Stakeholder Feedback on Identifying Quality Measures for a Minnesota Assisted Living Report Card

A report to the Minnesota Department of Human Services

Tetyana P. Shippee, PhD
Timothy Beebe, PhD
Odichinma Akosionu, MPH
Tricia Skarphol, MA
Emily Friedrich, BS
David Uhr, MPH

University of Minnesota, School of Public Health
Division of Health Policy and Management

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Executive Summary

The objective of this report is to present the results from a statewide stakeholder engagement on quality measures for assisted living (AL) and determine priority rankings for types of domains for AL quality that are measured, and indicators used to assess these domains. The overarching goal is to inform the development of a quality framework for the AL report card in Minnesota, which is part of the new AL legislation.[1]

Broadly, we define quality as "the capacity to satisfy the needs and wants of the users of a service or product," as measurable indicators.[2,3,4] Our methodology involved a comprehensive statewide stakeholder engagement effort to identify priority areas for previously identified measures of AL quality based on national research and technical expert feedback.[5] We undertook a variety of stakeholder outreach initiatives to solicit feedback on the domains of AL quality from national work. These included: a) a statewide online survey (n=822 respondents); b) public presentations (n=13); c) a statewide livestream event (n=266 attended); d) focus groups with AL residents and advocacy organizations (n=5 groups).

We asked the following three questions:

1) Which of the domains of AL quality that have been identified in national work are also highly supported by MN stakeholders?
2) What subdomains and indicators (associated measures) are most important to stakeholders when measuring resident quality of life and family satisfaction?
3) What are areas of consensus across all stakeholder groups and which areas are more stakeholder-dependent (e.g., providers as compared to family members of AL residents)?

First, when comparing across all sources of data and all stakeholder groups, the overall domains of AL quality most frequently rated as most important were: a) **quality of life**; b) **staff quality**; and c) **resident safety**. The domains which were least likely to be rated as most important were

[1] Laws of Minnesota 2019, Regular Session, chapter 60, article 5, section 1: https://www.revisor.mn.gov/laws/2019/0/Session+Law/Chapter/60/ (Accessed July, 2019)
[2] Crick, M., Backman, C., Angus, D. (2017). Isqua17-1632 Quality in Long-Term Care: An Expanded View. International Journal for Quality In Health Care, 29(Suppl_1), 31-31.
[3] Kajonius, P. J., Kazemi, A. (2016). Structure and process quality as predictors of satisfaction with elderly care. Health & social care in the community, 24(6), 699-707.
[4] Stewart, M. (2001). Towards a global definition of patient centred care: the patient should be the judge of patient centred care.
[5] Literature Review and Environmental Scan: Identifying Quality Measures in Assisted Living: https://mn.gov/dhs/assets/UMN-assisted-living-quality-report_tcm1053-393870.pdf (Accessed December, 2019)

the physical environment and the social environment. There was high level of agreement on the top domains across stakeholder roles. The top three domains remained the same regardless of stakeholder role, gender, location (rural versus urban), age, and race/ethnicity.

Second, stakeholders identified a number of subdomains and indicators they felt are important to meaningfully capture resident quality of life and family satisfaction. The subdomains of quality of life that received the highest percentage of "Very important" or "Critically important" ratings were **dignity/respect**, **staff-related items**, and **security**. The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were religion/spirituality, community integration (with one's broader community where AL is located), and physical activity. The subdomains of resident family satisfaction that received the highest percentage of "Very important" or "Critically important" ratings were **staff competency**, **respect from staff**, **and care experience**. The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were meal choice and housekeeping.

Third, the domains of quality were highly consistent across stakeholder roles, with the only difference emerging in resident focus groups, who rated **social and physical environment** of the AL higher than those who participated in the survey and other outreach efforts (where these came up as the two lowest rated domains). Of note, residents placed more importance on the social environment than physical environment. Also, while both domains were rated as important by most residents, they were less likely to be rated "Critically important" by residents. Consumer advocates also emphasized "social environment" as an important aspect of quality as it relates to inclusion and belonging and overall culture of the AL setting. However, much of the focus group discussion around these two domains was tied to how they impact residents' quality of life, further supporting the importance of quality if life as a key metric of AL quality.

We also saw a high degree of consistency regarding subdomains and indicators to measure quality of life. There were three differences that were significant: a) stakeholder role was associated with the perceived importance of the subdomain of financial transparency (higher for family members and consumer advocates vs providers); b) rural/urban and gender differences in the importance of the QOL subdomain of religion/spirituality (higher for those in rural vs urban; higher for women than men); c) differences between white respondents and non-white respondents on the importance of the subdomains of community integration, religion/spirituality, and meaningful activities/social engagement (with non-white respondents assigning higher ratings). Similarly, we saw high consistency in subdomain ratings for resident family satisfaction, with no differences by gender, age, race/ethnicity or location. The only difference was variability by stakeholder role for the subdomains of cost of care, meal choice, physical environment, and staff competency. Providers were less likely to rate cost of care and physical environment as "Critically important" or "Very important" compared to other

stakeholders, whereas the top two stakeholders rating cost of care and physical environment as "Critically important" were advocates and family members respectively. Family members and health and human services providers rated staff competency as "Critically important" more than other stakeholders. In addition, more family members rated meal choice as "Critically important."

Recommendations and Conclusions

Resident quality of life and family satisfaction are going to be assessed through statewide surveys starting in late 2020 and early 2021. These forthcoming efforts reflect stakeholder rating of quality of life as the top domain of AL quality. However, safety and staff-related quality emerged as being of equal importance or closely tied to quality of life, regardless of stakeholder role. While the safety domain may be in part addressed by Minnesota Department of Health licensure efforts, staff-related quality domain was the most frequent theme across all open-ended comments for the survey, presentations, and in focus group discussion. Importantly, staff-related quality is broader than staffing ratios and turnover (both of which frequently came up), but also includes measures of staff competency and training, quality of care given to residents by staff, staff communication with residents, as well as staff satisfaction and degree of empowerment. In addition, a close fourth was the domain of resident health outcomes, which may become even more important, especially as AL residents become increasingly more complex and have higher clinical care needs.

Assisted living and the need for quality measures

Definition and extent of assisted living

Assisted living (AL) has many different definitions but is commonly defined as the "senior living option that combines housing, support services, and health care, as needed."[6] AL is meant to provide more assistance than an independent retirement community but less medical and nursing care than a nursing facility. A typical AL community offers assistance with everyday activities such as meals, medical management, or assistance bathing, dressing, and transportation. Nationally, as well as in MN, many AL communities provide care for people with dementia.

According to the new licensing framework passed by the 2019 Minnesota Legislature, AL is defined as "a licensed facility that provides sleeping accommodations and assisted living services to one or more adults."[7] The new licensing framework also defined an additional license category, AL with dementia care. It is defined as "a licensed assisted living facility that is advertised, marketed, or otherwise promoted as providing specialized care for individuals with Alzheimer's disease or other dementias. An assisted living facility with a secured dementia care unit must be licensed as an assisted living facility with dementia care."[8]

There are approximately 31,000 AL communities in the United States, with over 750,000 older adults living there.[9,10] In Minnesota, there are approximately 1,300 assisted living communities serving over 43,000 older adults and persons with disabilities.[11]

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[6] Argentum (formerly Assisted Living Federation of America) via Nevada Care Connection: https://www.nevadaadrc.com/resources/learn-about/item/291-assisted-living-federation-of-america (Accessed July 2019)

[7] Minnesota Legislature. Office of the Revisor of Statutes. Minnesota Statutes (2019) Section 144G.08. Subd. 7 https://www.revisor.mn.gov/statutes/cite/144G.08 (Accessed January, 2019)

[8] Minnesota Legislature. Office of the Revisor of Statutes. Minnesota Statutes (2019) Section 144G.08. Subd. 8 https://www.revisor.mn.gov/statutes/cite/144G.08 (Accessed January, 2019)
(Accessed July, 2019)

[9] Park-Lee, E., Caffrey, C., Sengupta, M., Moss, A. J., Rosenoff, E., Harris-Kojetin, L. D. (2011). Residential care facilities: a key sector in the spectrum of long-term care providers in the United States. NCHS data brief, (78), 1-8.

[10] Zimmerman, S., Allen, J., Cohen, L.W., Pinkowitz, J., Reed, D., Coffey, W.O., Reed, P., Lepore, M., Sloane, P.D. (2015). A measure of person-centered practices in assisted living: the PC-PAL. *Journal of the American Medical Directors Association*, *16*(2), pp.132-137.

[11] Minnesota Department of Health, Housing With Services Registration, September 2018 (Accessed July 2019)

Concerns about quality in assisted living

Quality of AL matters so much to people in part because AL is not only about the experience of receiving specific services, but about a place that many will call home. AL is also a relatively expensive service, whether it's paid for privately or publicly. It is also recognized as one of the fastest-growing components of the long term care industry.[12] However, concerns have surfaced regarding the quality of AL nationally and in MN. Many of the concerns nationally include poor staffing, inadequate teamwork, and poor management, which negatively impact resident well-being.[13, 14] Media outlets, the legislature, and a wide array of stakeholders explored these problems in depth in Minnesota.[15] Also, a national study surveyed 572 administrators and 3,600 workers in AL and found that the patient safety culture was lacking in many AL communities and could result in resident neglect.[16]

Hence, in part due to concerns about culture, the 2019 Minnesota Legislature passed a landmark elder care bill that established a new AL license, invested in the Minnesota adult protection system and the Ombudsman for Long-Term Care, and funded an AL report card, including resident and family surveys.

Findings from phase 1

Our stakeholder work is based on findings from Phase 1 (concluded in June 2019) which was based on national work to identify domains of AL quality. Specifically, we conducted a national review of peer-reviewed literature; review of "grey literature"[17]; and interviews with national experts to identify a list of domains, subdomains and existing AL quality measures.[5] Our results

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[12] Castle, N. G., Wagner, L. M., Ferguson-Rome, J. C., Smith, M. L., Handler, S. M. (2012). Alcohol misuse and abuse reported by nurse aides in assisted living. *Research on Aging*, *34*(3), 321-336.

[13] Harrington, C. Wiener, J.M., Ross, L., Musumeci, MB. (2017). Key Issues in Long -Term Services and Supports Quality. Issue brief *Kaiser Family Foundation.* https://www.kff.org/medicaid/issue-brief/key-issues-in-long-term-services-and-supports-quality/ (Accessed January, 2020)

[14] Thompson, A.C., Jones, J. (2013) Elderly, At Risk and Haphazardly Protected. *Frontline. PBS.* https://www.pbs.org/wgbh/frontline/article/elderly-at-risk-and-haphazardly-protected/ (Accessed January, 2020)

[15] Cooney, V. (2019) Assisted living licensure bill passes House, despite minority's complaint it was 'incomplete'.Minnesota house of Representatives. Minnesota Legistlature. https://www.house.leg.state.mn.us/SessionDaily/Story/13953 (Accessed January, 2020)

[16] Castle, N. G., Wagner, L. M., Sonon, K., Ferguson-Rome, J. C. (2012). Measuring administrators' and direct care workers' perceptions of the safety culture in assisted living facilities. *The Joint Commission Journal on Quality and Patient Safety*, *38*(8), 375-AP3.

[17] The term grey literature typically describes reports or papers not included in traditional journals or books. These may include reports from associations, societies, city, state, and federal governments, and other organizations. (As defined in previous report - Literature Review and Environmental Scan: Identifying Quality Measures in Assisted Living. See footnote #5)

were based on an initial total of 833 references (719 were not relevant), from which we screened full text of 160 references, with a total of 49 peer-reviewed references and 45 sources from grey literature. We also conducted 12 in-depth interviews and 2 technical expert panels.

After reviewing all eligible studies, and relevant grey literature findings, we compiled and summarized the domains and indicators identified with each domain (see Appendix A for the full list). The final set of domains (in relative order of prevalence) includes:

1) Resident quality of life
2) Resident and family satisfaction
3) Safety
4) Resident health outcomes
5) Staff
6) Physical and social environment
7) Service availability
8) Core values and philosophy
9) Care services and integration

In this work, we were guided by the Donabedian model: one of the most well-known and commonly used conceptual frameworks to evaluate quality in health care settings, including long-term care services and supports. [18]This model is useful for our report because it helps to operationalize quality, broadly described as "the capacity to satisfy the needs and wants of the users of a service or product," as measurable indicators.[2, 3, 4]

Based on the model, quality of care consists of three fundamental components: "structure", "process", and "outcomes." Structure refers to factors that impact the conditions of care-giving, such as the physical and social environment of the AL, the philosophy of care delivery, AL ownership and location, safety/regulatory compliance, and the methods of reimbursement. Process factors denote what actually takes place in the transaction of care delivery for AL residents, such as interaction, communication, and decision-making, happening between staff and residents, health information exchange between the AL community and other settings, etc. Process factors are considered more challenging to measure than structural variables, which are usually more straightforward. Finally, outcomes refer to the effects of the care setting (i.e., AL) on resident's well-being and health outcomes. These include quality of life, resident and family satisfaction, staff-related outcomes, and resident health outcomes. When compared to

[18] Donabedian, A. (1988). The quality of care: how can it be assessed?. Jama, 260(12), 1743-1748.

the Donabedian framework and the deductive domains listed in the introduction, we found fewer domains and especially indicators for “structure” and “process” measures of quality.

Each domain has a set of elements of subdomains and potential indicators that can be used to measure those elements(e.g., Safety and policies around resident safety/accountability practices).

Research questions

To identify priority areas for previously identified measures of AL quality based on national research and technical expert feedback, we asked the following research questions:

1) Which of the domains of the AL quality that have been identified in national work are also highly supported by MN stakeholders?
2) What indicators (associated measures) are most important to stakeholders when measuring resident quality of life and family satisfaction?
3) What are areas of consensus across all stakeholder groups and which areas are more stakeholder-dependent (e.g., providers vs residents)?

Methods

We undertook a variety of stakeholder outreach initiatives to solicit feedback on the domains of AL quality from national work. These included: a) a statewide online survey; b) public presentations; c) a statewide livestream event; and d) focus groups with AL residents and advocacy organizations.

Statewide online survey

In an effort to reach a broad range of stakeholders across MN pertaining to measuring quality in AL, the University of Minnesota School of Public Health (UMN) partnered with the Office of Measurement Services at the University of Minnesota to conduct a statewide survey. After the initial survey development, pilot testing was conducted for two weeks with stakeholders from the Minnesota Department of Human Services, Central MN Council on Aging, LeadingAge MN, Elder Voice Family Advocates, Care Providers of MN, the MN River Area Agency on Aging, and the Office of Ombudsman for Long-Term Care. Survey revisions were made based on feedback received from these stakeholders.

Data collection began on October 17 and continued for 6 weeks through November 30. Survey Promotion/Dissemination included:

- Emails to all contacts who participated in previous public presentations
- UMN flyers and communications
- Emails to provider associations
- Aging and Adult Services and Disability Services (DHS) eList announcements
- News articles on Minnesota Board on Aging (MBA) websites
- Promotion of the survey through Senior LinkAge Line call centers
- DHS/MBA press release
- Media coverage, including a MPR news story, KSTP and other channel stories, and outreach on social media through UMN twitter

In total, 822 respondents participated in the survey, with 77.3% (n=635) of respondents who started the survey completing it. 187 respondents started the survey but did not complete it. Of these 187 partial responses, 35.8% (n=67) were removed from the final dataset because they did not answer any questions relating to the topics of quality at assisted living communities after the initial consent to participate. An additional nine respondents were removed from the final dataset because they elected not to participate at the consent statement. After data cleaning, **746** survey responses were kept for analysis. The survey had four main sections: demographics characteristics, quality domains, subdomains for resident quality of life and resident and family satisfaction, and open-ended questions about the Report Card.

Public presentations

University of Minnesota (UMN) and Department of Human Services project staff, presented at 13 consumer and provider meetings, conferences and web-based platforms (e.g. Minnesota Gerontological Society webinar). The presentations discussed the legislation for an Assisted Living (AL) Report Card for Minnesota, why measuring quality in AL is important, findings of the UMN's national research on quality measurement in AL, and solicited feedback from the stakeholders regarding the research findings. See Appendix B for the list of public presentations.

Statewide live-stream event

UMN participated in a statewide event that was designed for home and community-based providers, counties, and discharge planners. UMN presented with DHS partners in St Paul via satellite livestreaming and conversations at locations throughout Minnesota were hosted by local facilitators. These sites included Alexandria, Bemidji, Carlton, Detroit Lakes, St Paul, Mankato, Rochester, St Cloud, and Thief River Falls. The event took place on November 4, 2019 from 8:00 a.m. to 12:00 p.m. Participants were asked to provide feedback on measuring quality in assisted living as well as forthcoming assisted living regulatory changes. The event was

attended by 266 participants, with most in St Paul (126), followed by St Cloud (46) and Rochester (38).

Focus groups

UMN gathered stakeholder feedback through four resident focus groups and one advocacy organization focus group. Resident focus groups took place on October 17, October 24, November 7 and November 12. The consumer advocate focus group took place on October 14 in St Paul.

Resident focus group sites were selected through a stratified random sample to include: smaller and larger settings; settings with higher and lower rates of Medicaid waiver program participation; rural and urban settings; and inclusion of residents from diverse racial/ethnic groups. Setting were selected from a data set from DHS' home and community-based services (HCBS) Settings Rule Provider Attestation Database. See Appendix C for more information about site selection and for an overview of the focus group site characteristics.

Advocacy organizations that participated in the focus group on October 14 were invited based on their previous participation in 2019 assisted living reform efforts. See Appendix D for a list of advocacy organization focus group participants.

Results

Statewide online survey

The following section provides results from the statewide online survey. Please see Appendix E for additional information including detailed tables summarizing survey responses.

Demographic characteristics

Demographic data was collected on respondent's gender, age, race/ethnicity, location, and role with respect to assisted living communities. Most of the survey respondents were female (87%), with 35% percent of respondents within the ages of 55-64, 18% within the ages of 45-54, 16% within the ages of 65-74 and the rest under the age 55 (31%). Ninety four percent of respondents identified as White or European American. Forty-four percent of respondents lived in either Hennepin County (24%), Ramsey County (13%), or Dakota County (7%). For analysis

purposes, location data was collapsed into two categories, Urban (77%) and Rural (23%), based on classification data from the Minnesota Center for Rural Policy and Development.[19]

In an effort to better understand the perspectives of respondents, each respondent was asked to identify their role(s) with respect assisted living communities. They were given the options of resident; family member of resident; consumer advocate; provider; health or human services provider not in assisted living; county, tribe or health plan; and other. The most common role identified was family member of resident (30%), followed by providers in assisted living (19%), and providers not in assisted living (14%). Approximately 22% of respondents identified as having more than 1 role with assisted living communities.

Another 101 respondents selected "Other", with 96 of them writing in a description of their role. These write-in responses covered a wide-range of professions and roles. Examples included friends of residents, government employees, board members, former assisted living employees, caregivers, insurance brokers, and future assisted living residents.

Role	Percent	Count
Family member of resident	30%	250
Provider	19%	160
Health or human services provider (not in assisted living)	14%	119
Other (please describe)	12%	101
County, tribe, or health plan	12%	100
Consumer advocate	12%	98
Resident	1%	12
Total:	100%	840

Findings regarding quality domains

Respondents were asked to rate the level of importance for 9 domains of quality in assisted living communities. These domains were compiled through an earlier literature review and environmental scan conducted by the University of Minnesota.[5] The domains included in the survey were availability of services, care services integration, health outcomes, the physical environment of AL, the social environment of AL, quality of life, resident and family satisfaction, safety, and staff quality.

Respondents were presented one domain at a time in a random order. For each domain they were given a few examples of measures for the domain and were asked their opinion on the importance of the domain to the overall well-being of people served in assisted living settings

[19] MN House Research. Classification of Cities. November 2019. https://www.house.leg.state.mn.us/hrd/pubs/cityclass.pdf (Accessed December 30, 2019)

on a 5-point scale from “critically important” to “not at all important.” When looking at the number of respondents who rated a domain as either critically or very important, the top domains were **quality of life** (98%), **staff quality** (98%), and **safety** (97%). The domains with the lowest percentage of respondents rating them as critically or very important were the social environment (85%) and the physical environment of AL (91%).

After rating each domain, respondents were shown a list of the domains they rated as “critically important” or “very important” and were asked to choose *the one domain* they felt was most important to the well-being of older adults who use assisted living. Again, the domains most frequently rated as most important were quality of life (30%), staff quality (21%), and safety (16%). The domains which were least likely to be selected as the most important were the physical environment (1%) and the social environment (1%). There was little variability in the top domain across roles. Quality of Life was the top domain across all roles except “Other role”, with percentages ranging from 27% (other role) to 40% (resident). Staff quality also experienced limited variability, rating as the 2nd most important domain amongst all role groups except providers. When looking at the most important domain across the other demographic variables, the top 3 domains remained the same regardless of gender, location, age, and race.

Subdomains for quality of life and satisfaction

Our literature review identified quality of life and resident and family satisfaction as separate domains, each containing various subdomains and indicators.

For the quality of life domain, a total of 14 subdomains were identified. These included: 1)autonomy/choice, 2) assisted living community, 3) community integration, 4) dignity/respect, 5) financial transparency, 6) food, 7) meaningful activities/social engagement, 8) physical activity, 9) privacy, 10) relationships with assisted living community, 11) relationships with friends and family, 12) religion/spirituality, 13) security, and 14) staff-related items. Respondents were shown these 14 subdomains in a random order and were provided a brief description of each. They were then asked to rate each domain as either “Important” or “Not important.”

When rating the quality of life subdomains as important or not important, all subdomains were rated as important by the majority of respondents. Ten of the 14 subdomains were rated by at least 90% of respondents as being important. Religion/spirituality received the fewest number of “important” selections at 79%.

For each subdomain rated as “Important,” respondents were then asked to rate the level of importance on a 4-point scale ranging from “Somewhat important” to “Critically important.” The subdomains that received the highest percentage of “Very important” or “Critically

important" ratings were **dignity/respect** (97%), **staff-related items** (96%), and **security** (93%). The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were religion/spirituality (59%), community integration (60%), and physical activity (67%).

Differences in quality of life ratings by demographic characteristics

Pearson's Chi-square tests were conducted to determine if there were significant differences in quality of life ratings based on the demographic variables collected. For individuals who selected multiple roles, only their primary role was included in analysis.

When looking at the quality of life subdomain ratings by role, the subdomains of financial transparency and relationship with assisted living community were found to be statistically significant, meaning there is a relationship between role and these quality subdomain variables.

When looking at the quality of life subdomain ratings by gender, only the subdomain of religion/spirituality was found to vary by gender (women were more likely than men to rate religion/spirituality (61%) as very important or critically important; only 53% of men rated the item as very important or critically important).

When comparing the quality of life subdomain ratings to the respondents location (urban vs rural), only the subdomain of religion/spirituality was found to have significant differences. Rural respondents were significantly more likely to rate religion/spirituality as critically important or very important (67%) when compared to urban respondents (58%).

There were significant differences between white respondents and non-white respondents on the subdomains of community integration, religion/spirituality, and meaningful activities/social engagement, with non-white respondents assigning higher ratings. For the subdomain of community integration, 68% of non-white respondents rated the domain as critically important or very important compared to 59% for white respondents. When looking at just the critically important ratings, 47% of non-white respondents rated the subdomain as critically important compared to just 17% of white respondents. For the subdomain of religion/spirituality, 76% of non-white respondents rated the domain as critically important or very important compared to 60% for white respondents. There were no meaningful differences by race/ethnicity for the subdomain of meaningful activities/social engagement in assessing whether they are important. However, we saw large difference when only looking at critically important ratings, with 47% non-white respondents rating meaningful activities as critically important compared to just 27% of white respondents.

There were no significant differences in the rating of the quality of life subdomains when analyzing the results by age.

Resident and family satisfaction subdomains

For the domain of resident and family satisfaction, a total of 11 subdomains were identified. These included: 1) care experience, 2) cost of care, 3) housekeeping, 4) meal choice, 5) physical environment, 6) quality of staff care, 7) respect from staff, 8) staff competency, 9) well-being as a result of care, 10) whether one's choice/preference is met, and 11) whether one's personal care needs are met. Respondents were shown these 11 subdomains in a random order and were provided a brief description of each. They were then asked to rate each domain as either "Important" or "Not important." When rating the satisfaction subdomains as important or not important, all subdomains were rated as important by at least 92% of respondents. Here, "meal choice" and "housekeeping" were the two lowest rated domains.

For each subdomain rated as "Important," respondents were then asked to rate the level of importance on a 4-point scale ranging from "Somewhat important" to "Critically important." The subdomains that received the highest percentage of "Very important" or "Critically important" ratings were staff competency (98%), respect from staff (97%) and care experience (97%). The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were again meal choice (73%) and housekeeping (74%).

Chi-square tests were conducted to determine if there were significant differences in satisfaction ratings based on the demographic variables collected. When looking at the satisfaction subdomain ratings by role, the subdomains of cost of care , meal choice , physical environment , and staff competency were all found to be influenced by their relationship with the satisfaction subdomain variables. When looking at the proportion of respondents who rated these subdomains as "Very important" or "Critically important", AL providers rated the cost of care the lowest at 79.8%. Consumer advocates placed greatest importance on the cost of care at (96.8%), followed by those in the "other group" (many in this group had multiple roles) (93.5%). When looking at meal choice, respondents identified as County/tribe/or health plans rated this subdomain the lowest (63.9%), and consumer advocates rated it the highest (79.4%). For the physical environment [as a domain of satisfaction], providers rated the subdomain the lowest (80%). The physical environment as a domain of satisfaction was rated the highest by residents, with all respondents from this role considering it to be either very important or critically important (100%). With the subdomain of staff competency, residents rated it the lowest (85.7%). Stakeholders in all other roles rated this subdomain above 94% with consumer advocates rating it the highest (100%).

No significant differences were found when looking at the satisfaction subdomain ratings by gender, race, location, or age.

Open-ended items

Three open-ended questions were also included in the survey:

1) As a provider, how would you use this information? *(providers only)*
2) Were there any surprises or gaps in these topics that we did not mention?
3) Do you have any other comments/feedback for us?

Responses from these open-ended questions were coded based on the occurrence of primary themes discussed in the comment.

For the question "As a provider, how would you use this information?" we received 56 written responses. The most common responses were providers will use this information to "improve/enhance services, offerings, and outcomes" (39%). This was followed by "staff-related comments" (20%), which primarily focused on training, education, and hiring of staff. The next two most frequent themes were provider concerns pertaining to the report card development (13%) and using the information to help understand what is important to consumers and sharing results with them (13%).

For the question "Were there any surprises or gaps in these topics that we did not mention?" We received 289 written responses. The most common response was respondents stating that there were no gaps or that they didn't know of any gaps in the topics (39%). This was followed by "staff-related comments" (9%), which primarily focused on staff quality, turnover, and shortages as key areas to address in addition to what was listed in the subdomains. The next most prevalent themes were complaints/concerns with survey or report card development (4%), culturally sensitive care (3%), affordability/costs of care (3%), accountability of the facility (3%), resident choice/autonomy (3%), elderly waiver or medical assistance and private vs. public payments (3%), and financial transparency (2%).

Although these were responses to a question about gaps and surprises regarding the topical domains used in the survey, for most responses it was unclear if the respondent was referencing a gap or a surprise. The majority of the themes developed from coding this question were topics already included within the survey as domains of quality for assisted living communities. The notable exceptions being written comments about private versus public payment for assisted living, (the majority of these comments discuss the lack of choice and services for individuals on elderly waiver or medical assistance) and providing culturally sensitive care. These topics were not explicitly reflected in the original quality domains and subdomains.

For the question "Do you have any other comments/feedback for us?" we received 296 written responses. A large portion of responses were from respondents stating they did not have any other comments (16%). The most common theme was about staffing (16%). Like with the

previous open-ended items, staffing comments tended to focus on staff quality, training, turnover, and shortages. Other common themes included encouraging comments about the need for an Assisted Living Report Card (15%), comments about the survey specifically (8%), personal stories about specific facilities (4%), comments about how the report card and survey results should look (4%), comments about safety (4%), and comments regarding laws and regulations for assisted living communities (3%).

Public presentations

Providers

Overall, we received a high degree of engagement and interest from AL providers and were invited to present at their quality meetings, conferences, and other venues. Providers generally found the domains reflective of their experiences delivering assisted living services, but identified the following concerns:

- Measurement of each domain/subdomain in a report card to ensure that, given the differences across AL facilities, there will be a fair process of capturing the unique differences between them in a single report card format.
- Quality measurement will need to be sensitive to differences between assisted living communities, including: size, geographic location, the services they offer, and the populations they serve (calling for some degree of risk adjustment in rating settings).
- Some domains and subdomains of quality seemed subjective and some providers were concerned that these topics would be difficult to fairly measure in a report card. This was especially true for the domain titled “AL values and philosophy” from the national literature review effort, which aimed to get at person-centered nature of AL. (Ultimately, this domain is cross-cutting across a number of domains, and, despite potential challenges in measurement, remains an area of importance because it represents the mission of AL and the reason why many consumers choose AL services vs nursing home care, for example.)
- Some providers noted gaps in that there was not a specific domain focused on end of life care. Others emphasized that hospital admissions or emergency room visits may be a more meaningful focus for measurement than nursing home admission.

Consumers

Similar to AL providers, consumer feedback was generally positive and supportive of the nine domains identified. Consumers overwhelmingly felt that while safety is very important, it needs to be balanced with resident choice/autonomy. Staff-related items were frequently discussed and included comments on staffing ratios, staff training, and supportive work environments for

AL staff. In addition, these groups felt coordination of services between the AL communities and outside services/providers is an important aspect of quality and an area for improvement. Consumers identified the following gaps in the identified domains:

- Providing care in a culturally appropriate way for all racial/ethnic and LGBTQ groups, including language services
- Staff safety
- Timeliness of RN review and visits at the AL facility after a resident emergency room visit or a hospital stay
- A domain or subdomains specifically related to dementia care
- Hospital admissions or emergency room visits

Overall

Finally, all stakeholders felt it was important to clearly define assisted living. Both groups identified subdomains that may be considered subjective and difficult to accurately measure (see provider comments above; consumers raised some concerns about social environment measures). Providers worried about the fairness in ratings between AL communities, and consumers wanted to make sure the information was useful and easy to understand.

Gaps in domains voiced by both groups include hospital admissions or emergency room visits versus nursing home admissions (under resident health outcomes domain), and separate domains for dementia care.

Statewide livestream

UMN presented with DHS partners in St Paul for a statewide livestreaming event on the 2019 elder care reforms enacted during the 2019 Minnesota Legislature. The event included time for discussion at locations throughout Minnesota, which were hosted by local facilitators. These sites included: Alexandria, Bemidji, Carlton, Detroit Lakes, St Paul, Mankato, Rochester, St Cloud, Thief River Falls. During the discussion times, participants were asked two specific questions, pertaining to AL quality domains.

First, participants were asked: *Do the domains and subdomains reflect your experience and observations of assisted living?* Overall, the comments were positive and the general sentiment was that this was "a very inclusive list." Participants provided responses, such as: "yes, it's a very well thought out list;" and that "it should be a helpful tool for communication with consumers and family members;" and that they "could not wait for it to be used." Consumers did note two main things for the report card to be helpful: 1) it should be coupled with consumer education and awareness, emphasizing that the forthcoming report card will provide

an unbiased source of information relative to other vendor reviews, and how it was created; and 2) many emphasized that to be helpful, such a report card needs to be used "upstream" to reach people before they make a decision about assisted living.

The comments were generally consistent across the livestream event sites, with many affirming that an AL report card will help people select AL communities. Participants also thought that a report card will support quality improvement within AL communities especially related to resident safety, resident quality of life and quality of care, staffing, and family satisfaction. These themes aligned well with our survey findings. As far as specific domains, most participants commented on the importance of quality of life and staff-related domains, with some pointing out that they were glad to see that staff quality is not discussed in terms of turnover but also in terms of staff satisfaction and empowerment.

Second, participants were asked: *Are there any surprises or gaps related to the domains or subdomains?* Concerns or gaps that were raised related to the need for more attention to staffing ratios and staffing shortages, wait-times to get into AL, equitable and culturally sensitive care, and making domains more actionable within the forthcoming assisted living licensure. Some participants raised concerns about ensuring that quality measures are tied to something that an assisted living community has control over (e.g., the availability of services offered varies greatly in urban vs. rural settings or the size of the facility cannot be changed if certain standards around this area are enacted). Some also stated that while the domains were comprehensive, they may not matter much if a person has only one option for AL (e.g. because of the person's geographic location or the willingness of an AL community to accept Medicaid waiver payments).

Resident focus groups

We conducted four resident focus groups and one advocacy organization focus group. The main findings are described below. We present detailed descriptions of the resident focus groups and summary of findings separately in Appendix F.

All focus groups were voice recorded and transcribed. The transcriptions were then reviewed and comments were coded based on the frequency of mentions for each quality domain.

Rural focus groups

Rural focus group #1 key findings
Participants placed a high degree of importance on **staff quality**, **staff communication with residents**, and the **availability of services**. While discussing staff quality, residents stressed the

effect that staff attitude has on overall **resident quality of life**, which also came up as important. One resident said, "*we have talked about respectful and competent staff, but [what about] having excited and friendly staff*?" Another resident responded with "*some are very good, I've found*." After this particular resident suffered a stroke, the staff members came to visit her. She said, *"I thought that was really nice… it affects your whole day."*

When the conversation moved to staff communication, the focus was around information sharing leading to care continuity. For example, one resident said, "*sometimes one staff [member] floats for another staff [member]… and [information] is not communicated to the next person."* Another resident added, *"it's not very confidence-instilling when the staff member is asking you what medications you should be taking."* The residents in this focus group were highly concerned about the effects of staff communication on the quality of their care.

The focus group discussion around availability of services for these residents was brief, but unanimous in its weight. When asked how they felt about the importance of available services in an assisted living community, one resident simply said *"otherwise, you could stay home"* [if services were not offered] and others agreed. This shows how vital it is that residents feel adequate services are provided. The perspective in this particular focus group was an assumption of available services to meet their needs; the reason for their residence in the community.

Additionally, there was some discussion about **religion and spirituality** and the effect that the religious affiliation of the associated assisted living community has on the perception of religion and spirituality in community events. For example, participants discussed whether or not it was equally important that Christmas and religious holidays outside of Christianity were both celebrated. Some participants felt all religions should be equally represented and some felt that since focus group #1 AL site is a Christian organization; Christianity is expected to be more prominently celebrated. One resident commented, *"It's a Christian facility… and so I would not expect other religions coming in here…"* This demonstrates the potential importance of the organization's religious affiliation for selection process by some residents.

Rural focus group #2 key findings

Similar to focus group #1, **quality of life**, **family and resident satisfaction,** and **availability of services** were the prominent topics that came up during the discussion. Residents focused their discussions within quality of life primarily around friends, family, and their community. The **social and physical environment of the community** were also important aspects of quality of life for participants in this group. One resident noted that one of the main reasons they selected this particular assisted living community was due to the proximity to their physician, church, and family members.

In discussions about satisfaction, one resident discussed how important it was to have her daughter-in-law be pleased with the physical environment of the community. She said "*when my daughter-in-law walked into my apartment and saw the space and the view and then saw*

the care… I have never [heard] a negative thing from my in-laws or from my children." Others shared similar sentiments about importance of family satisfaction in approving of their chosen assisted living community.

With regards to the availability of services, residents from the rural focus group #2 felt similarly as residents from focus group #1; both focus groups felt that regardless of whether they utilized the services personally, they expected services to be available and appreciated that they were. One resident said, *"In my position, I don't think [availability of services] is so important, but it is great to have [them]."*

Urban focus groups

Urban focus group #1 findings

Staff quality and related items, **transportation** and **meal choice** were frequent themes that emerged. Participants in the first urban focus group spent more time discussing staff items in depth and their concerns related to staff quality . They were in agreement that **staff quality** is very important and expressed concern about **staff attitudes** towards residents, respect from staff, and staff training, especially in the case of turnovers and effort it takes to build relationships with new staff. On the importance of being treated with dignity and respect, one resident said, "*[Being treated] with dignity and respect because, that's important to me."* and another said, *"I agree with whoever said about respect. If I respect you, you respect me. You're not going to talk to me any kind of way."*

Focus group participants also talked about the importance of **social environment** as it relates to overall well-being. A resident said, *"Every morning I run a trivia group and I have fun doing that. But that isn't staff run, it's run by me. And I see all those things as being pretty important."* She discussed the importance of having meaningful activities as as aspects of quality in AL settings and others agreed.

The collective group agreed that **safety** is very important and also discussed access to safe smoking areas, and aspects of the neighborhood where the assisted living setting is located that make them feel unsafe. **Transportation** was also discussed with many concerns around safety issues with public transportation options and delays with Metro Mobility rides, although they acknowledged that transportation services are not part of what the specific assisted living setting provides.

Communication was not explicitly a domain or subtopic, but it was highlighted as important and associated with both safety and staff quality. For example, AL communicating with residents when vendors or other persons not visiting residents are scheduled to be in the assisted living community was important to know. To this point, one resident said, *"Knowing and finding out reasons outside people are coming in to look at [AL community name]. I guess,*

that would be something important to me. I do know why outside people come, but I think it's important for people that might be wondering, "Why are these people here?" To know why they're here."This sentiment was also tied to the feeling of agency in one's environment and a sense of home.

Urban focus group #2 findings

Participants in the second urban focus group acknowledged that in general, different domains and subdomains of quality will become more or less important as people age and as their health changes. **Availability of services and social environment** came up a lot during discussion. Participants shared that having different levels of care and service options within the AL community was very important, as people need different services as they age. One resident said, *"We came when it was newly opened. The idea was that we wanted to go to a place where we could transition when our health problems would be bad. So we've enjoyed it."* Another resident said *"I came seven years ago with my husband who had Alzheimer's. We started together. In three month's time, he went to memory care here and then transitioned from here to a smaller setting, which was better for him. My choice was to stay here, where I'd made new friends."*

Participants emphasized that they value their **relationships with other members of the assisted living community** and like to know about the well-being of others. There was enthusiastic agreement across the group when one resident said, *"Because we consider ourselves a family."* When asked if there was anything missing from the list quality domains, one resident mentioned communication to other AL community residents about how a resident is doing, where they are going, and their condition in a medical emergency. The resident speaking acknowledges that HIPAA makes this matter complicated. She also said, *"But if, we talked about this, when a resident moves in, they give the okay for information about them to be given to the other residents here. You know, where they're going and what their condition."* and another resident said, *"I don't think you can do anything about it, but as a family, it would be nice to know if, who's going out on an ambulance, where they are going or the status."*

When the discussion moved on to quality of life, one resident shared that the proximity of AL setting to family and church was important, and some residents nodded in agreement. **Finances and cost transparency** came up a lot in discussion with regards to both quality of life and resident and family satisfaction. Participants shared that it is very important to understand how much services costs, and what their options are so they can plan accordingly. Moreover, they highlighted the importance of trusting what was communicated regarding service cost quotes is what it actually is, after moving in (no surprise billing). One resident said, *"The cost. Excuse me. I went to two other places, plus this one. This is the only one where they laid the costs out, item for item, before you even made a decision. I like that."* They also said, we like to know *"What is*

included? Here everything was laid out, item for item, so you knew before deciding. ", with all participants nodding in agreement. In discussing **community integration as an aspect of quality of life**, some noted that the importance of this item varies by one's ability to drive.

Food, choice and preferences were also brought up in discussion. Participants discussed being able to choose when and what to eat is important, *"Especially at meals too. If you don't like what's on the special, you don't have to take it. You have to let the office know in the morning that you want to switch. Or you want something different that's not on there, so they have the flexibility. I like that."* one resident said, and most agreed. **Staff quality** came up as important but in general this domain was not as salient for participants when compared to those in focus group 3, in part because they seemed more satisfied with the care they were receiving. One resident said, *"I think there are some real concerns around finding competent help. There's so many of these facilities being built that it's very competitive. And I don't think the pay for these [jobs] is that well."* When discussing resident and family satisfaction, the group acknowledged that family members often have differing views on what's more important for quality in AL, and this was supported by euthanistic nods in agreement from all participants.

Differences between urban and rural focus groups

Although there are clear similarities between urban and rural focus groups, there were some differences in themes that emerged. For the urban focus groups, the importance of AL cost information and cost transparency was much more salient, compared to their rural counterparts. Residents at urban focus groups also discussed safety topics more compared to participants at rural focus groups.

When discussing subdomains of quality of life, participants at three of the groups (2 rural, 1 urban) highlighted the importance of friendships (including new relationships at the AL) and family relationships as aspects of quality of life. Most participants of the fourth focus group (urban) had a neutral outlook regarding relationships with family and friends and shared that family connection was not as important to them in assessing quality.

Similarities between urban and rural focus groups

The prominent theme that emerged across both urban and rural focus groups is the importance of staff quality and other staff-related items including: staff training, staff attitudes towards residents, resident relationships with staff, turnover rates, respect from staff, and communication with staff, as it relates to quality of care and quality of life. The importance of the social environment also emerged across both urban and rural focus group discussions.

Spirituality/religious affiliation as part of quality of life subdomain was also discussed in all focus groups. Participants in the rural focus groups discussed the importance they placed on

Christian faith and celebration of various religious activities as part of their AL communities (both rural AL communities were religiously affiliated). In the urban focus groups, while some noted that the proximity to a church was important to them (getting at community integration), others discussed that religious affiliation is a choice and residents should be free to express their choice and live accordingly.

Residents who participated in focus groups spoke from the perspective of their personal experiences in AL, rather than what's relevant for AL quality in general, which is brings the "lived" consumer perspective to assessing what AL quality measurement should include.

Advocacy organization focus group

Participants in the advocacy organization focus group generally agreed that the domains were inclusive and comprehensive. The most prevalent and consistently endorsed domain was resident quality of life. Yet, several of the participants said that they felt that all of the nine domains were equally important, and hence, the group chose not to do the ranking summary sheets as not to give the message that they value one of the nine domains less (as per their comments). They also felt that they would hope to see measure development in all of the nine domains and not only for quality of life or family satisfaction.

Participants focused much of the discussion on ways to measure key domains or missing areas within domains, with the most common themes including: a) quality of life; b) residents' ability to age in place (a new sub-theme); c) availability of services in how they relate to accessibility, safety, and quality of life; and d) social and physical environments of the AL. Participants also discussed staff quality, health outcomes, and safety as essential, but had fewer specific suggestions on measurement.

First, quality of life was the most prevalent theme, with over 24 different codes. Within quality of life, participants tended to focus most on autonomy/choice (n=7), food (n=6), and meaningful activities and engagement (n=6). Advocates strongly emphasized the importance of autonomy, choice, and quality of life and the importance of not over-prioritizing safety at a cost to choice. There was strong consensus that residents deserve to have their voices heard and to have a say in their own day-to-day decisions, just as they would in their own home (since AL is part of home and community-based services). One of the advocates said: *"We get the most complaints and concerns about lack of autonomy and choice and looking at privacy."*

Participants in the focus group also discussed the tension between risk management and autonomy and how both need to be a part of the quality measurement for AL. Some of this tension is particularly relevant for residents with dementia, where as one participant said: *"Making sure that people have a voice and ensuring that if you have dementia, you have a*

voice. And how do you balance the person's voice with family voice or, personal representatives' choice. And there can be some tension in that."

Under choice, much of the discussion also focused on making care more person-centered, as one participant said: *"Personalizing some of that activity level to the person and not just having a standard, eight to four activity calendar that doesn't really make sense to people."*

This importance of choice also carried over to the discussions of the QOL subdomain of food. One participant focused on the choice of when to eat*: "Do I have to eat at this time only or what's the flexibility in choices that I have?"* Another participant discussed the role that food and meals has on the broader domain of QOL: *"Meals and food and quality of food is critical to people's quality of life and happiness. That is what people talk about whenever I go to a resident council meeting."*

Under the subdomain of meaningful activities and engagement, the concept of choice was also discussed. One participant illustrated this with an example of the importance of finding and choosing what is meaningful for each resident: *"I don't play Bingo, I don't do this, I don't do that. It's really about how do you…want to contribute, how do we facilitate you being able to contribute in that way?"* Another participant highlighted how meaningfulness encompasses other quality domains such as the environment and availability of services: *"the meaningfulness aspect breathes life into the environment… the central thing is to have the meaningfulness and if you have the meaningfulness you get into things like, is the environment accessible to people with disabilities, can they access programs and is it an environment worth being in."*

Second, availability of services received the next most mentions and codes (n=20). Availability of services includes items pertaining to meal service, medication assistance, management and quality, wellness services, pharmacy services, personal care services, transportation services, and other services relevant to assisted living communities. Discussions surrounding the availability of services were varied. Some participants questioned whether it was truly a measure of quality or was instead better used as a means of choosing an AL community. Participants shared: *"people may choose to live in a place that has the number of services that meets their needs and other people don't need to go to that, so I'm not sure that's a quality measure." They also said that "we have a lot of individuals calling who are looking to make the move to an assisted living and some of the key things they are wanting to know are what are the services that are available."*

Several participants expressed skepticism for this domain, centered around the concern that just because a service is technically offered, it doesn't mean it is necessarily accessible or practical. As one participant put it:"*There are also plenty of situations where a person doesn't receive the services they signed up for, or there are strange means of service delivery. For*

example they go allegedly provide services when they know the client isn't there, and then they write down, "Oh well, we offered it".

Third, a new subtheme focus on ability to age in place arose during the group discussion. This idea of aging in place centered around concerns that AL communities were not sufficiently accommodating the desire of residents to continue living there as they age. Participants were especially passionate about this subdomain and the impact it has on residents and their thought process when choosing an AL community:- *"having that availability of services and aging in place. As needs progress, can the AL community continue to provide the level of care that that person needs."* Another participant gave a personal example of how aging in place impacted her mom's experience in Assisted Living: *"The aging in place matters. My Mom is in a brand-new facility, had a wonderful apartment. There was only a couple of units out of the 100-some unit building that were fully accessible with a wheelchair access bathroom. So, when she started to need a wheelchair, they were starting to talk, well she's going to have to move."*

Some of the other discussions regarding aging in place focused on waivered services and barriers to access and ability to stay and age in place in AL for those on waivers. One participant explained the challenges faced by those on waivers: *"We've noticed that a lot of people on Elderly Waiver (ED) get kicked out of the system because of their disability."*

Finally, the next most frequently mentioned domain was the environment of the AL (n=13). This domain was broken out into the physical environment (n=7) and the social environment (n=6). Both physical and social domains (and especially the importance of "social domain" were salient for resident and advocates focus groups).

While discussions in our resident focus groups about the physical environment often focused on how visually appealing the surroundings were, advocates tended to instead think about the physical environment from the perspective of accessibility and safety. As one participant described it*: "we can count the ways that you can injure yourself because we haven't made these facilities physically accessible. That's why it's a critical piece."* Another participant felt like the physical environment was important because it can impact so many of the quality domains: *"the physical environment, could go on almost every one of the categories here because it impacts it so much. Quality of life, what your mental and physical outcome's going to be."*

When discussing the social environment, responses covered the topics of belonging, connectedness, and cultural considerations. This differed from the resident groups, where the focus on the social environment was mostly about interactions between residents and activities or events within the community. One advocate highlighted the role that diversity and culture play in influencing one's social environment: *"For me it related to diversity and cultural humility,…, it's the ethnic, racial, LGBT and religious qualities about an institution that make me*

want to live there. Do the staff look like me, do they speak my language, do they pray the same?"

Based on the feedback from the advocacy organization focus group, several potential gaps/additions came up to consider for quality domains or subdomains. These included diversity, equity, and inclusion; cultural sensitivity of services; consumer choice as a separate domain instead of a QOL subdomain; the ability to age in place; and metrics for tracking quality for waiver service users.

Discussion

This report summarizes the findings from a statewide stakeholder engagement on quality measures for AL in Minnesota and determines priority rankings for types of domains for AL quality that are measured, and indicators used to assess these domains. The overarching goal is to inform the development of a quality framework for the AL report card in Minnesota, which is part of the new AL legislation.[20]

Our methodology involved a comprehensive statewide stakeholder engagement effort to identify priority areas for previously identified measures of AL quality based on national research and technical expert feedback. We undertook a variety of stakeholder outreach initiatives to solicit their feedback on the domains of AL quality from national work. These included: a) a statewide online survey (n=822 respondents); b) public presentations (n=13); c) a statewide livestream event (n=266 attended); and d) focus groups with AL residents and advocacy organizations (n=5 groups).

First, we identified the domains of the AL quality from the national work that are also highly supported by MN stakeholders.[5]

While our findings indicate high level of support among Minnesota stakeholders to the domains of quality that were identified in the national work, the domains of AL quality endorsed as most important were: a) **quality of life**; b) **staff quality**; and c) **resident safety**. Yet, stakeholders also assigned high priority to the domains of resident and family satisfaction; resident health outcomes; physical and social environments of AL; service availability; and care services and integration. One difference from the national work is that MN stakeholders felt that the domain titled "core values and philosophy" of AL, which aimed to get at person-centered nature of AL, mission, values, etc., while important, was overly broad and difficult to measure. We

[20] Minnesota Legislature. Office of the Revisor of Statutes. Minnesota Statutes (2019) Section 144G.08. Subd.69 https://www.revisor.mn.gov/statutes/cite/144G.08 (Accessed January, 2019)

recommend that this domain remain on the list of quality domains but further work would be needed to operationalize it, should it be included in the future. Also, based on stakeholder feedback, we recommend separating physical and social environment of AL into separate domains.

Interestingly, physical and social environments of AL were the two lowest rated domains from the survey and public presentations, compared to other five domains. Yet, residents and consumer advocates felt that these domains are important as they relate to accessibility of the environment, culture of the setting, especially as it relates to the diversity and inclusion (for those with disabilities, racial/ethnic minorities, sexual and gender minorities, etc.). One solution may be to incorporate measures for satisfaction with these aspects of the AL environment in resident quality of life and family satisfaction surveys, since the discussion of these domains were tied to how they impacted residents' quality of life and satisfaction.

Second, our findings show what subdomains and indicators (associated measures) are most important to stakeholders when measuring resident quality of life and family satisfaction.

Stakeholders generally felt that the list of subdomains and indicators under quality of life and family/resident satisfaction was inclusive but also identified priority areas and some gaps that need to be addressed. Importantly, they also differentiated between resident quality of life and family satisfaction expressing that sometimes residents and family members have different priorities. This came up in survey open-ended comments and also in the resident and advocacy organization focus groups.

Among the subdomains of quality of life that received the highest percentage of "Very important" or "Critically important" ratings were **dignity/respect**, **staff-related items**, and **security**. The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were religion/spirituality, community integration with one's broader community where AL is located, and physical activity.

Stakeholders also identified some gaps in the proposed subdomains for quality of life, specifically, indicators to assess cultural-sensitivity, equity/inclusion of the AL setting, quality for those on waivers, and ability to age in place as an important aspect of quality of life.

The subdomains of family satisfaction that received the highest percentage of "Very important" or "Critically important" ratings were **staff competency**, **respect from staff**, and **care experience**. The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were meal choice and housekeeping. Similar to quality of life subdomains, there was emphasis that family members may have different priorities from residents but most of the gaps focused on staff-related items as they pertain to staff culture, staff empowerment, and staff cultural sensitivity toward residents from different backgrounds.

Finally, we examined areas of consensus across all stakeholder groups and which areas were more stakeholder-dependent (e.g., providers as compared to family members of AL residents).

Our findings show that the domains of quality were highly consistent across stakeholder roles, with strong agreement around the importance of **quality of life**, **staff quality**, and **safety.** Focus groups with residents and advocacy organizations provided support for these domains, but with the added considerations for the potential tension between choice and autonomy (both key subdomains of quality of life) and safety/risk management. Advocates also emphasized the importance of aging in place as a key aspect of AL quality and raised concerns for barriers faced by those on Medicaid Waiver programs. Residents who participated in focus groups reflected on aspects of AL quality that have been important for their quality of life, with staff quality, availability of services, and social and physical environments of the AL receiving much priority.

We also saw a high degree of consistency regarding subdomains and indicators to measure quality of life. However, there were three areas where we observed significant differences across various groups: a) stakeholder role was associated with the perceived importance of the subdomain of financial transparency (higher importance for family members and consumer advocates vs providers); b) rural/urban and gender differences in the importance of the quality of life subdomain of religion/spirituality (higher for those in rural vs urban; higher for women than men); and c) differences between white respondents and non-white respondents on the importance of the subdomains of community integration, religion/spirituality, and meaningful activities/social engagement (non-white respondents assigning higher ratings).

Similarly, we saw high consistency in subdomain ratings for family satisfaction, with no differences by gender, age, race/ethnicity, or location. The only difference was variability by stakeholder role for the subdomains of cost of care, meal choice, physical environment, and staff competency.

Limitations

This report is based on feedback from over a thousand diverse stakeholders across Minnesota. Yet, it is not without limitations. First, our respondents are not randomly selected since we relied on a convenience sample for the survey and other outreach initiatives. Yet, we worked closely with trade associations, various consumer groups, DHS, and media to ensure that our outreach was as comprehensive as possible, within the time frame that we were given. Second, most of our respondents are white and English speaking. A growing proportion of Minnesotans are from communities of color, indigenous and immigrant communities. We worked with the Minnesota Diverse Elders Coalition to raise awareness of these efforts for racially/ethnically diverse communities, but a key limitation was that the survey was in English (as were our other outreach efforts) which precluded participation for non-English speakers. We are hoping to

build closer partnerships in diverse communities for future aspects of this work. Third, when conducting Pearson Chi-Square tests on the survey data, we were limited by the large number of categorical variables and the small sample size. Therefore, caution is needed in interpreting the results pertaining to statistical significance due to small sample size in some cases.

Conclusions

Overall, our findings support the importance of assessing resident quality of life and consumer (resident/family) satisfaction as the top-rated measure of AL quality. Importantly, staff-related quality was the second-rated domain endorsed across all stakeholders. Finally, safety was the third-ranked domain, closely followed by resident health outcomes to get at some measures of clinical quality, especially for those with dementia.

Since resident quality of life and family satisfaction are going to be assessed through statewide surveys, starting in 2021, it is important to identify ways to also capture staff-related quality and other key domains, as identified by consumers. Importantly, staff-related quality is broader than staffing ratios and turnover (both of which frequently came up), but also includes measures of staff competency and training, quality of care given to residents by staff, staff communication with residents, as well as staff satisfaction and degree of empowerment. In addition, a close fourth was the domain of resident health outcomes, which may become even more important, especially as AL residents become increasingly more complex and have higher clinical care needs.

The stakeholders identified the need for a balance between person-centered, clinical and administrative measures to provide a comprehensive view of AL quality to consumers and providers. It is also important to keep in mind what AL aims to be when compared to nursing homes and what consumers value about AL, which includes a more home-like setting, choice, and independence. These values and priorities also help individual ALs set themselves apart from other ALs via marketing to consumers. Thus, person-centered measures of quality for AL are essential and are important for both residents, family members, and consumer advocates. Yet, staff quality is a key aspect of residents' quality of life. Another consideration is that we don't have much information about clinical quality. Report cards should provide information that consumers are missing, thus, making the case for some measures of quality of care. These findings point to the importance of a comprehensive but also usable and accessible system that can help consumers in identifying ALs that best meet their needs and also serve as metric of quality for providers.

Appendices

Appendix A: Domains, subdomains and indicators of quality in assisted living

Domain	Subdomains	Indicators
Resident quality of life	• Food quality • Connectedness • Meaningful life/activities/engagement • Social relationship • Community • Privacy • Choice • Religion/Spirituality • Independence /Autonomy • Social activities* • Physical activity* • Relationships [friends & family] * • Financial well-being* • Community integration*	• Dementia Care Mapping • Experience of Home Scale (EOH) • Quality of Life in Dementia (QOL-D) • Quality of Life in Alzheimer's Disease (QOL-AD)-resident • Quality of Life in Alzheimer's Disease (QOL-AD)-care provider • Alzheimer Disease Related Quality of Life (ADRQL) • Dementia Quality of Life (DQoL) • Resident and Staff Observation Checklist-Quality of Life Measure (RSOC-QOL) • Philadelphia Geriatric Center Affect Rating Scale (PGC-ARS) • Fitness and exercise* • NCI-AD AL resident questions* • Ohio – Residential Care Survey*
Resident and family satisfaction	• Overall satisfaction • Unmet needs • Care experience • Well being • Choice/preferences met* • Personal care needs met* • Respect from staff* • Burden of care* • Housekeeping* • Staff competency* • Meal choice satisfaction* • Cost of care* • Quality of Staff care* • Recommendation to others*	• Assisted Living Resident Satisfaction Survey (ALRSS) • Quality of Dying in Long-Term Care (QOD-LTC) (all descendants • Quality of Dying in Long-Term Care (QOL-LTC-C) (cognitively intact descendants) • Resident Satisfaction Index (RSI) • Person-Centered Practices in Assisted Living questionnaire – resident • CoreQ (5 measures) * • Ohio Long-term Care Resident Satisfaction Survey* • Ohio Long-term Care Family Satisfaction Survey* • California Assisted Living Association Survey (2016)*

Domain	Subdomains	Indicators
Safety	• Resident empowerment opportunities/perceived safety • Accountability and continuous quality improvement • Policies around resident safety • Elder abuse • Safety culture	• Regulatory compliance • Citations • Substantiated complaints* • Safety culture indicators
Resident health outcomes	• Physical function • Psychosocial well-being • Adverse/avoidable critical incidents • Medication errors • Nursing home admissions • Mental health/Behavioral health	• ADLs/IADLs • Social role function • Falls • Avoidable hospitalization • Under prescribing • Incorrect medication • Incorrect timing of medication • NH admissions from AL • Rates of alcohol misuse and abuse
Staff	• Close staff relationships • Staff empowerment • Collaboration among staff • Communication (among providers/direct care workers) • Burnout/stress • Supports (institutional, supervisor, emotional, coworker) • Job satisfaction • Resident-centered job satisfaction • Consistent assignment • Employee qualifications	• Observable Indicators of Quality-Assisted Living • Person-Directed Care (PDC) and Environmental Support for PDC measure • Work Stress Inventory • Person-Centered Practices in Assisted Living questionnaire – staff • Job Attitude Scale (JAS) • Staff Experience working with Demented Residents • Dementia care quality indicators • Turnover • RN Hours • Staff training • Staff Performance Reviews* • Nurse/staff availability* • CoreQ-staff* • Assisted Living Provider Tool for Consumer Education*

Domain	Subdomains	Indicators
Physical and social environment	• Safety/Security • Dining room environment • Social climate • Ability to get outside • Occupancy rate* • Fire safety and emergency preparedness*	• Physical characteristics • Service availability • Indexes, including Nursing Home Survey on Patient Safety and Culture • Pandemic preparedness tool • Seniors' Outdoor Survey (SOS) • State criminal background checks* • North Carolina's Star Rating Program* • Wisconsin Dept. of Health Services Assisted Living Facility Survey*
Service availability	• Meal service • Medication assistance/management/quality • Wellness • Nutrition services • Pharmacy services/use • Personal and emotional care* • Transportation*	• Could be pulled from internal data • Assisted Living Provider Tool for Consumer Education* • State AL associations*
Core values and philosophy*	• Rules / Resident Rights* • Family and Resident councils* • Workplace practices* • Scope of services*	• Move in/discharge criteria* • Medicaid discrimination* • Consumer information Guide: Assisted Living Residence (NY)* • State AL associations*
Care services and integration	• Information transmission • Efficiency of HIT sharing • Care quality • Collaboration among providers • Communication with family • Service plan* • Case management*	• ADL care quality • Dementia care quality • Advanced care planning* • Individualized service plan, Record keeping*

Note: Domains, subdomains, and indicators in this table come from published and grey literature. Elements marked by * come from grey literature.

Appendix B: Stakeholder presentations

a. Age and Disability Odyssey (August 1)
b. Stratis Health Community Outreach Committee (August 21)
c. Care Providers of Minnesota Quality Council (August 23)
d. NASUAD (ADvancing States) HCBS Conference (August 28)
e. LeadingAge of Minnesota Quality Committee (September 12)
f. Minnesota Gerontological Society Webinar (September 19)
g. Minnesota Board on Aging (September 20)
h. LeadingAge of Minnesota Housing Committee (October 2)
i. Minnesota Diverse Elders Coalition (October 4)
j. TouchStone Mental Health (October 7)
k. Statewide Assisted Living Community Conversation Livestream Event (November 4)
l. Care Providers of Minnesota Housing Committee (November 6)
m. Care Providers of Minnesota Convention (November 18)

Appendix C: Resident focus groups

Resident focus group sites were selected through a stratified random sample to include: smaller and larger settings; settings with higher and lower rates of Medicaid waiver program participation; rural and urban representation; and inclusion of residents from diverse racial/ethnic groups. Settings were selected at random from a data set from DHS' HCBS Settings Rule Provider Attestation Database as of October 2018. Based on these data, there were 1,262 Customized Living providers available for selection. We used the following steps, described below, to make the selections.

First, we identified settings with reported occupancy of 24+ residents = **464** (or 37% or records). This was done to ensure sufficient numbers of residents for focus group participation. Second, we identified the occupancy (i.e. size) and proportion of waiver participants in each setting. The table below breaks the 464 settings into four groups by waiver program participation and occupancy.

Proportion of Waiver Participants & Setting Occupancy	Smaller (24-49 residents)	Larger (50 or more residents)
29% or less	118	154
30% or more	122	70

Third, we selected three settings at random for each of the four quadrants above. Fourth, we reviewed the randomly selected settings for geographic distribution and racial/ethnic group diversity. In addition, we reviewed whether the setting was compliant with the HCBS Settings Rule compliant and excluded those that were not. To increase the variation between sites, we made one additional random selection to find a fourth site option in one quadrant, which resulted in a total of 13 sites. Finally, four sites were selected among the 13 sites that, together, addressed the characteristics we were seeking in our selections. The table below provides a summary of the characteristics of four selected sites.

Site	Characteristics[21]
1	50 or more residents; 5% Elderly Waiver (EW) participants; 2nd Class City; Twin Cities Metro
2	50 or more residents; 13% EW participants, 3rd Class City; Central Minnesota
3	24-49 residents; 15% EW participants; Town; Central Minnesota
4	50 or more residents; 18% EW participants; 1st Class City; Twin Cities Metro; racially/ethnically diverse

[21] Classification of Cities, MN House Research, November 2019: https://www.house.leg.state.mn.us/hrd/pubs/cityclass.pdf (Accessed December 2019)

Appendix D: Advocacy organization focus group

Advocacy organization focus group participants

Organization	Representative
AARP	Mary Jo George
Alzheimer's Association	Heidi Haley Franklin
Elder Voice Family Advocates*	Kristine Sundberg
Legal Aid Society	Daniel Stewart
Minnesota Elder Justice Center	Amanda Vickstrom
Ombudsman for Long Term Care	Genevieve Gaboriault
MN Association of Area Agencies on Aging	Lori Vrolson
Minnesota Council on Disability	Joan Willshire
Minnesota Leadership Council on Aging	Rajean Moone
Stratis Health	Jane Pederson
Ombudsman for Mental Health and Developmental Disabilities	Maura McNellis Kubat

*Elder Voice Family Advocates was not able to attend on October 14. They provided feedback through a phone interview on October 30, 2019.

Appendix E: Detailed online survey results

Survey background

In an effort to collect opinions pertaining to topics of quality at assisted living communities, the University of Minnesota School of Public Health partnered with the Office of Measurement Services at the University of Minnesota to conduct a statewide survey.

After the initial survey development, pilot testing was conducted for two weeks with stakeholders from the Minnesota Department of Human Services, Central MN Council on Aging, LeadingAge MN, Elder Voice Family Advocates, Care Providers of MN, the MN River Area Agency on Aging, and the Office of Ombudsman for Long-Term Care. Survey revisions were made based on feedback received from these stakeholders.

Data collection began in mid-October and continued for 6 weeks through the end of November. The survey link was distributed to a wide variety of audiences through the use of social media, news publications. In total, 822 respondents participated in the survey, with 77.3% (n=635) of respondents who started the survey clicking the "submit" button at the end of the survey. An additional 187 respondents started the survey but did not complete it. Of these 187 partial responses, 35.8% (n=67) were removed from the final dataset because they did not answer any questions relating to the topics of quality at assisted living communities. An additional nine respondents were removed from the final dataset because they elected not to participate at the consent statement. After data cleaning, 746 survey responses were kept for analysis.

The survey had four main sections: demographics characteristics, quality domains, subdomains for resident quality of life and resident and family satisfaction, and open-ended questions about the Report Card.

Demographic characteristics

Demographic data was collected on respondents' gender, age, race/ethnicity, location, and role within assisted living communities.

The vast majority of survey respondents were female (87%). Ninety-five percent of respondents were within the ages of 25-74. The most common age ranges for respondents were 55-64 (35%), 45-54 (18%), or 65-74 (16%).

Gender	Percent	Count
Female	87%	540
Male	13%	82
Other (please describe)	0%	2
Total:	100%	624

Age group	Percent	Count
Under 18 years old	0%	0
18-24 years old	1%	6
25-34 years old	12%	75
35-44 years old	14%	86
45-54 years old	18%	115
55-64 years old	35%	217
65-74 years old	16%	103
75-84 years of age	3%	17
85 years of age or older	1%	6
Total:	100%	625

Respondents were asked about their race and ethnicity through two separate survey items. They were first asked in a "check all that apply" item if they identify as Hispanic or Latino, Hmong, or Somali. They were then asked to select all options that best describe them amongst the following: White or European American, Black or African American, American Indian or Alaskan Native, Native Hawaiian or Pacific Islander, and Asian. For analysis purposes, race and ethnicity data was collapsed into two categories, White or European American (94%) and Non-white (6%).

Race	Percent	Count
White or European American	94%	584
Non-white	6%	34
Total:	100%	618

Respondents were also asked where they currently reside and were provided a drop-down list of all counties in Minnesota. Forty-four percent of respondents lived in either Hennepin County (24%), Ramsey County (13%), or Dakota County (7%). For analysis purposes, location data was collapsed into two categories, Urban (77%) and Rural (23%), based on classification data from the Minnesota Center for Rural Policy and Development.

Location	Percent	Count
Urban	77%	475
Rural	23%	144
Total:	100%	619

In an effort to better understand the perspectives of respondents, each respondent was asked to identify their role(s) with assisted living communities. They were given the options of resident; family member of resident; consumer advocate; provider; health or human services provider not in assisted living; county, tribe or health plan; and other. The most common role identified was family member of resident (30%), followed by providers in assisted living (19%),

and providers not in assisted living (14%). Approximately 22% of respondents identified as having more than 1 role with assisted living communities.

Another 101 respondents selected Other, with 96 of them writing in a description of their role. These write-in responses covered a wide-range of professions and roles. Examples included friends of residents, government employees, board members, former assisted living employees, caregivers, insurance brokers, and future assisted living residents.

Role	Percent	Count
Family member of resident	30%	250
Provider	19%	160
Health or human services provider (not in assisted living)	14%	119
Other (please describe)	12%	101
County, tribe, or health plan	12%	100
Consumer advocate	12%	98
Resident	1%	12
Total:	100%	840

Quality domains

Respondents were asked to rate the level of importance for 9 domains of quality in assisted living communities. These domains were compiled through a literature review and environmental scan conducted by the University of Minnesota. The domains included in the survey were availability of services, care services, health outcomes, the physical environment, the social environment, quality of life, resident and family satisfaction, safety, and staff quality.

Respondents were presented 1 domain at a time in a random order. For each domain they were given a few examples of what the domain includes and were asked their opinion on the importance of the domain to the overall well-being of people served in assisted living settings on a 5-point scale from “critically important” to “not at all important.” When looking at the number of respondents who rated a domain as either critically or very important, the top domains were quality of life (98%), staff quality (98%), and safety (97%). The domains with the lowest percentage of respondents rating them as critically or very important were the social environment (85%) and the physical environment (91%).

Domain	Scale option	Percent	Count
Safety	Critically important	80%	569
	Very important	17%	123
	Moderately important	2%	16
	Somewhat important	0%	1
	Not important	0%	1

Domain	Scale option	Percent	Count
Quality of Life	Critically important	70%	502
	Very important	28%	201
	Moderately important	1%	10
	Somewhat important	0%	2
	Not important	0%	0
Resident & Family Satisfaction	Critically important	53%	381
	Very important	41%	296
	Moderately important	4%	32
	Somewhat important	1%	6
	Not important	0%	0
Resident Health Outcomes	Critically important	62%	441
	Very important	31%	220
	Moderately important	6%	46
	Somewhat important	0%	3
	Not important	0%	2
Staff Quality	Critically important	74%	532
	Very important	24%	171
	Moderately important	1%	10
	Somewhat important	0%	1
	Not important	0%	3
Physical Environment	Critically important	39%	276
	Very important	52%	371
	Moderately important	8%	58
	Somewhat important	1%	9
	Not important	0%	1
Social Environment	Critically important	35%	249
	Very important	50%	358
	Moderately important	13%	89
	Somewhat important	2%	13
	Not important	0%	3
Availability of Services	Critically important	51%	362
	Very important	43%	309
	Moderately important	5%	39
	Somewhat important	1%	4

Domain	Scale option	Percent	Count
	Not important	0%	0
Care Services	Critically important	56%	396
	Very important	38%	273
	Moderately important	5%	39
	Somewhat important	0%	3
	Not important	0%	2

After rating each domain, respondents were shown a list of the domains they rated as "critically important" or "very important" and were asked to choose the one domain they felt was most important to the well-being of older adults who use assisted living. The domains most frequently rated as most important were quality of life (30%), staff quality (21%), and safety (16%). The domains which were least likely to be rated as most important were the physical environment (1%) and the social environment (1%).

Domain	Percent	Count
Quality of life	30%	208
Staff quality	21%	143
Safety	16%	113
Care services	10%	68
Resident and family satisfaction	9%	60
Health outcomes	7%	47
Availability of services	6%	45
Physical environment	1%	4
Social environment	1%	5
Total:	100%	693

There was little variability in the top domain across roles. Quality of life was the top domain across all roles except "Other role", with percentages ranging from 27% (other role) to 40% (resident). Staff quality also experienced limited variability, rating as the 2nd most important domain amongst all role groups except providers.

Domain	Total	Consumer advocate	County, tribe, or health plan	Family member of resident	Provider (not assisted living)	Other	Provider (assisted living)	Resident
Availability of services	7.0%	5.5%	14.3%	6.8%	7.7%	5.6%	4.1%	0.0%
Care services	8.8%	5.5%	4.1%	9.4%	7.7%	7.9%	15.1%	0.0%
Health outcomes	6.9%	8.8%	6.1%	4.3%	11.1%	5.6%	7.5%	10.0%
Physical environment	0.64%	1.1%	0.0%	1.3%	0.0%	0.0%	0.68%	0.0%
Quality of life	29.9%	36.3%	30.6%	26.0%	34.2%	27.0%	29.5%	40.0%

Domain	Total	Consumer advocate	County, tribe, or health plan	Family member of resident	Provider (not assisted living)	Other	Provider (assisted living)	Resident
Resident and family satisfaction	8.7%	6.6%	7.1%	8.9%	3.4%	4.5%	15.8%	30.0%
Safety	17.0%	14.3%	17.3%	17.9%	17.1%	20.2%	15.8%	10.0%
Social environment	1.0%	2.2%	1.0%	0.43%	0.85%	1.1%	1.4%	0.0%
Staff quality	20.1%	19.8%	19.4%	25.1%	17.9%	28.1%	10.3%	10.0%

When looking at the most important domains across the other demographic variables, the top 3 domains remained the same regardless of gender, location, age, and race.

Quality of life subdomains

Our literature review identified quality of life and resident and family satisfaction as larger domains each containing several important subdomains.

For quality of life, a total of 14 subdomains were identified. These included autonomy/choice, assisted living community, community integration, dignity/respect, financial transparency, food, meaningful activities/social engagement, physical activity, privacy, relationships with assisted living community, relationships with friends and family, religion/spirituality, security, and staff-related items.

Respondents were shown these 14 subdomains in a random order and were provided a brief description of each. They were then asked to rate each domain as either “Important” or “Not important.”

When rating the quality of life subdomains as important or not important, all subdomains were rated as important by the majority of respondents. Ten of the 14 subdomains were rated by at least 90% of respondents as being important. Religion/spirituality received the fewest number of “important” selections at 79%.

Quality of life subdomains	Important	Not important	Count
Dignity/respect (Being treated with dignity and respect by staff)	100%	0%	684
Security (The assisted living community is accessible and safe for you and your belongings)	99%	1%	683
Staff-related items (Having competent, responsive, and respectful staff)	99%	1%	684
Relationships with assisted living community (Having good relations with the people who help you)	98%	2%	683
Meaningful activities/social engagement (Being able to do the things you enjoy)	97%	3%	684
Relationships with friends and family (Staying in touch with family members and friends)	97%	3%	684

Quality of life subdomains	Important	Not important	Count
Autonomy/choice (Your ability to control your daily routines and make choices, even when others disagree)	96%	4%	682
Financial transparency (Costs are clear and there are no surprise costs)	96%	4%	683
Privacy (Having control over who may enter your room/apartment)	96%	4%	680
Food (meal choices; whether meal time is enjoyable; whether you can get your favorite foods)	95%	5%	681
Assisted living community (Having a sense of belonging in the assisted living community)	89%	11%	681
Physical activity (Having enough opportunities to stay physically fit)	89%	11%	682
Community integration (Being able to get where you want or need to go within the broader community such as stores, restaurants or parks)	84%	16%	683
Religion/spirituality (Having your religious and spiritual needs met)	79%	21%	680

For each subdomain rated as "Important," respondents were then asked to rate the level of importance on a 4-point scale ranging from "Somewhat important" to "Critically important." The subdomains that received the highest percentage of "Very important" or "Critically important" ratings were dignity/respect (97%), staff-related items (96%), and security (93%). The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were religion/spirituality (59%), community integration (60%), and physical activity (67%).

Quality of life subdomains	Somewhat important	Moderately important	Very important	Critically important	Count
Dignity/respect (Being treated with dignity and respect by staff)	1%	2%	21%	76%	660
Staff-related items (Having competent, responsive, and respectful staff)	1%	3%	21%	75%	660
Security (The assisted living community is accessible and safe for you and your belongings)	2%	5%	34%	59%	659
Financial transparency (Costs are clear and there are no surprise costs)	3%	9%	41%	47%	656
Privacy (Having control over who may enter your room/apartment)	2%	11%	45%	43%	656
Relationships with friends and family (Staying in touch with family members and friends)	3%	10%	45%	42%	660
Autonomy/choice (Your ability to control your daily routines and make choices, even when others disagree)	2%	13%	46%	39%	658
Relationships with assisted living community (Having good relations with the people who help you)	2%	12%	50%	36%	661
Meaningful activities/social engagement (Being able to do the things you enjoy)	3%	16%	54%	28%	658
Food (meal choices; whether meal time is enjoyable; whether you can get your favorite foods)	3%	19%	52%	26%	655
Assisted living community (Having a sense of belonging in the assisted living community)	5%	25%	47%	22%	657

Quality of life subdomains	Somewhat important	Moderately important	Very important	Critically important	Count
Religion/spirituality (Having your religious and spiritual needs met)	13%	27%	39%	20%	657
Community integration (Being able to get where you want or need to go within the broader community such as stores, restaurants or parks)	10%	30%	41%	19%	660
Physical activity (Having enough opportunities to stay physically fit)	8%	25%	48%	19%	658

Chi-square tests were conducted to determine if there were significant differences in QOL ratings based on the demographic variables collected. For individuals who selected multiple roles, only their primary role was included in analysis.

When looking at the quality of life subdomain ratings by role, the subdomains of financial transparency (p=.011) and relationship with assisted living community (p=.019) were found to be statistically significant, meaning there is a relationship between role and these quality subdomain variables.

When looking at the quality of life subdomain ratings by gender, only the subdomain of religion/spirituality was found to have a significant difference of importance between genders (p=.017). Religion/Spirituality had 61 percent of females rating it as very important or critically important whereas only 53% of males rated the item as very important or critically important.

When comparing the quality of life subdomain ratings to the respondents location (urban vs rural), only the subdomain of religion/spirituality was found to have significant differences (p=.029). Rural respondents were significantly more likely to rate religion/spirituality as critically important or very important (67%) when compared to urban respondents (58%).

There were significant differences between white respondents and non-white respondents on the subdomains of community integration (p=.002), religion/spirituality (p=.025), and meaningful activities/social engagement (p=.039). For the subdomain of community integration, 68% of non-white respondents rated the domain as critically important or very important compared to 59% for white respondents. When looking at just the critically important ratings the difference was more significant, with 47% of non-white respondents rating the subdomain as critically important compared to just 17% of white respondents. For the subdomain of religion/spirituality, 76% of non-white respondents rated the domain as critically important or very important compared to 60% for white respondents. For the subdomain of meaningful activities/social engagement, there was almost no difference between white and non-white respondents when looking at combined ratings of very important and critically important. However, when only looking at critically important ratings there are large differences, with 47% non-white respondents rating the item as critically important compared to just 27% of white respondents.

There were no significant differences in the rating of the quality of life subdomains when analyzing the results by age.

Resident and family satisfaction subdomains

For resident and family satisfaction, a total of 11 subdomains were identified. These included care experience, cost of care, housekeeping, meal choice, physical environment, quality of staff care, respect from staff, staff competency, well-being as a result of care, whether one's choice/preference is met, and whether one's personal care needs are met.

Respondents were shown these 11 subdomains in a random order and were provided a brief description of each. They were then asked to rate each domain as either "Important" or "Not important." When rating the satisfaction subdomains as important or not important, all subdomains were rated as important by at least 92% of respondents.

Satisfaction subdomains	Important	Not important	Count
Care experience (getting timely response from staff, communication with providers)	99%	1%	646
Quality of staff care (quality of care services offered, staff turnover)	99%	1%	648
Respect from staff	99%	1%	648
Staff competency	99%	1%	649
Well-being as a result of care (physical and mental health)	99%	1%	648
Whether one's personal care needs are met	99%	1%	648
Physical environment of the assisted living community (cleanliness, accessibility, safety)	98%	2%	648
Cost of care (affordability, transparency of costs)	96%	4%	648
Whether one's choice/preference is met	96%	4%	645
Housekeeping	94%	6%	648
Meal choice (choices of meals, meal environment)	92%	8%	646

For each subdomain rated as "Important," respondents were then asked to rate the level of importance on a 4-point scale ranging from "Somewhat important" to "Critically important." The subdomains that received the highest percentage of "Very important" or "Critically important" ratings were staff competency (98%), respect from staff (97%) and care experience (97%). The subdomains with the lowest percentage of "Very important" or "Critically important" ratings were meal choice (73%) and housekeeping (74%).

Satisfaction subdomains	Somewhat important	Moderately important	Very important	Critically important	Count
Staff competency	1%	2%	22%	76%	625
Quality of staff care (quality of care services offered, staff turnover)	1%	3%	22%	74%	628
Respect from staff	0%	2%	24%	73%	626
Whether one's personal care needs are met	1%	3%	27%	69%	625
Well-being as a result of care (physical and mental health)	1%	3%	33%	63%	624

Satisfaction subdomains	Somewhat important	Moderately important	Very important	Critically important	Count
Care experience (getting timely response from staff, communication with providers)	1%	2%	36%	61%	624
Cost of care (affordability, transparency of costs)	1%	9%	46%	44%	625
Physical environment of the assisted living community (cleanliness, accessibility, safety)	2%	10%	48%	40%	625
Whether one's choice/preference is met	2%	11%	52%	35%	623
Housekeeping	4%	22%	55%	19%	625
Meal choice (choices of meals, meal environment)	4%	23%	54%	19%	624

Chi-square tests were conducted to determine if there were significant differences in satisfaction ratings based on the demographic variables collected. When looking at the satisfaction subdomain ratings by role, the subdomains of cost of care (p=.047), meal choice (p=.048), physical environment (p=.03), an staff competency (p=.025) were all found to be statistically significant, meaning there is a relationship between role and these satisfaction subdomain variables.

No significant differences were found when looking at the satisfaction subdomain ratings by gender, race, location, or age.

Open-ended items

Three open ended questions were also included in the survey:

- As a provider, how would you use this information? *(providers only)*
- Were there any surprises or gaps in these topics that we did not mention?
- Do you have any other comments/feedback for us?

Responses from these open-ended questions were coded based on the occurrence of primary themes discussed in the comment.

For the question “As a provider, how would you use this information?” we received 56 written responses. The most common responses were that providers will use this information to “improve/enhance services, offerings, and outcomes” (39%). This was followed by “staff-related comments” (20%), which primarily focused on training, education, and hiring of staff. The next two most frequent themes were provider concerns pertaining to the report card development (13%) and using the information to help understand what is important to consumers and sharing results with them (13%).

Code	Percent	Count
To improve/enhance services/offerings and outcomes	39.3%	22
Staff-related comments	19.6%	11
Provider concerns with how report card was developed, ratings are subjective, etc.	12.5%	7

Code	Percent	Count
To help understand what is import to consumers (residents, family), share results with them	12.5%	7
Provider-Not sure how will use	5.4%	3
To compare to other facilities/providers	5.4%	3
Hold AL responsible for what they advertise	3.6%	2
Unsure how to code	1.8%	1
Total:	100%	56

For the question "Were there any surprises or gaps in these topics that we did not mention?" we received 289 written responses. The most common responses were that respondents stating there were no gaps or that they didn't know of any gaps in the topics (39%), this was followed by "staff-related comments" (9%), which primarily focused on staff quality, turnover, and shortages.

The next most prevalent themes were complaints/concerns with survey or report card development (4%), culturally sensitive care (3%), affordability/costs of care (3%), accountability of the facility (3%), resident choice/autonomy (3%), elderly waiver on Medical assistance and private vs. public payments (3%), and financial transparency (2%).

Although these were responses to a question about gaps and surprises regarding the topical domains used in the survey, for most responses it was unclear if the respondent was referencing a gap or a surprise. The majority of the themes developed from coding this question are topics that were already included within the survey as domains of quality for assisted living communities. The notable exceptions being the elderly waiver discussions about private vs. public assisted living payments and providing culturally sensitive care. These topics were not properly captured by the original quality domains and subdomains.

Code	Percent	Count
No/I don't know/NA/No comment	39.1%	113
Staff (shortages, staffing ratios, more RNs needed, better care standards from staff). Include comments about more training for aging and lack of training standards	9.0%	26
Complaint or concern with survey orreport card development	4.2%	12
All important, hard to prioritize	4.2%	12
Culturally sensitive care	3.5%	10
Affordability, costs of care	3.1%	9
Accountability of the facility	3.1%	9
Resident choice/autonomy	2.8%	8
Elderly Waiver or Medical Assistance (MA), private vs. public pay	2.8%	8

Code	Percent	Count
Financial Transparency, transparency of costs for services in AL facility	2.4%	7
Venting about assisted living or want to tell story about AL care	2.1%	6
Resident characteristics taken into account	2.1%	6
Facility communication with family members	1.7%	5
Care for dying/palliative care/ hospice care	1.7%	5
Transportation	1.4%	4
Activities for AL residents (in or out of facility)	1.4%	4
Safety and Security	1.4%	4
Dementia/Alz./memory care	1.0%	3
Responsiveness to concerns	1.0%	3
Patient bill of rights/ how to file a complaint	1.0%	3
Services offered by the AL facility	1.0%	3
Rural or urban facilities	1.0%	3
Size of facility	1.0%	3
Advocacy services for AL residents	0.7%	2
Report findings of inspections, investigations	0.7%	2
Food	0.7%	2
Allow for open comments	0.7%	2
Facility communication/coordination with others	0.7%	2
Resources for finding how to pay prior to moving in	0.7%	2
Suggestions for improvement	0.7%	2
Other services (social services, mental health)	0.7%	2
Person-centered care	0.7%	2
Medication	0.3%	1
How are agency staff used/rated -feel safe with them?	0.3%	1
Aging in place	0.3%	1
Facility communication/coordination with others	0.3%	1
Want to know ownership type (non-profit, for profit)	0.3%	1
Total:	100%	289

For the question “Do you have any other comments/feedback for us?” we received 296 written responses. A large portion of responses were from respondents stating they did not have any other comments (16%). The most common theme was about staffing (16%). Like with the previous open-ended items, staffing comments tended to focus on staff quality, training, turnover, and shortages. Other common themes included encouraging comments about the need for an Assisted Living Report Card (15%), comments about the survey specifically (8%), personal stories about specific facilities (4%), comments about how the report card and survey results should look (4%), comments about safety (4%), and comments regarding laws and regulations for assisted living communities (3%).

Code	Percent	Count
Staffing	15.9%	47
No/I don't know/NA/No comments	15.9%	47
Encouraging comments/ need for this/ everything is important	15.2%	45
Survey comments	7.8%	23
Story about particular facility	4.1%	12
How report should look/ when conducted (AL report card)	3.7%	11
Safety	3.7%	11
Laws/ regulations for AL	3.4%	10
Resident choice, resident rights	2.7%	8
Affordability/cost concerns/financial transparency	2.7%	8
Accountability of facility	2.7%	8
Levels of care	2.4%	7
Facility involving family and Family involvement	2.4%	7
Elderly Waiver, medical assistance programs	2.0%	6
Providers concerns/ concerns taken into account	2.0%	6
Family advocacy or advocacy for AL residents	1.4%	4
Look at foster care other living <55 yr old, comments about group homes	1.4%	4
Rural vs. Urban AL facilities	1.4%	4
Venting/complaints	1.0%	3
End of life care, hospice	1.0%	3
Memory care/dementia care	1.0%	3
Coordination between facility and agencies	1.0%	3
Diversity/ Culturally sensitive care	1.0%	3
Services in lower income facilities	0.7%	2
Not applicable	0.7%	2
Ownership of AL facility	0.7%	2
mental illness	0.3%	1
other facility comments	0.3%	1
Transportation	0.3%	1
Activities for residents	0.3%	1
Unsure how to code	0.3%	1
Higher levels of care needed for AL residents	0.3%	1
Food	0.3%	1
Total:	100%	296

Appendix F: Detailed resident focus group results

Appendix F1: Summary of rural and urban focus group findings

Rural focus groups

The first rural focus group was conducted in a larger AL community, located in a 3rd class city, on October 17, 2019.[22] Eight assisted living residents participated; all were Caucasian (as were all AL residents at this site); half were male and half were female; 62.5% were 81 years of age or older, 12.5% were between 71 and 80 years of age, and 25% were between 61 and 70 years of age; 62.5% exhibited a moderate level of activity and engagement and 37.5% exhibited a high level of activity and engagement.

For rural focus group 1, the main themes focused on staff quality, staff communication with residents, and the availability of services in the AL. Many residents noted how staff turnover or lack of staffing adversely impacted their care and quality of life. In terms of availability of services, residents felt that even if they didn't need a service at this particular time, it was helpful to have it available in case they need it in the future ("otherwise if not having the services one needs, why not receive care at home", as one of the residents said).

The second rural focus group was conducted in a medium-sized AL community, in a rural Central Minnesota town on October 24, 2019. Nine assisted living residents participated; all were Caucasian (reflective of the resident racial/ethnic composition at this site); 33.3% were male and 66.7% were female; 22.2% were 81 years of age or older and 77.8% were between 71 and 80 years of age; 55.5% exhibited a moderate level of activity and engagement and 44.4% exhibited a high level of activity and engagement.

For rural focus group 2, the main themes included quality of life, family and resident satisfaction, and availability of services. The social and physical environment of the community were also named as important aspects of quality of life. The importance of the physical location of the AL building was also expressed. One resident noted that one of the main reasons they selected this particular AL community was due to the proximity to their physician, church, and family members.

In conclusion, although there were some differences across groups, main similarities related to the importance of quality of life, importance of staff communication and quality, availability of

[22] Classification of Cities, MN House Research, November 2019: https://www.house.leg.state.mn.us/hrd/pubs/cityclass.pdf (Accessed December 2019)

services, and the physical and social environments of their respective assisted living communities.

Urban focus groups

The first urban focus group was conducted in a larger AL community, located in a 1st class city, on November 5, 2019.[23] The second urban focus group was conducted in a smaller AL community compared to the first urban group and was located in a 2nd class city, on November 12th, 2019. One of the two urban focus groups consisted of all Caucasian participants (11), of which 6 were women and 5 were men. The other urban focus group included 3 African American women, 1 Caucasian woman and 6 Caucasian men for a total of 10 participants. 29% of all urban focus group participants were 61-70 years of age, 52% were 71-80 years of age and, 19% were 81 years or older. 43% of the urban group participants were identified as people who typically have a high level of engagement and activity involvement, while 57% were in the low to moderate activity and level of engagement category.

For urban focus group 1, the main themes focused on staff quality and training, and quality of life and satisfaction related items including: staff attitudes towards residents, staff communication with residents, and dignity and respect. Safety, social environment, and transportation were also prevalent themes. Similar to the first rural focus group, residents also noted how staff turnover or lack of staffing adversely impacted their care and quality of life. On the importance of being treated with dignity and respect, one resident said, "*Mine was important with dignity and respect because that's important to me. If I'm not treated well by the staff, I'm going to be mad...."* For social environment, a resident said, *"Every morning I run a trivia group and I have fun doing that. But that isn't staff run, it's run by me. And I see all those things as being pretty important."* She discussed how meaningful activities relate to quality in AL settings and others agreed.

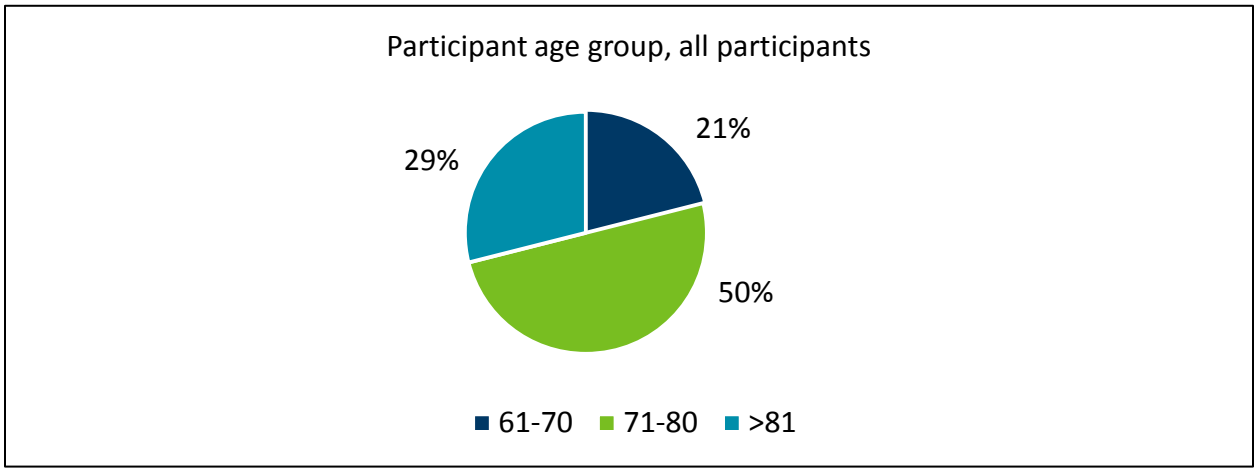
For urban focus group 2, the main themes included availability of services, social environment, and quality of life items, including relationships with other members of the assisted living community, connection with family and friends, and financial transparency. Satisfaction subtopics they focused on included food, choice and preferences, cost and staff competency/quality. Most residents expressed the importance of checking in on each other and forming good relationships with other residents and one resident explained *"Because we consider ourselves a family."* On financial transparency and cost, one resident shared that it is very important to understand how much services cost, what their options are so they can plan

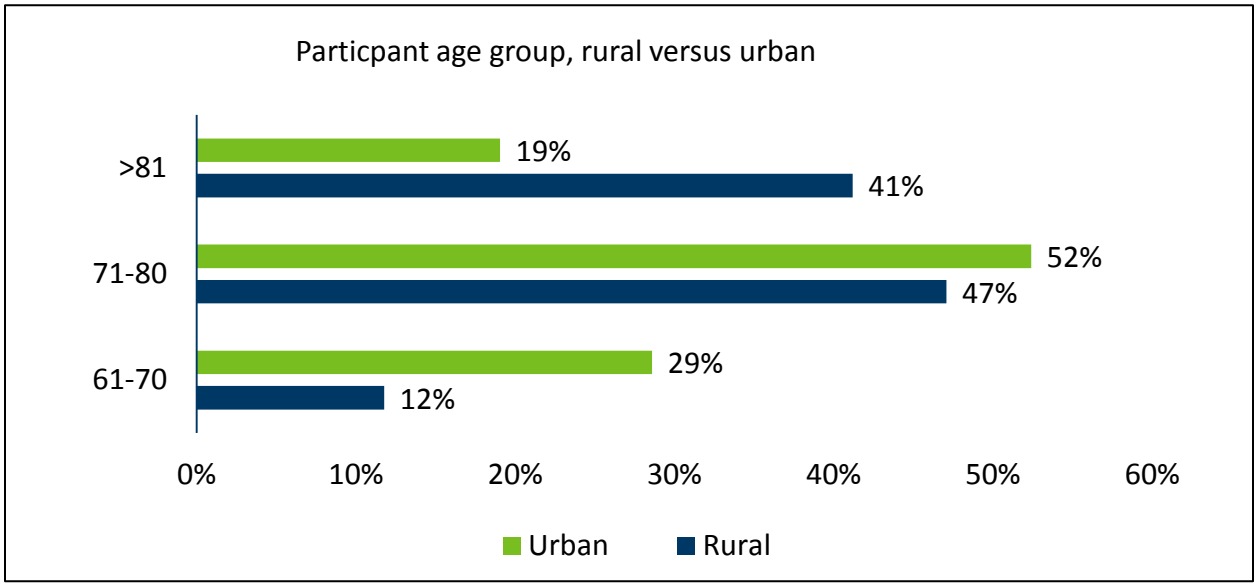
[23] Classification of Cities, MN House Research, November 2019: https://www.house.leg.state.mn.us/hrd/pubs/cityclass.pdf (Accessed December 2019)

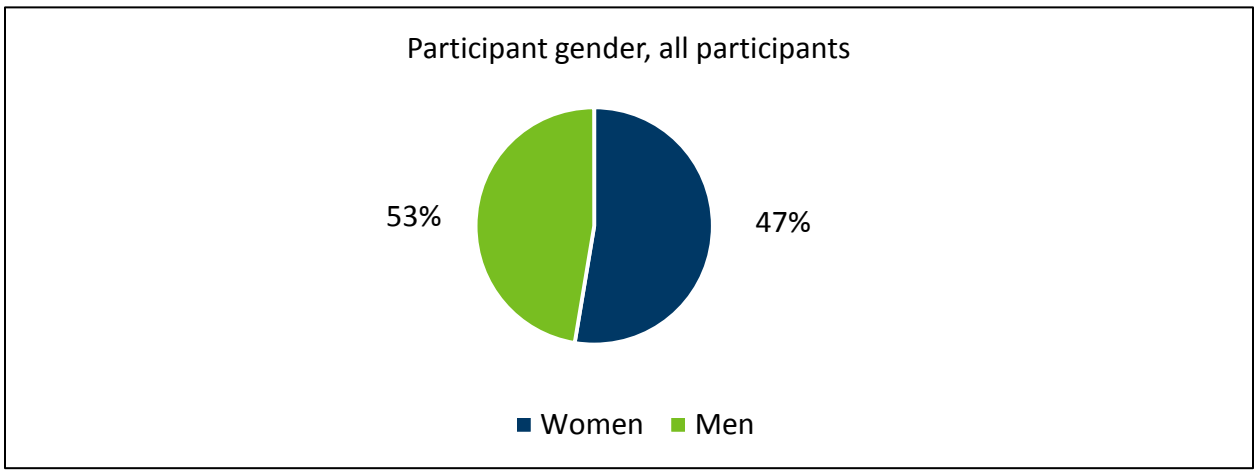
accordingly. The resident said "*The cost. Excuse me. I went to two other places, plus this one. This is the only one where they laid the costs out, item for item, before you even made a decision. I liked that."* Others nodded in agreement

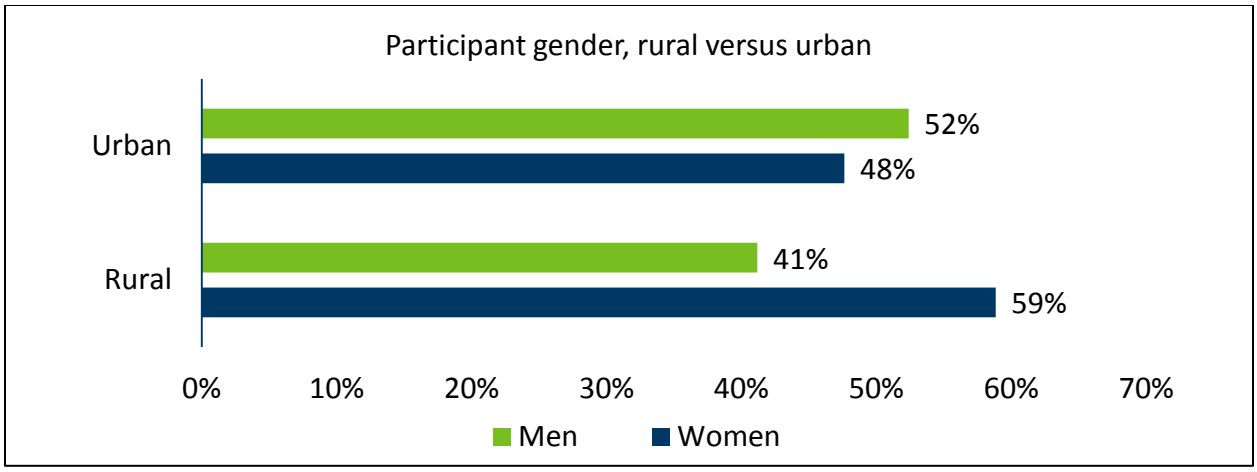
In conclusion, there were differences between both urban groups. The main similarities related to quality of life, safety, and physical and social environments. Both urban focus groups highlighted the importance of staff quality and safety. Lastly, both urban focus groups, especially the second group, acknowledged that family members and residents may not always agree on what's important for a resident's quality of life.

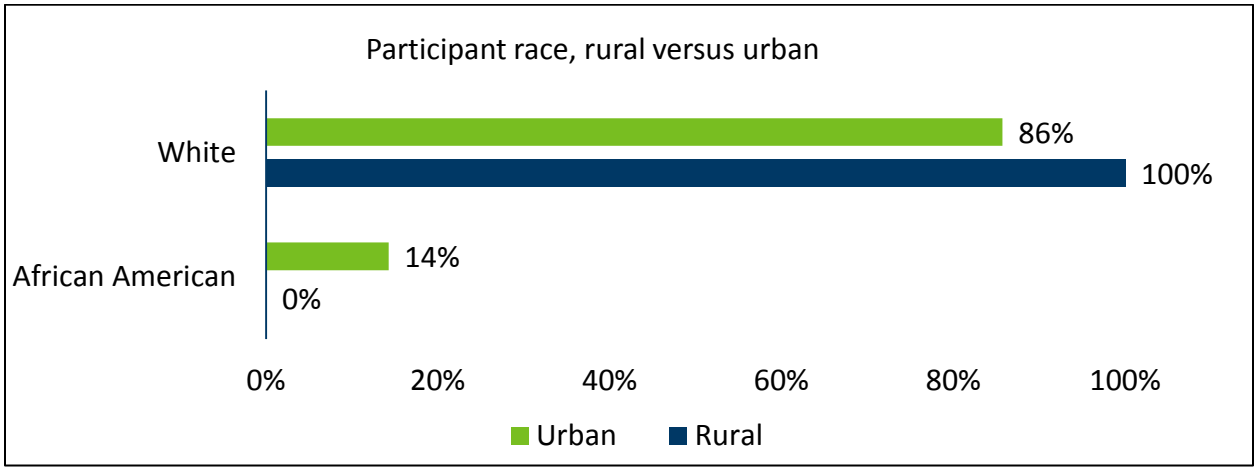
Appendix F2: Resident focus group paticipant characteristics

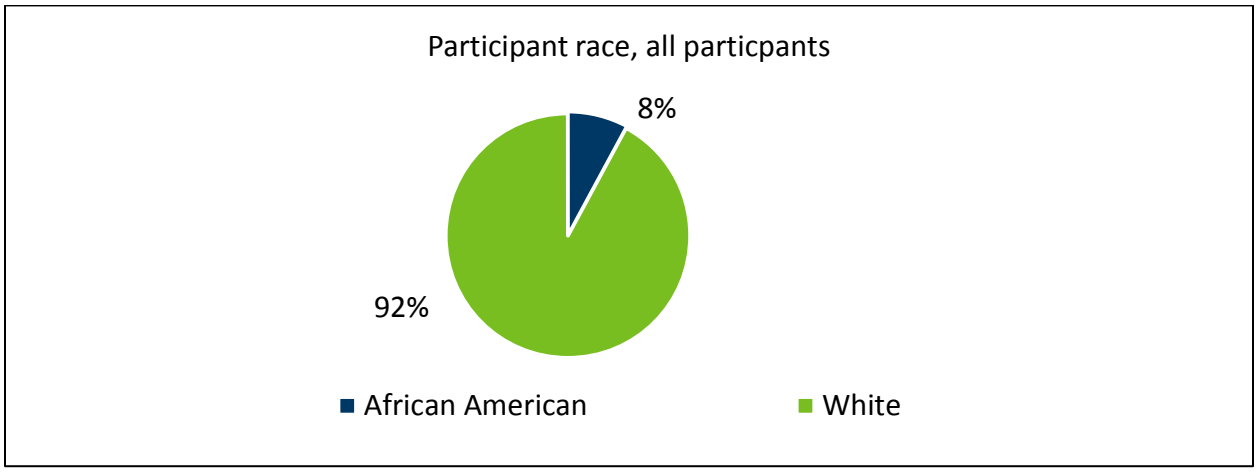


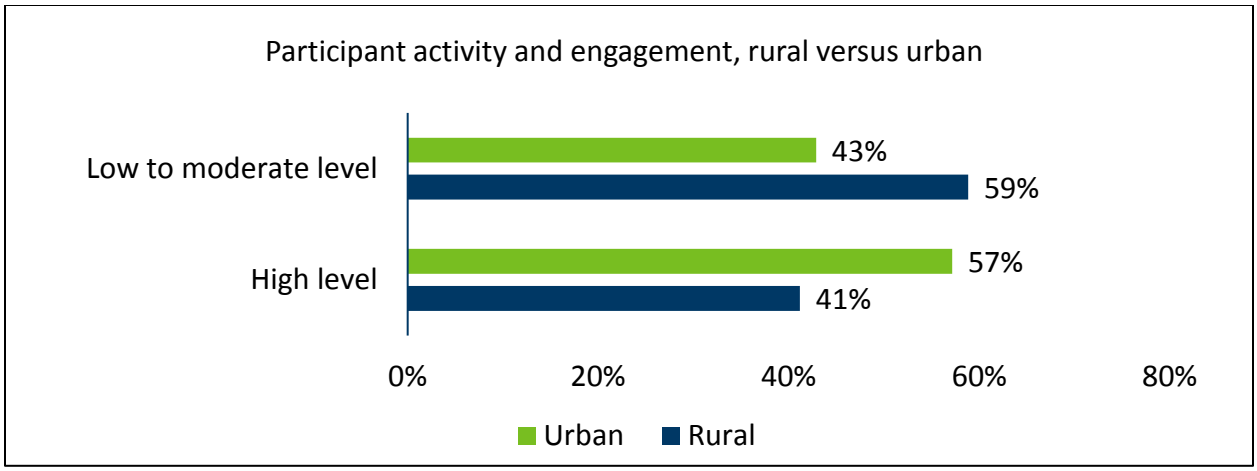


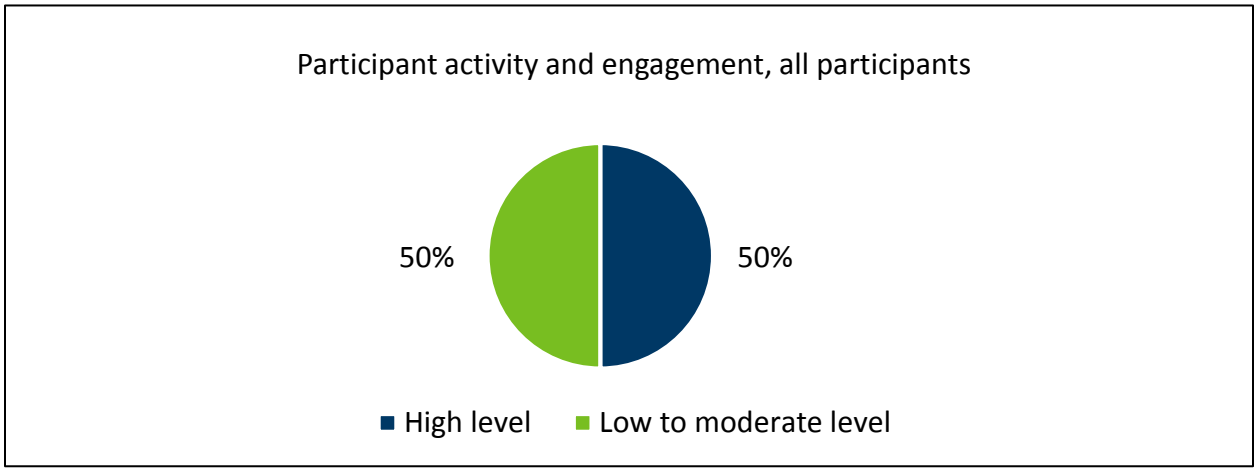



Participant gender, rural versus urban
Urban
Rural
52%
48%
41%
59%
0%
10%
20%
30%
40%
50%
60%
70%
Men
Women

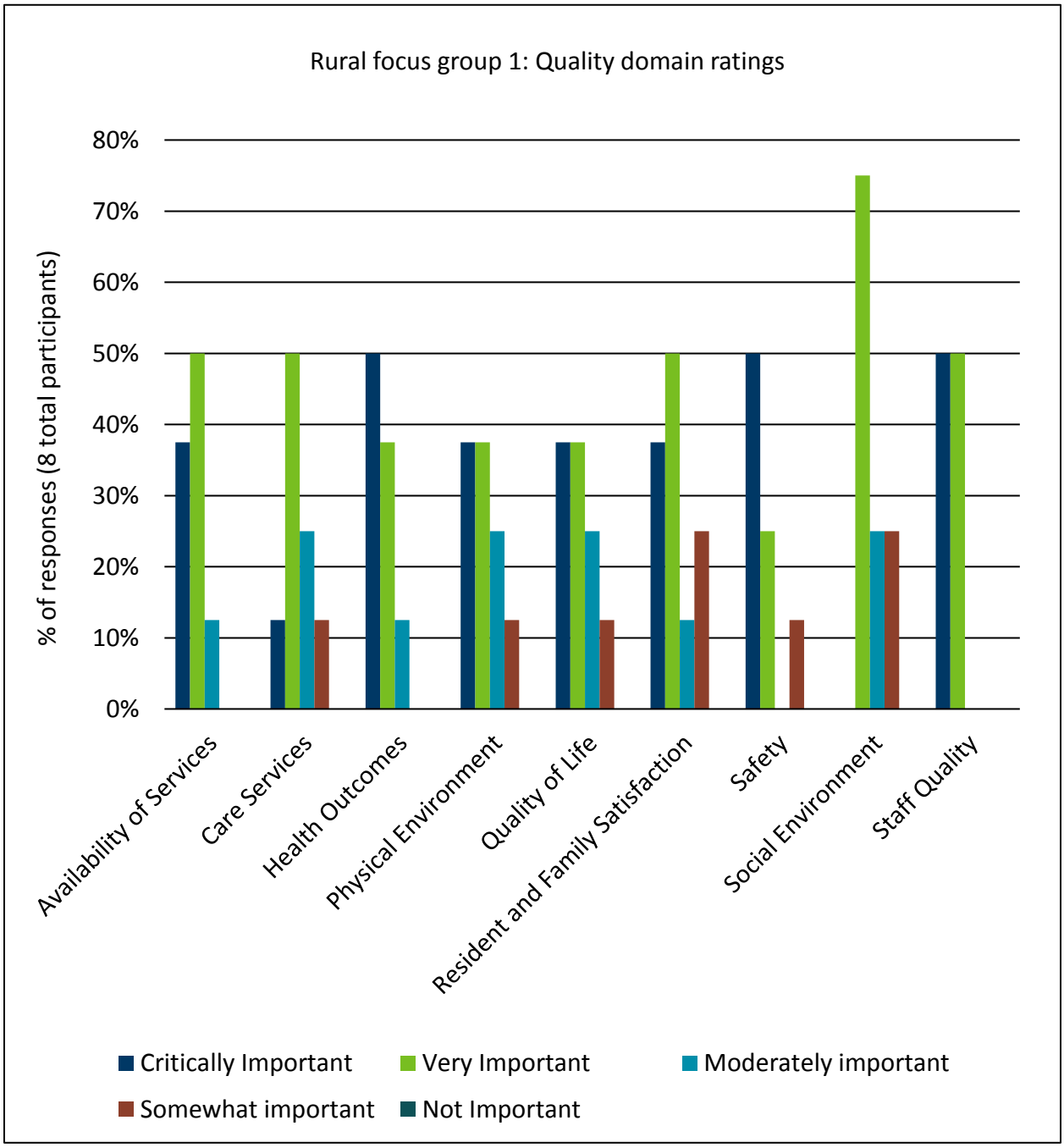

Participant race, rural versus urban
White
African American
86%
100%
14%
0%
0%
20%
40%
60%
80%
100%
Urban
Rural

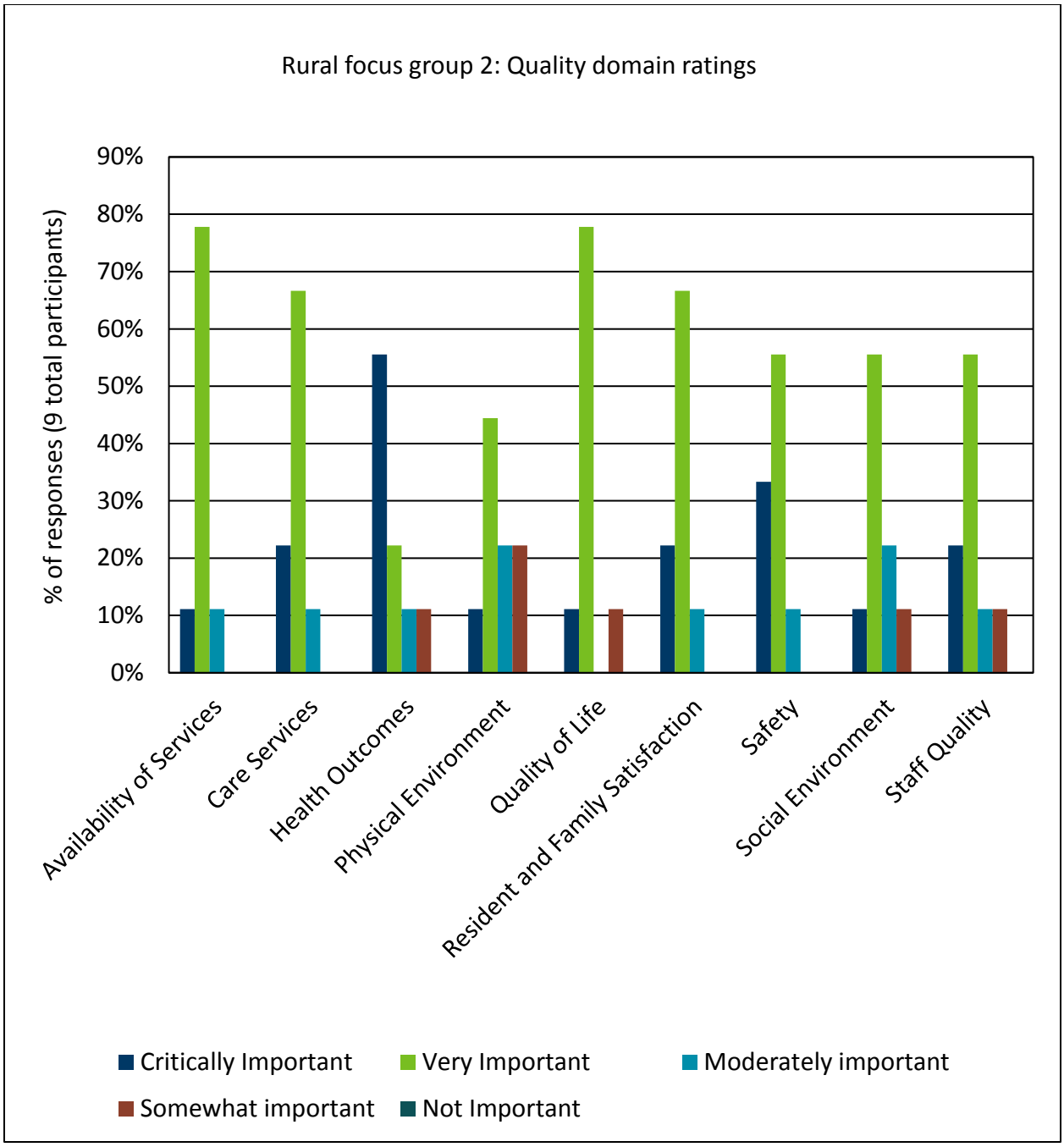

Participant race, all particpants
8%
92%
African American
White

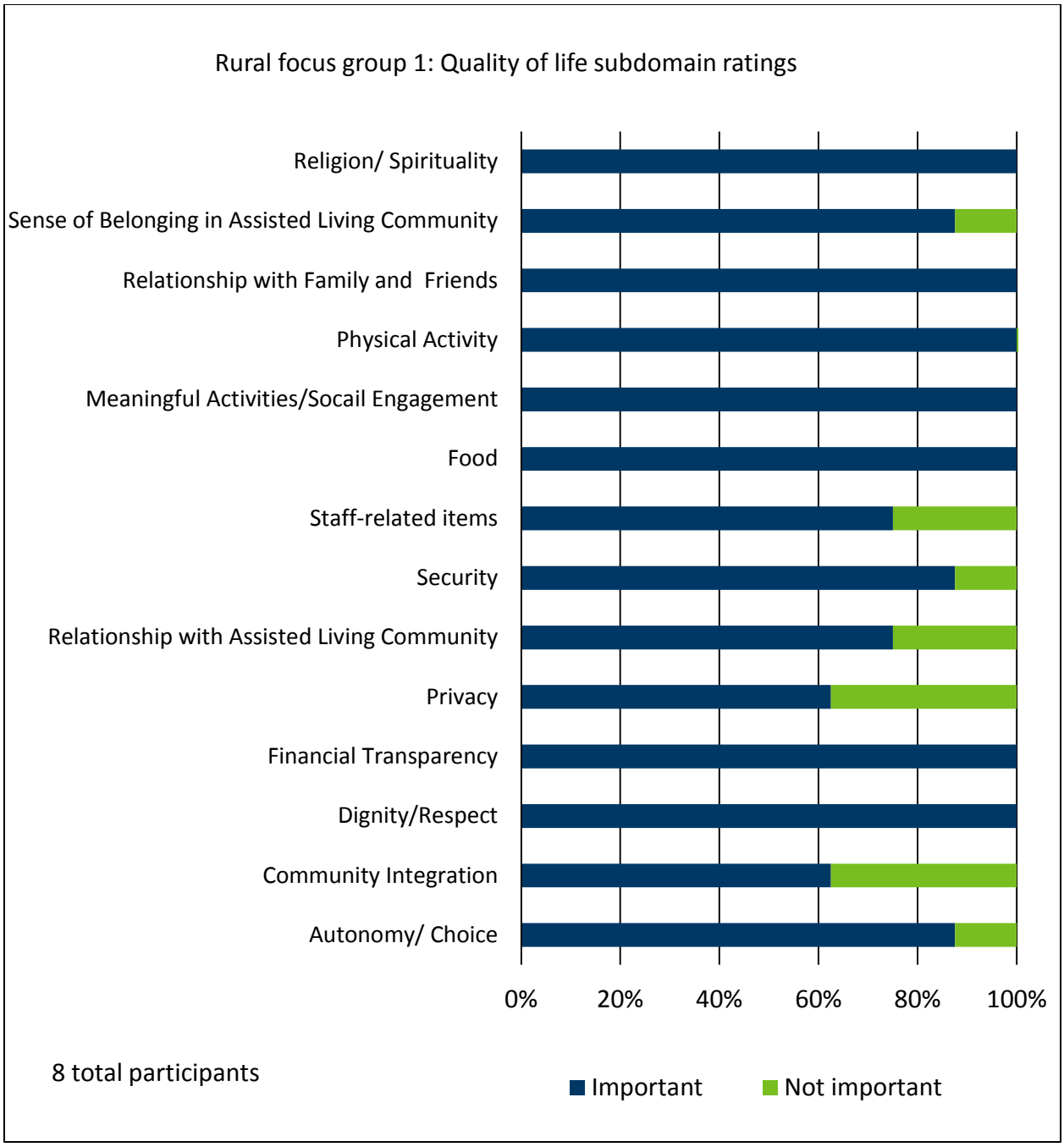

Participant activity and engagement, rural versus urban
Low to moderate level
High level
43%
59%
57%
41%
0%
20%
40%
60%
80%
Urban
Rural

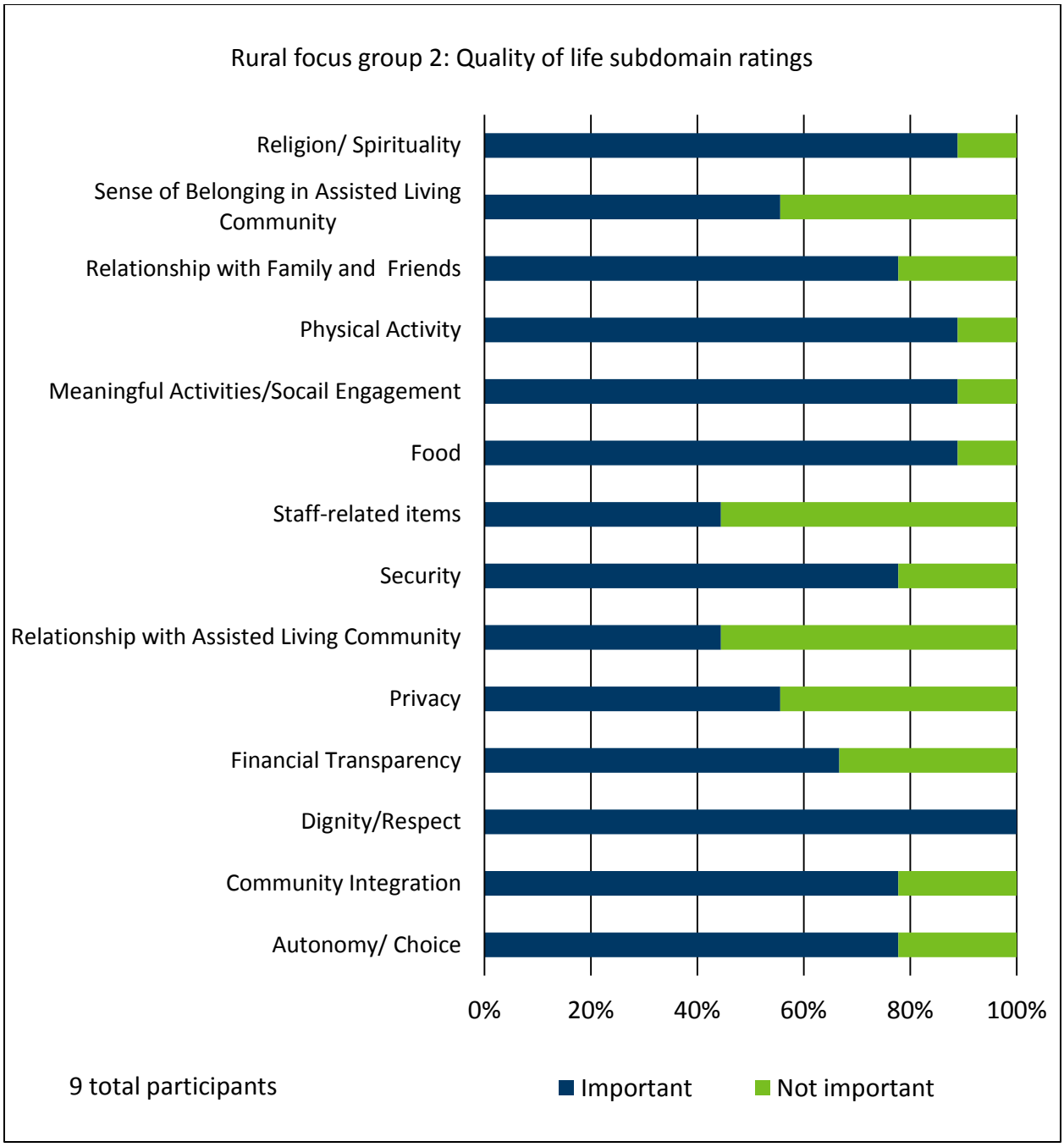

Participant activity and engagement, all participants
50%
50%
High level
Low to moderate level

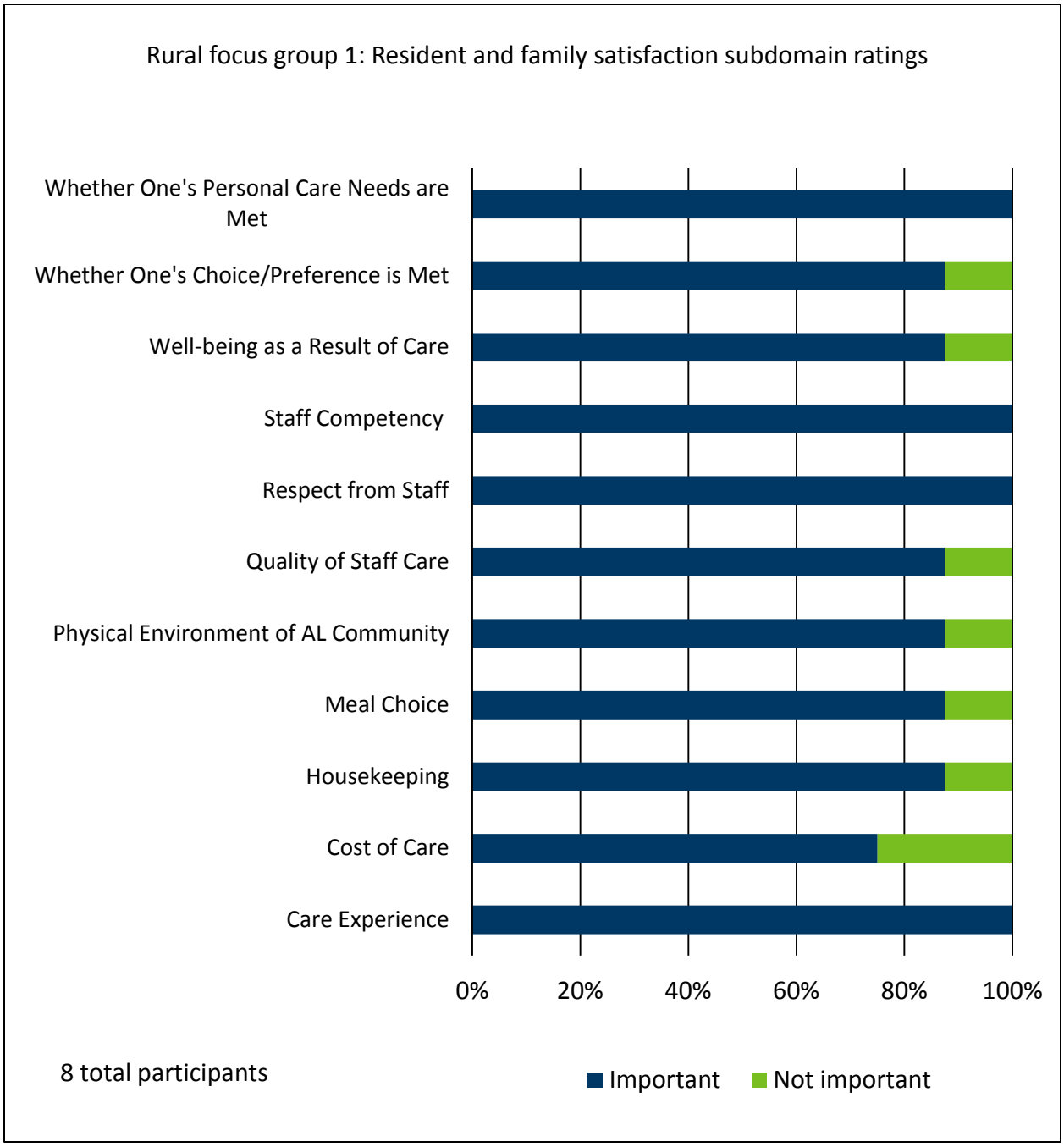
Appendix F3: Rural focus group worksheet responses

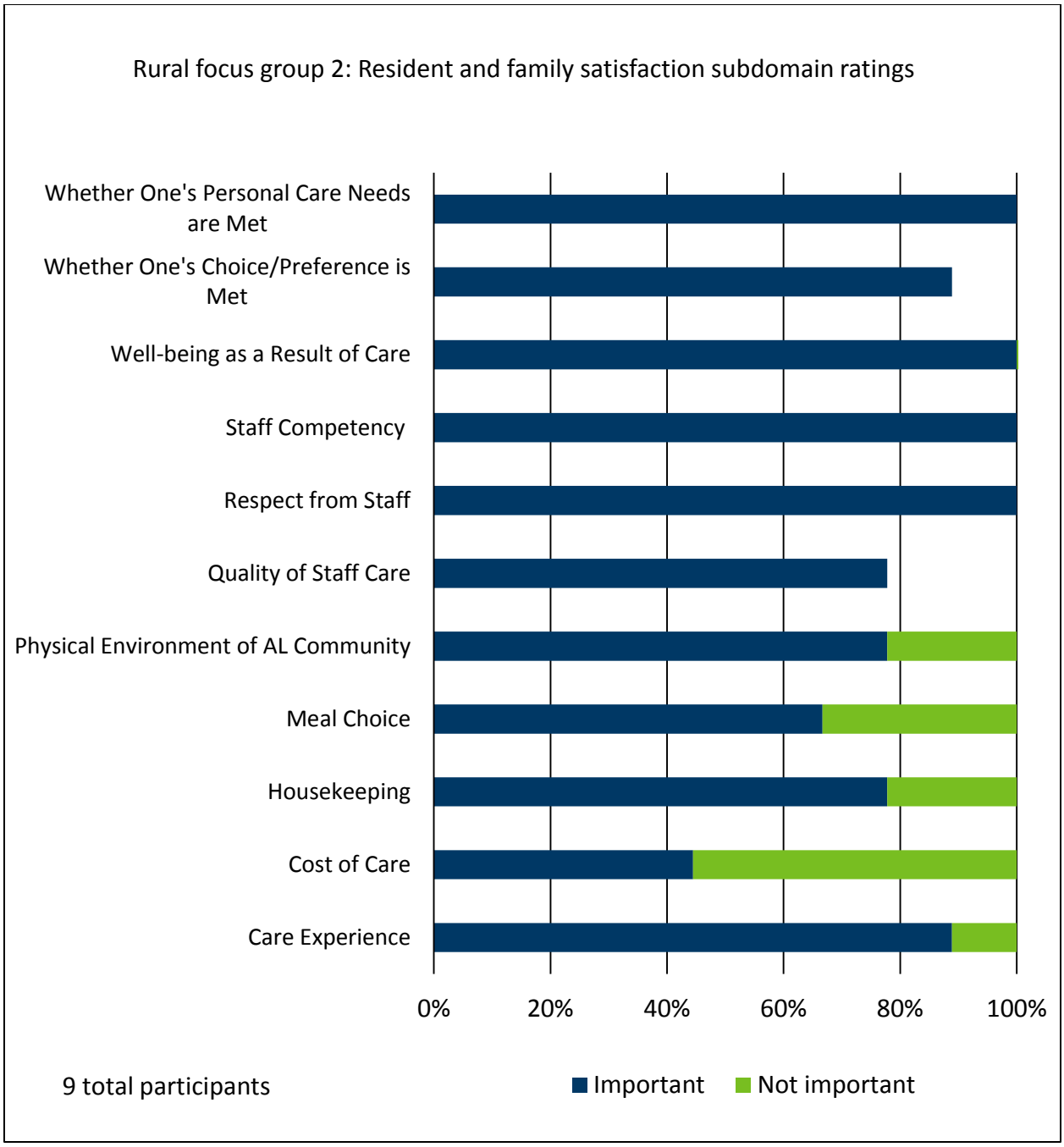



Rural focus group 2: Quality domain ratings
% of responses (9 total participants)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Availability of Services
Care Services
Health Outcomes
Physical Environment
Quality of Life
Resident and Family Satisfaction
Safety
Social Environment
Staff Quality
Critically Important
Very Important
Moderately important
Somewhat important
Not Important

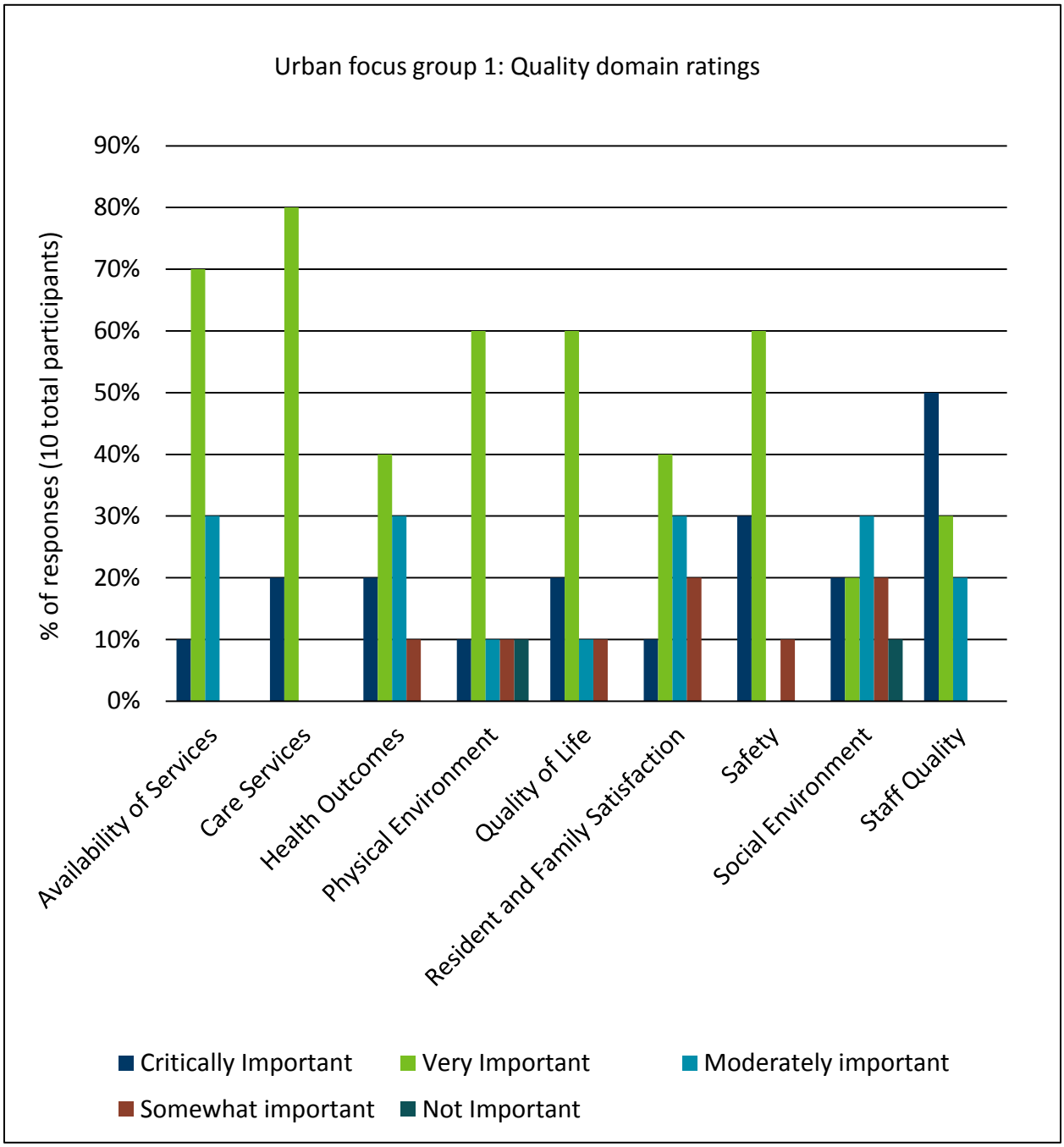

Rural focus group 1: Quality of life subdomain ratings
Religion/ Spirituality
Sense of Belonging in Assisted Living Community
Relationship with Family and Friends
Physical Activity
Meaningful Activities/Socail Engagement
Food
Staff-related items
Security
Relationship with Assisted Living Community
Privacy
Financial Transparency
Dignity/Respect
Community Integration
Autonomy/ Choice
0%
20%
40%
60%
80%
100%
8 total participants
Important
Not important

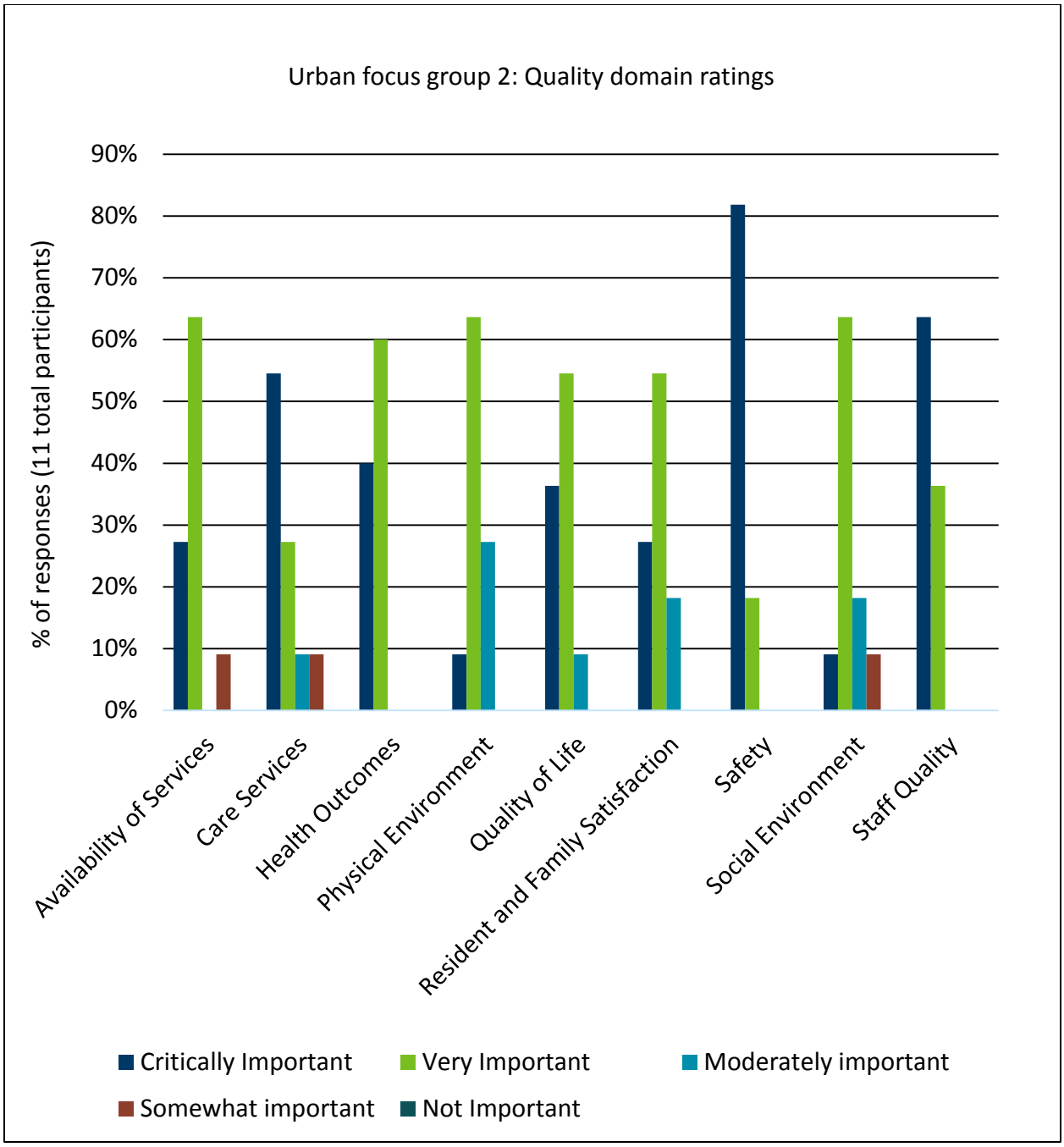

Rural focus group 2: Quality of life subdomain ratings
Religion/ Spirituality
Sense of Belonging in Assisted Living Community
Relationship with Family and Friends
Physical Activity
Meaningful Activities/Socail Engagement
Food
Staff-related items
Security
Relationship with Assisted Living Community
Privacy
Financial Transparency
Dignity/Respect
Community Integration
Autonomy/ Choice
0%
20%
40%
60%
80%
100%
9 total participants
Important
Not important

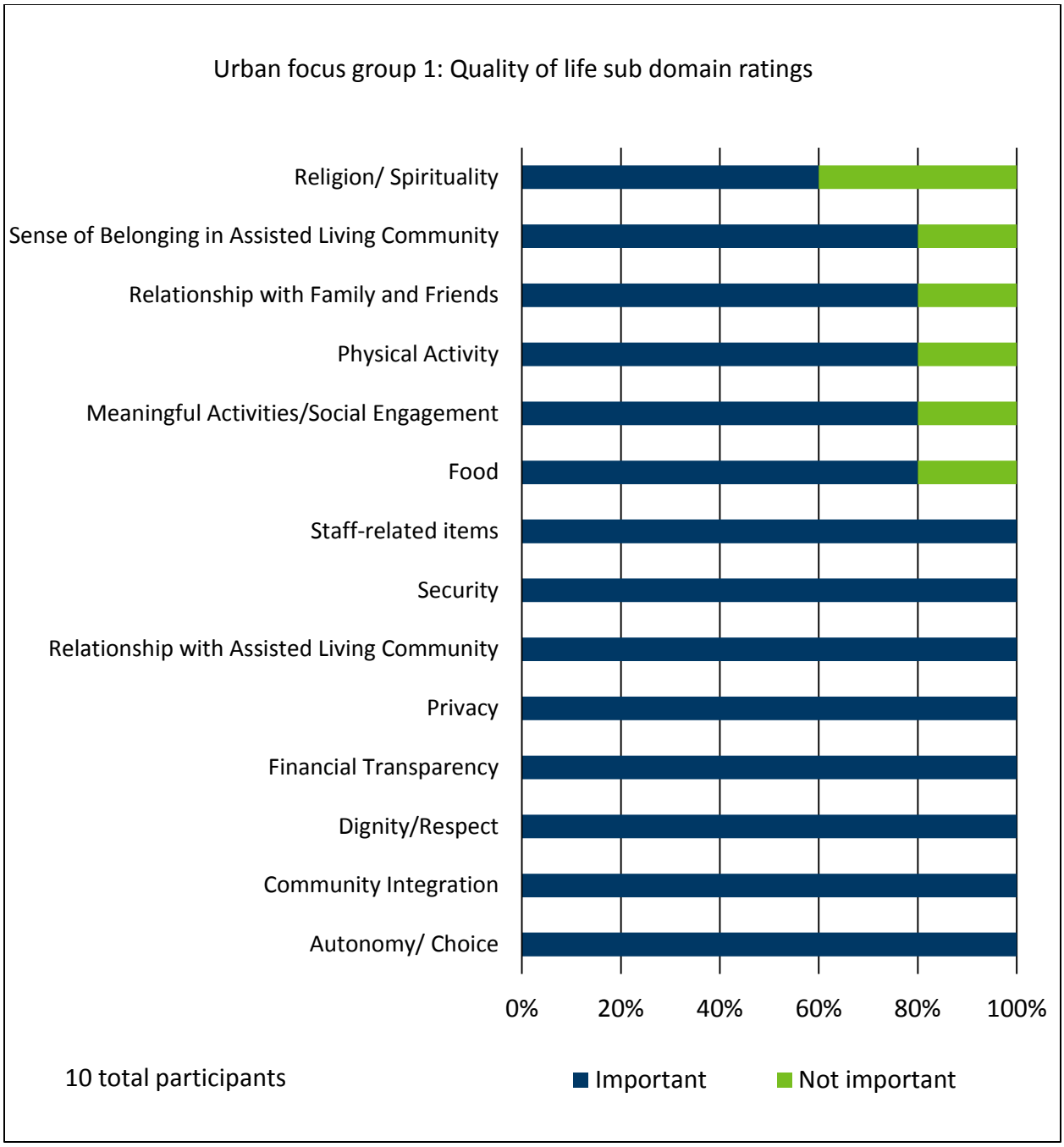

Rural focus group 1: Resident and family satisfaction subdomain ratings
Whether One's Personal Care Needs are Met
Whether One's Choice/Preference is Met
Well-being as a Result of Care
Staff Competency
Respect from Staff
Quality of Staff Care
Physical Environment of AL Community
Meal Choice
Housekeeping
Cost of Care
Care Experience
0%
20%
40%
60%
80%
100%
8 total participants
Important
Not important

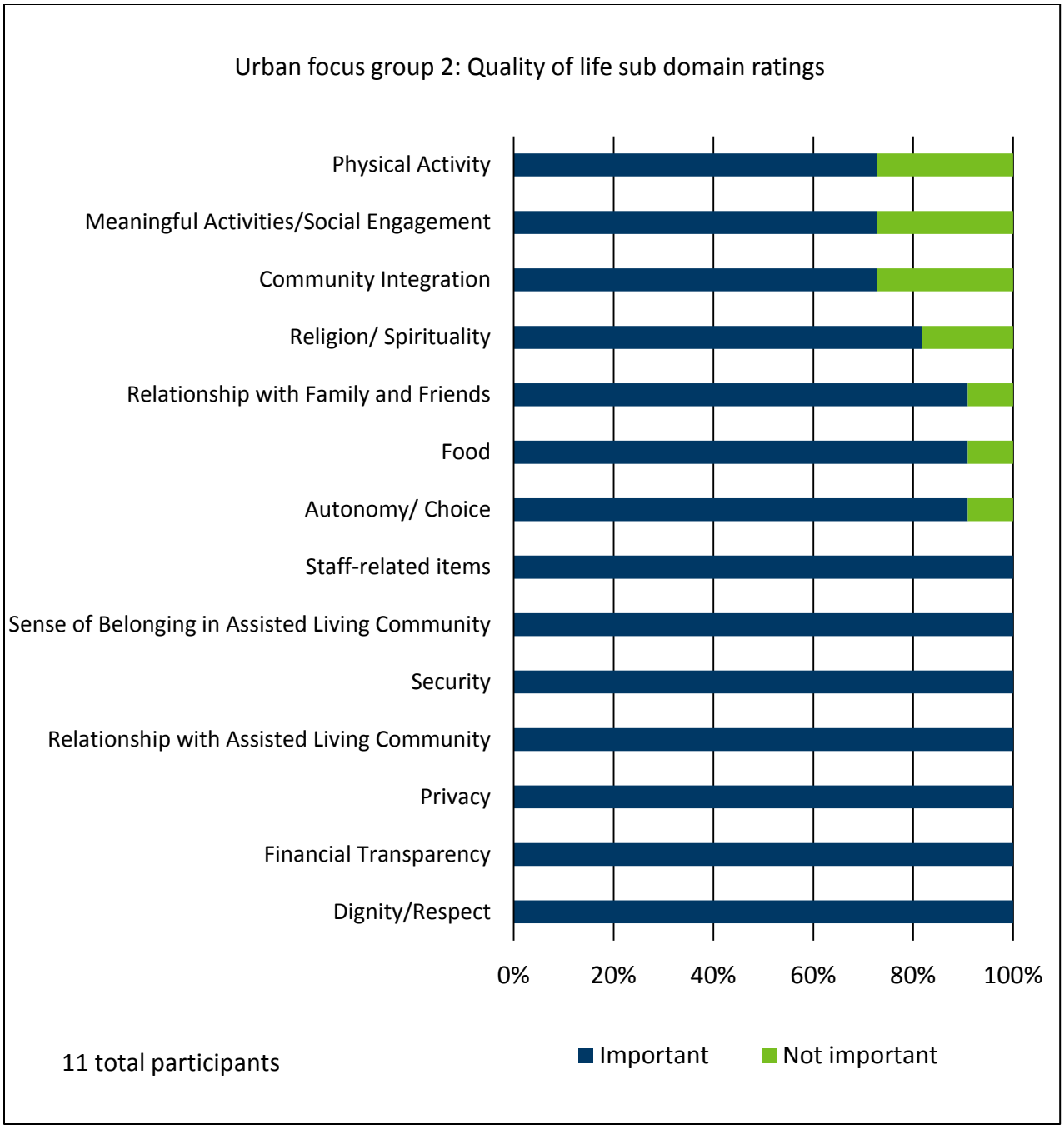

Rural focus group 2: Resident and family satisfaction subdomain ratings
Whether One's Personal Care Needs are Met
Whether One's Choice/Preference is Met
Well-being as a Result of Care
Staff Competency
Respect from Staff
Quality of Staff Care
Physical Environment of AL Community
Meal Choice
Housekeeping
Cost of Care
Care Experience
0%
20%
40%
60%
80%
100%
9 total participants
Important
Not important

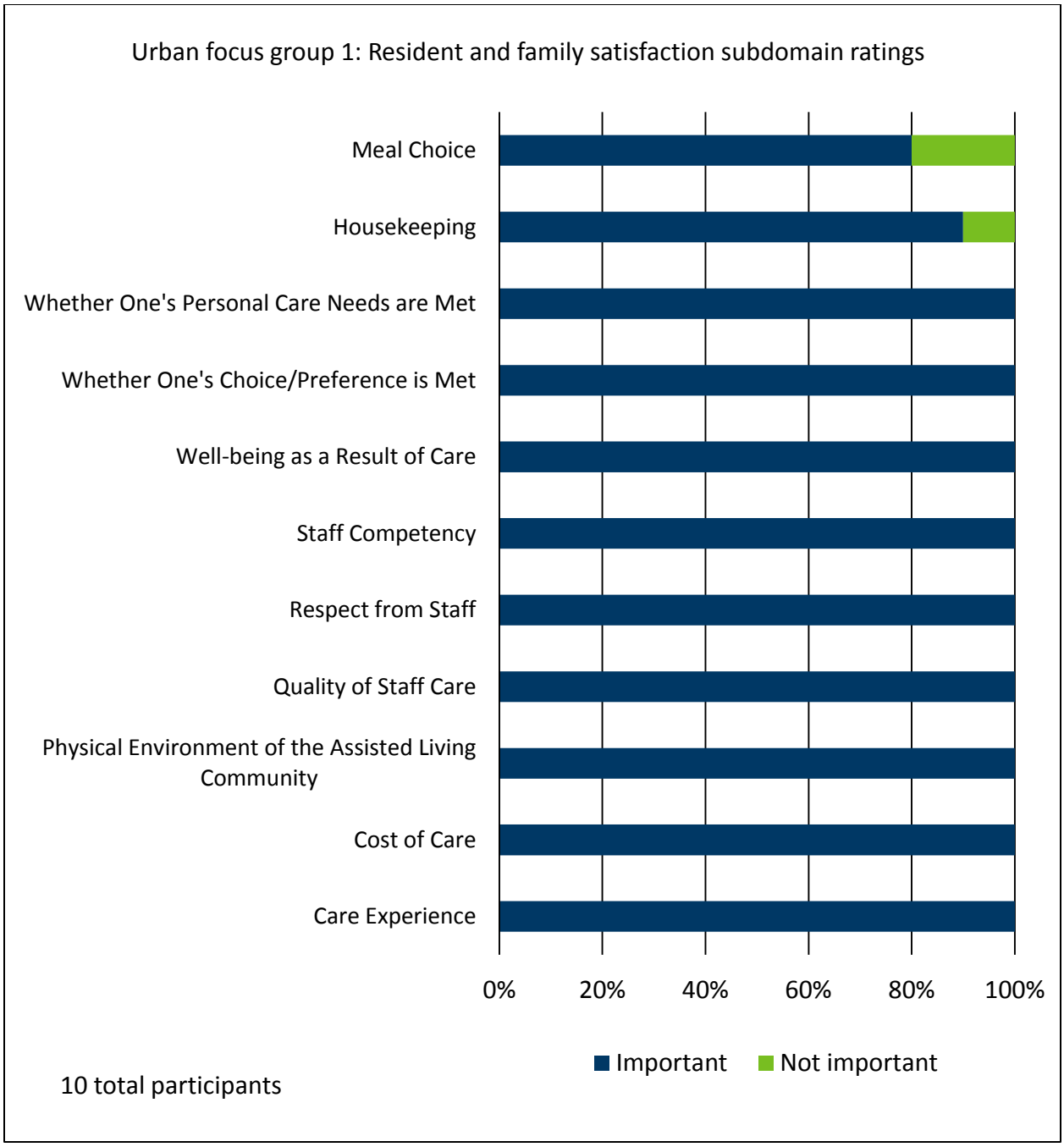
Appendix F5: Urban focus group worksheet reponses

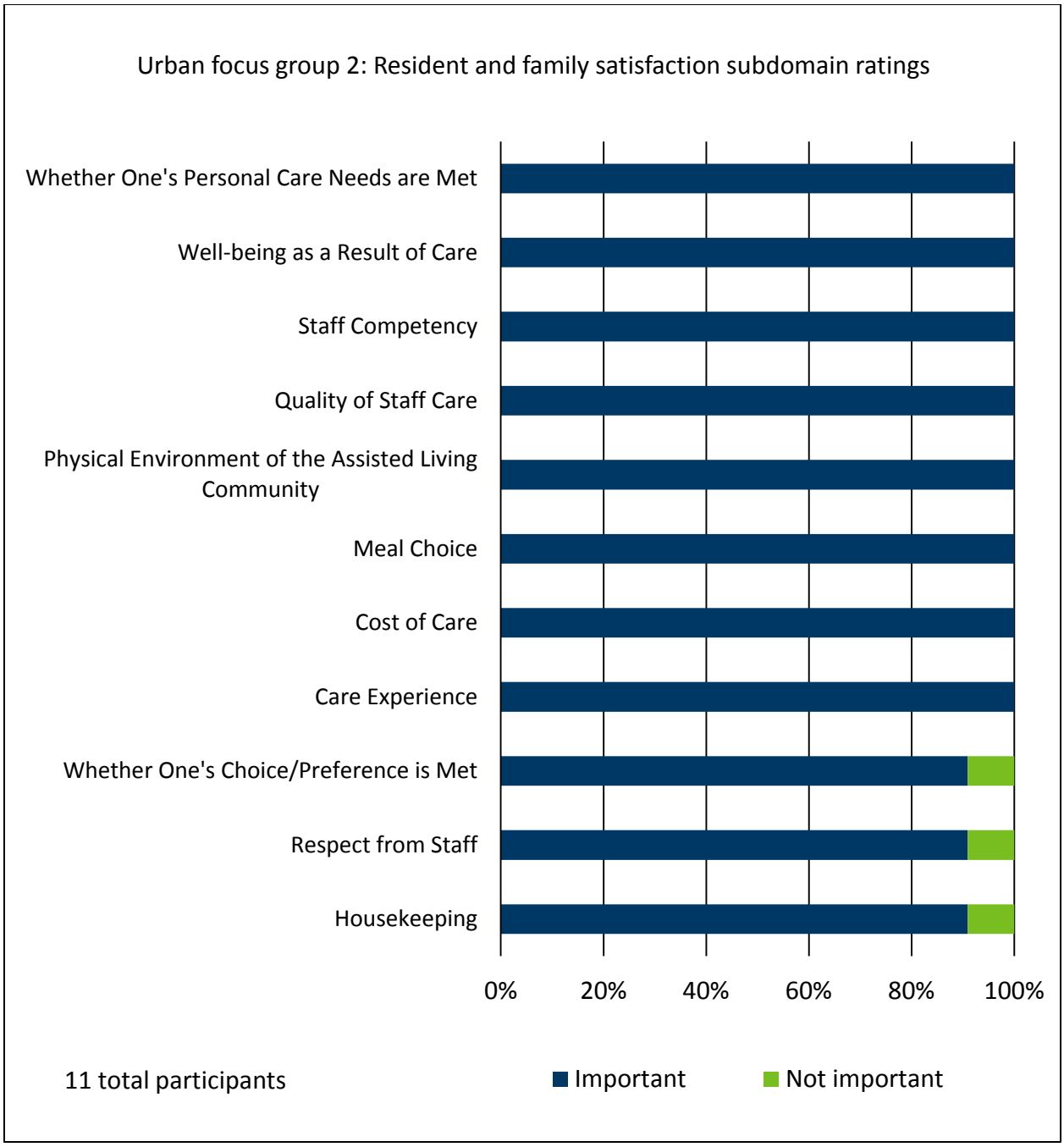



Urban focus group 2: Quality domain ratings
% of responses (11 total participants)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Availability of Services
Care Services
Health Outcomes
Physical Environment
Quality of Life
Resident and Family Satisfaction
Safety
Social Environment
Staff Quality
Critically Important
Very Important
Moderately important
Somewhat important
Not Important


Urban focus group 1: Quality of life sub domain ratings
Religion/ Spirituality
Sense of Belonging in Assisted Living Community
Relationship with Family and Friends
Physical Activity
Meaningful Activities/Social Engagement
Food
Staff-related items
Security
Relationship with Assisted Living Community
Privacy
Financial Transparency
Dignity/Respect
Community Integration
Autonomy/ Choice
0%
20%
40%
60%
80%
100%
10 total participants
Important
Not important


Urban focus group 2: Quality of life sub domain ratings
Physical Activity
Meaningful Activities/Social Engagement
Community Integration
Religion/ Spirituality
Relationship with Family and Friends
Food
Autonomy/ Choice
Staff-related items
Sense of Belonging in Assisted Living Community
Security
Relationship with Assisted Living Community
Privacy
Financial Transparency
Dignity/Respect
0%
20%
40%
60%
80%
100%
11 total participants
Important
Not important


Urban focus group 1: Resident and family satisfaction subdomain ratings
Meal Choice
Housekeeping
Whether One's Personal Care Needs are Met
Whether One's Choice/Preference is Met
Well-being as a Result of Care
Staff Competency
Respect from Staff
Quality of Staff Care
Physical Environment of the Assisted Living Community
Cost of Care
Care Experience
0%
20%
40%
60%
80%
100%
Important
Not important
10 total participants


Urban focus group 2: Resident and family satisfaction subdomain ratings
Whether One's Personal Care Needs are Met
Well-being as a Result of Care
Staff Competency
Quality of Staff Care
Physical Environment of the Assisted Living Community
Meal Choice
Cost of Care
Care Experience
Whether One's Choice/Preference is Met
Respect from Staff
Housekeeping
0%
20%
40%
60%
80%
100%
11 total participants
Important
Not important

Appendix F6: Rural and urban combined