	0.699
q1 I feel welcome when I visit.	0.652
Factor 3	Corrected Item-Total Correlation
q24 My resident's living unit/personal space is well maintained.	0.664
q25 The common areas in and around the facility are well maintained.	0.851
q26 The facility is clean.	0.860
q27 The facility is free of offensive odors.	0.780
Factor 4	Corrected Item-Total Correlation
q28 There is enough variety in the meals.	0.778
q29 My resident looks forward to mealtimes.	0.853
q30 My resident likes the food served here.	0.862
Factor 5	Corrected Item-Total Correlation
q11 My resident's spiritual beliefs are respected.	0.790

q12 People who work here respect my resident's culture.	0.812
q17 My resident is given the opportunity to be as independent as they can be.	0.674

NEXT STEPS

Instruments

The psychometric results presented above should be considered preliminary. The results did not raise any significant concerns about any items. As such, Vital suggested continuing with the next phase of statewide pilot testing with the same instruments. Then, a larger quantity of data can be analyzed to assess whether the results reported here, are stable by combining results across pilot testing phases. With more data based on the same survey, additional analyses can be done for different segments of the population, for example examining results by gender or for those living in facilities of different sizes.

One issue that surfaced regarding the response scale, was concern that perhaps the combined *Don't Know/Not Applicable/Non-response* option might mask some responses that would otherwise be *Rarely or Never*. Additionally, there was interest in exploring a 3- versus 4-point scale again but using in-person cognitive testing to see if the results from phone-based cognitive testing reported above, would hold. Therefore, we tested two response scales in the next stage of in-person cognitive testing (see below).

Data Collection Processes

Because in-person cognitive interviewing was not possible in the first phase of pilot testing, a second phase of in-person cognitive testing was recommended, with a focus on residents who were in memory care settings. Providers had raised the concern that the survey may be more challenging for residents in memory care and additional testing in that setting would be helpful. Additionally, in-person cognitive testing allowed the team to assess procedures for collecting data in-person.

PHASE 2- COGNITIVE INTERVIEWING IN MEMORY CARE

KEY PROJECT ACTIVITIES

The purpose of this phase of instrument development was to test in-person data collection methods and assess memory care (MC) residents' understanding of the resident quality of life survey. Item-level understanding, use and understanding of different response scales, and the overall flow of the survey were explored in phase two. MC units or buildings serve residents with a diagnosis of Alzheimer's disease or other dementias. In Minnesota, MC units (e.g., dementia care) are governed by additional licensing, staffing, and administrative requirements.¹ Approximately one-third of MN AL residents have a dementia diagnosis.² Assuring MC residents are able to understand the survey questions and participate in a survey interview is critical to collecting reliable and representative data in this population.

METHOD

Sample

Memory Care Facility Recruitment

DHS and trade associations partnered with Vital to purposively select sites for participation based on their proximity to the Twin Cities area. In May 2021, seven MC communities were invited via email and telephone to participate in this phase of cognitive interviewing, and four communities agreed to participate. When scheduling, Vital identified a facility contact who would assist interviewers on the day of interviewing. The facility contact was encouraged to reach out to residents' family members and/or legal guardians to communicate the purpose of the interviews.

Memory Care Residents

Table 24 briefly describes the number of residents and interviews pursued over the course of the pilot period in the four participant communities. All residents were considered eligible to participate unless: 1) resident was in isolation/quarantine and/or 2) a legal guardian had declined participation on their resident's behalf.

Of the 86 total residents living among the four communities the week of 6/14/21 to 6/18/21, just over three quarters were eligible to participate (n=65). Of the eligible residents, 52 were approached to participate in an interview. Reasons eligible residents were not approached include being out of the building, having visitors, sleeping, not in their room/could not find, or participating in group activities. Vital completed 30 interviews for a 58% response rate (# completed/# approached) over the four-day period. Three interviews contained some usable data but were not considered complete.

¹ Minnesota Statutes, Assisted Living Law, Chapter 144G §80-§84

<https://www.health.state.mn.us/facilities/regulation/assistedliving/law.html>

² Lendon JP, Sengupta M, Rome V, Caffrey C, Harris-Kojetin L, Melekin, A. Long-Term Care Providers and Services Users in the United States—State Estimates Supplement: National Study of Long-Term Care Providers, 2015–2016. Hyattsville, MD: National Center for Health Statistics. 2019.

https://www.cdc.gov/nchs/data/nsltcp/2016_CombinedNSLTCPStateTables_opt.pdf

Two interviews that were initiated, were suspended because the respondent did not respond for four consecutive items.

TABLE 24. DESCRIPTION OF PILOT MEMORY CARE SITES AND INTERVIEWS

Site	Current # Residents	Eligible # Residents	Approached # Residents	Initiated # Interviews	Completed # Interviews
1	17	17	14	9	8
2	35	16	11	7	7
3	22	22	18	10	7
4	12	10	9	9	8
Total	86	65	52	35	30

Data Collection- Cognitive Interviewing

Two interviewers with multiple years of experience conducting in-person interviews with residents of nursing and AL facilities visited one facility per day during the week of June 14-18th, 2021. Upon arriving at the facility, one interviewer would introduce themselves to the facility contact previously identified when scheduling the visit. The facility contact provided the interviewers with a list of residents currently living in the memory care unit, identifying those whose legal guardians had refused participation and those who were in isolation.

Interviewers divided the list of residents and conducted in-person interviews with MC residents on paper versions of the survey instrument. Interviewers alternated delivering surveys with 3-point (*Always/Most of the time, Some of the time, and Rarely or Never*) and 4-point (*Always, Most of the time, Some of the time, and Rarely or Never*) response scales. Responses that were *Don't Know, Not Applicable* or *Non-Responses* were each tracked separately. In addition to the survey questions, interviewers asked open ended questions (Appendix C) to understand MC residents' comprehension and feedback on questions asked.

Analytic Plan

Vital summarized the narrative feedback from residents based on answers to cognitive interviewing questions. Descriptive statistics were calculated to understand variability in responses and use of full response scales as well as the extent to which residents could answer each of the items on the survey by examining the rate of *Not Applicable/Don't Know* and missing responses between the 3-point and 4-point response scales.

RESULTS

Descriptive Statistics

Respondents

Demographic characteristics for the participating MC residents are described in Table 25. The average age of participating MC residents was 81.5 years old, ranging from 60 to 100 years old. The largest proportion of residents identified as non-Hispanic White (48.5%) and female (57.6%). Over half reported using a mobility aid (51.5%) in the last month and 27.2% of residents reported receiving assistance with activities of daily living.

TABLE 25. DEMOGRAPHIC CHARACTERISTICS OF PARTICIPATING MEMORY CARE RESIDENTS, N=33

	Characteristics	n	%
Sex	Female	19	57.6%
	Male	9	27.3%
	No response	5	15.2%
Race/Ethnicity	American Indian or Alaskan Native	0	0.0%
	Asian or Asian American	1	3.0%
	Black or African American	0	0.0%
	Hispanic or Latino/a/x	0	0.0%
	Middle Eastern or North African or Arab American	0	0.0%
	Native Hawaiian or Other Pacific Islander	0	0.0%
	White or Caucasian or European American	16	48.5%
	Not Listed	7	21.2%
	Prefer not to answer	2	6.1%
	No response	4	12.1%
Highest degree of completed education	< High School Diploma	2	6.1%
	High school degree or equivalent	7	21.2%
	Some college, no degree	1	3.0%
	Associate degree	2	6.1%
	Bachelor's degree	10	30.3%
	Graduate degree	5	15.2%
	No response	6	18.2%

Subdomains

Response frequencies for the MC resident sample are presented in Appendix D. There was more response variation among the resident sample that received the 3-point response options, where the responses in the 4-point sample tended to skew positive. The 3-point scale option tended to have higher prevalence of *some* and *rarely/never* as response options as compared with the 4-point scale. Additionally, the sample that received the 4-point survey had more *Don't Know*, *Not Applicable*, and *Non-response* answers compared to the sample that received the 3-point survey. Descriptive results by subdomain are presented below with numeric results available in Appendix D.

The People Who Work in AL Facilities

Questions 1-9 ask residents about the people who work in AL facilities. For the 3-point scale, there were more responses in the *rarely or never* category as compared with the 4-point scale, which had just a few *rarely or never* responses.

Physical Environment

Questions 11-13 ask residents about the physical environment of the AL facilities in which they live. In general, responses across both scales were quite positive. However, responses on the 4-point scale were skewed more positively than those on the 3-point scale with responses of *some* being more common on the 3-point scale. *Not Applicable* and *Nonresponse* answers were more prevalent when the 4-point scale was used as compared with the 3-point scale.

Food

MC respondents also felt mostly positively about the food offered at their facilities (Questions 14-19). A similar pattern of more positive results with the 4- as opposed to the 3-point scale were found. Responses of *some* and *rarely/never* were more common across most items for the 3-point scale as compared with the 4-point scale.

Meaningful Activities and Social Engagement

Resident perceptions of meaningful activities and social engagement were generally positive for each scale. The response options of *Don't know* and *non-responses* were more prevalent on the 4- as compared with 3-point scale while the reverse was observed for the response options of *some* and *rarely/never*.

Choice/Autonomy

For items related to resident choice and autonomy (Questions 26-30), results were positive as with other sub-domains. A similar pattern of results when comparing responses across the 3- and 4-point scales was observed for these items, as with items on other sub-domains.

Religion and Spirituality

Items related to religion and spirituality (Questions 31-33) displayed results that were somewhat varied as compared with items in other subdomains. The pattern of slightly more positive responses when the 4-point scale was used is evident for two of the three items in this sub-domain.

Safety, Security and Privacy

The pattern of responses observed for prior sub-domains was largely replicated for items related to safety, security and privacy (Questions 34-39).

Finances

For the two items related to finances (Questions 41-42), there was quite a high percentage of responses that were nonresponses for both the 3- and 4-point scales. Beyond that, the 3-point scale displayed greater variability in use of response options.

Cognitive Interview Feedback

Interviewers had the opportunity to ask residents about their thoughts on survey items to determine feasibility of implementing this questionnaire in assisted living, specifically among MC residents. MC residents who participated in this pilot were asked several open-ended questions to address comprehension and importance of survey items. One key observation was that the versions of the surveys implemented included response scales aimed to capture frequency of aspects of care, but the question stems did not indicate how often. This led residents to answer with “Yes” or “No” and caused the interviewer to repeat or qualify the questions, extending the length of the interview and in some cases resulting in frustration or fatigue among residents.

There was no consistent pattern or preference between the two scale options indicated by residents. Some residents expressed that having to choose among four response options was cumbersome. A handful of participating residents thought it was both “annoying and frustrating” and meaningfully different to keep *Always*, *Most of the time*, and *Some of the time* as separate categories. Other residents preferred to condense to three choices, very rarely using the “*Always*” option. There was no conclusive preference for either response scale.

Overall, participating MC residents reacted positively to the length of the survey and the topics covered. Residents were able to say when things were confusing or hard to understand but had difficulty pointing out specific language or items that were problematic. Sometimes after reading answer choices, residents forgot what the question asked, and interviewers had to repeat the question-and-answer choices multiple times, which was expected. By the end of the interview, residents often could not recall what items posed difficulty, should be dropped, or changed. Resident recall also posed difficulty for several of the demographic questions related to time (e.g., length of time living in the facility, pre-COVID comparisons).

CONCLUSIONS

Vital proposes the following recommendations and alterations to the survey instrument (Appendix E) and data collection processes based on what was observed and learned through both phases of this pilot work.

1. **Utilize the 3-point response scale (Always/Most of the time, Some of the time, Rarely or Never).** Quantitative analysis in Phases 1 and 2 and qualitative feedback in Phase 2 indicate a 3-point scale results in greater variation and is more easily implemented during a face-to-face survey.
2. **Change the question stem from “Do you…” to “How often do you…”** This question wording reflects frequency in the response scale, minimizing the need for clarification and repetition.
3. **Align question stems and responses for additional questions to the Nursing Facility Resident Quality of Life Survey.** Though these surveys are separate, aligning question language allows for comparability between the two samples across similar questions (e.g., COVID-19 response, facility grading).
4. **Train interviewers to observe whether residents live in memory care units.** Rather than asking memory care residents whether they live in memory care, which may be insensitive or result in confusion, interviewers can be trained to visually confirm whether participating residents living in memory-care units or buildings.
5. **Keep “Don’t Know,” “Not Applicable,” and “Nonresponse” as one category.** For analytic purposes, items with these answers are coded as missing responses. Response frequencies from Phase 1 do not suggest utility in keeping these responses as separate categories.
6. **Ask residents whether they have lived in their facility for less than one year.** MC residents were asked for the date they moved into their current facility. Recall posed a significant challenge for identifying specific the specific year. We propose altering this question to a “Yes” or “No” answer rather than asking residents with varying cognitive abilities to attempt to recall specific dates.


APPENDIX A. RESIDENT QUALITY OF LIFE SURVEY USED IN PHASE I PILOT TESTING


APPENDIX B. FAMILY SATISFACTION SURVEY USED IN PHASE I PILOT TESTING

APPENDIX C. COGNITIVE INTERVIEWING QUESTIONS

CRITIQUE OF QUESTIONNAIRE

1. Are the questions clearly asked?
2. Are any of the choices for answers unclear?
3. Which are the problem questions?
4. Have we forgotten to address some relevant issues? What are they?
5. Should we drop any questions?
6. What about the length?

 Too long

 About right

 Too short

APPENDIX D. COMPARING 3-POINT VS. 4-POINT SCALE OF THE ASSISTED LIVING RESIDENT QUALITY OF LIFE SURVEY IN A SAMPLE OF MEMORY CARE RESIDENTS, N=33

TABLE D-1. 3-POINT SCALE N=16

Item	Always/ most	Some	Rarely or never	DK	NA	NR
1. Do the people who work here try to get to know you?	31.3%	31.3%	18.8%	6.3%	0.0%	12.5%
2. Do the people who work here treat you with respect?	56.3%	25.0%	12.5%	0.0%	0.0%	12.5%
3. Do you feel comfortable asking for help when you need it?	63%	31.3%	6.3%	0.0%	0.0%	0.0%
4. Do the people who work here come quickly when you need help?	31.3%	43.8%	12.5%	0.0%	6.3%	6.3%
5. Do the people who work here follow through when you have a complaint or problem?	18.8%	31.3%	18.8%	12.5%	12.5%	6.3%
6. Do you get enough help with your everyday activities if you need it?	37.5%	31.3%	18.8%	0.0%	12.5%	0.0%
7. Are you confident the people who work here can address your healthcare needs?	25.0%	37.5%	18.8%	12.5%	0.0%	6.3%
8. Are you satisfied with how your medications are managed?	68.8%	18.8%	6.3%	0.0%	0.0%	6.3%

Item	Always/ most	Some	Rarely or never	DK	NA	NR
9. Are you confident the people who work here know what to do if you have a medical emergency?	37.5%	12.5%	18.8%	25.0%	6.3%	0.0%
11. Are the common areas well maintained?	81.3%	12.5%	0.0%	6.3%	0.0%	0.0%
12. Is it quiet enough for you to sleep here?	87.5%	12.5%	0.0%	0.0%	0.0%	0.0%
13. Are there places for residents to socialize with other residents?	50.0%	25.0%	6.3%	6.3%	6.3%	6.3%
14. Does the facility offer access to healthy foods, like fruits and vegetables, if you want them?	56.3%	12.5%	6.3%	12.5%	0.0%	12.5%
15. Is there enough variety in the meals offered here?	50.0%	37.5%	12.5%	0.0%	0.0%	0.0%
16. Do you have enough choice in the meals offered by the facility?	37.5%	6.3%	50.0%	0.0%	0.0%	6.3%
17. Do you look forward to mealtimes?	56.3%	37.5%	6.3%	0.0%	0.0%	0.0%
18. Do you like the food served here?	31.3%	50.0%	6.3%	0.0%	0.0%	12.5%

Item	Always/ most	Some	Rarely or never	DK	NA	NR
19. Can you eat your meals when you want to?	31.3%	6.3%	31.3%	18.8%	0.0%	12.5%
20. Do you like the activities that are provided here?	25.0%	31.3%	18.8%	6.3%	6.3%	12.5%
21. Are there things to do here on the weekends that you enjoy?	12.5%	12.5%	37.5%	25.0%	12.5%	0.0%
22. Do you have enough activities to keep your mind active?	44%	18.8%	31.3%	0.0%	0.0%	6.3%
23. Is there enough variety in the activities here?	18.8%	44%	25.0%	6.3%	0.0%	6.3%
24. Do you enjoy the way you spend your time most days?	37.5%	44%	18.8%	0.0%	0.0%	0.0%
25. Do you feel included in things that are happening here?	44%	31.3%	18.8%	6.3%	0.0%	0.0%
26. Can you decide how to spend your time each day?	56.3%	25.0%	12.5%	6.3%	0.0%	0.0%
27. Do you spend as much time outdoors as you would like?	18.8%	18.8%	50.0%	0.0%	0.0%	12.5%
28. Are you allowed to personalize your room?	75.0%	12.5%	6.3%	6.3%	0.0%	0.0%

Item	Always/ most	Some	Rarely or never	DK	NA	NR
29. Are the services you receive here provided the way you want?	37.5%	31.3%	0.0%	12.5%	6.3%	12.5%
30. Are you as involved in decisions about the services you receive here as you want to be?	31.3%	18.8%	37.5%	0.0%	0.0%	12.5%
31. Are there enough opportunities for you to practice your religious or spiritual beliefs here?	43.8%	31.3%	12.5%	0.0%	0.0%	12.5%
32. Are the people who work here respectful of your religious or spiritual practices?	56.3%	0.0%	12.5%	50.0%	0.0%	6.3%
33. Are the people who work here respectful of your culture?	37.5%	18.8%	18.8%	6.3%	0.0%	18.8%
34. Are your personal belongings safe here?	50.0%	25.0%	6.3%	6.3%	0.0%	12.5%
35. Do you feel safe here?	81.3%	12.5%	0.0%	0.0%	0.0%	6.3%
36. Do the people who work here ever get angry at you?	0.0%	18.8%	63%	6.3%	0.0%	12.5%
37. Do you feel comfortable voicing a complaint or concern?	50.0%	25.0%	12.5%	6.3%	0.0%	6.3%

Item	Always/ most	Some	Rarely or never	DK	NA	NR
38. Do you feel you have enough privacy?	56.3%	18.8%	18.8%	0.0%	0.0%	6.3%
39. Do the people who work here ask to come in before entering your room?	50.0%	31.3%	0.0%	0.0%	6.3%	12.5%
41. Do you understand what is included in monthly fees?	12.5%	18.8%	12.5%	6.3%	0.0%	50.0%
42. Do you believe you are getting value for money?	25.0%	0.0%	6.3%	18.8%	0.0%	50.0%

TABLE D-2. 4-POINT SCALE (N=17)

Item	Always	Most	Some	Rarely or never	DK	NA	NR
1. Do the people who work here try to get to know you?	23%	41.2%	11.8%	5.9%	5.9%	0.0%	11.8%
2. Do the people who work here treat you with respect?	47%	41.2%	0.0%	0.0%	11.8%	0.0%	0.0%
3. Do you feel comfortable asking for help when you need it?	17.6%	52.9%	5.9%	0.0%	11.8%	0.0%	11.8%
4. Do the people who work here come quickly when you need help?	11.8%	35%	17.6%	0.0%	17.6%	11.8%	5.9%
5. Do the people who work here follow through when you have a complaint or problem?	11.8%	23.5%	11.8%	0.0%	11.8%	23.5%	17.6%
6. Do you get enough help with your everyday activities if you need it?	41.2%	35.3%	0.0%	0.0%	0.0%	11.8%	11.8%
7. Are you confident the people who work here can address your healthcare needs?	11.8%	35.3%	11.8%	0.0%	11.8%	23.5%	17.6%
8. Are you satisfied with how your medications are managed?	35.3%	11.8%	11.8%	0.0%	5.9%	17.6%	17.6%
9. Are you confident the people who work here know what to do if you have a medical emergency?	35.3%	29.4%	5.9%	11.8%	11.8%	0.0%	5.9%
11. Are the common areas well maintained?	29.4%	41.2%	0.0%	0.0%	5.9%	5.9%	17.6%

Item	Always	Most	Some	Rarely or never	DK	NA	NR
12. Is it quiet enough for you to sleep here?	58.8%	23.5%	0.0%	0.0%	0.0%	5.9%	11.8%
13. Are there places for residents to socialize with other residents?	41.2%	23.5%	5.9%	5.9%	5.9%	5.9%	11.8%
14. Does the facility offer access to healthy foods, like fruits and vegetables, if you want them?	35.3%	29.4%	5.9%	0.0%	5.9%	5.9%	17.6%
15. Is there enough variety in the meals offered here?	29.4%	29.4%	11.8%	5.9%	11.8%	0.0%	11.8%
16. Do you have enough choice in the meals offered by the facility?	23.5%	17.6%	5.9%	17.6%	11.8%	5.9%	17.6%
17. Do you look forward to mealtimes?	17.6%	23.5%	11.8%	29.4%	0.0%	0.0%	17.6%
18. Do you like the food served here?	23.5%	41.2%	11.8%	5.9%	0.0%	5.9%	11.8%
19. Can you eat your meals when you want to?	5.9%	17.6%	5.9%	52.9%	5.9%	0.0%	11.8%
20. Do you like the activities that are provided here?	11.8%	35.3%	5.9%	0.0%	17.6%	5.9%	23.5%
21. Are there things to do here on the weekends that you enjoy?	5.9%	11.8%	17.6%	29.4%	17.6%	0.0%	17.6%

Item	Always	Most	Some	Rarely or never	DK	NA	NR
22. Do you have enough activities to keep your mind active?	23.5%	35.3%	11.8%	17.6%	5.9%	0.0%	5.9%
23. Is there enough variety in the activities here?	11.8%	17.6%	11.8%	23.5%	17.6%	0.0%	17.6%
24. Do you enjoy the way you spend your time most days?	0.0%	41.2%	5.9%	17.6%	5.9%	0.0%	29.4%
25. Do you feel included in things that are happening here?	29.4%	35.3%	17.6%	5.9%	0.0%	0.0%	11.8%
26. Can you decide how to spend your time each day?	29.4%	41.2%	5.9%	11.8%	0.0%	0.0%	11.8%
27. Do you spend as much time outdoors as you would like?	17.6%	5.9%	17.6%	35.3%	0.0%	0.0%	23.5%
28. Are you allowed to personalize your room?	64.7%	11.8%	0.0%	11.8%	0.0%	0.0%	11.8%
29. Are the services you receive here provided the way you want?	29.4%	23.5%	11.8%	5.9%	11.8%	0.0%	17.6%
30. Are you as involved in decisions about the services you receive here as you want to be?	29.4%	29.4%	5.9%	5.9%	11.8%	0.0%	17.6%

Item	Always	Most	Some	Rarely or never	DK	NA	NR
31. Are there enough opportunities for you to practice your religious or spiritual beliefs here?	29.4%	11.8%	11.8%	17.6%	11.8%	5.9%	11.8%
32. Are the people who work here respectful of your religious or spiritual practices?	29.4%	23.5%	5.9%	0.0%	17.6%	5.9%	17.6%
33. Are the people who work here respectful of your culture?	17.6%	23.5%	11.8%	0.0%	23.5%	5.9%	17.6%
34. Are your personal belongings safe here?	41.2%	23.5%	5.9%	5.9%	5.9%	0.0%	17.6%
35. Do you feel safe here?	58.8%	17.6%	11.8%	0.0%	0.0%	0.0%	11.8%
36. Do the people who work here ever get angry at you?	0.0%	0.0%	17.6%	70%	0.0%	0.0%	11.8%
37. Do you feel comfortable voicing a complaint or concern?	29.4%	23.5%	5.9%	5.9%	11.8%	0.0%	23.5%
38. Do you feel you have enough privacy?	47.1%	23.5%	11.8%	5.9%	0.0%	0.0%	11.8%
39. Do the people who work here ask to come in before entering your room?	52.9%	5.9%	17.6%	0.0%	11.8%	0.0%	11.8%

Item	Always	Most	Some	Rarely or never	DK	NA	NR
41. Do you understand what is included in monthly fees?	0.0%	5.9%	5.9%	0.0%	0.0%	0.0%	88.2%
42. Do you believe you are getting value for money?	5.9%	5.9%	0.0%	0.0%	0.0%	0.0%	88.2%

APPENDIX E. RESIDENT QUALITY OF LIFE SURVEY FOR
STATEWIDE IMPLEMENTATION 2021-2022