Long Term Care
Family Experience Survey

November 2011

Promoting and improving patient safety and health service quality across Alberta.

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1. EXECUTIVE SUMMARY

1.1. Overview

Surveys are an integral part of the Health Quality Council of Alberta's (HQCA) legislated mandate to measure, monitor and report to Albertans about their experience and satisfaction with the quality of health services they receive. In 2007/2008, the HQCA conducted resident and family experience surveys in 173 long term care facilities across the province. These were the first long term care experience surveys conducted at the provincial level.

In addition the HQCA, long term care providers, health care professionals and policymakers recognize that family and resident experience is a key measure of quality and an important aspect of providing and improving care and services for long term care residents.

In 2010/2011, the HQCA repeated the family experience survey in 157 long term care facilities across the province. Note: while a resident survey was conducted in 2007 in addition to the family survey, less than 30% of residents were capable of completing the survey. For this reason, the resident survey was not completed in 2010/2011 and HQCA is examining alternative methods of collecting resident feedback.

The 2010/2011 survey sought to:

- Identify areas of excellence and opportunities for improvement in the long term care sector.

- Compare information from across the province, Alberta Health Services (AHS) zones and service providers.

- Provide an opportunity for those facilities that were surveyed in both 2007/2008 and 2010/2011 to compare the results from one survey year to the next.

The survey used the CAHPS Nursing Home Survey: Family Member Instrument. CAHPS refers to the Consumer Assessment of Healthcare Providers and Systems developed by the U.S.-based Agency for Healthcare Research and Quality. The HQCA conducted validation studies and a pilot test in 2006 to ensure the survey would collect valid and reliable information about families' experiences with long term care in Alberta. The questionnaire collected the following information:

- Resident and respondent characteristics.

- Family experience and perception of nursing home activities and services.

- Family member ratings of the care provided to the resident by the nursing home.

- Willingness to recommend the nursing home.

- Suggestions on how care and services provided at the nursing home could be improved.

The 2010/2011 questionnaire was mailed to 11,690 respondents. The data collection period was from November 22, 2010 to February 20, 2011. A total of 8,179 respondents completed the survey resulting in a response rate of 70.0%. This high response rate and large sample yields a margin of error of less than or equal to 1% at the provincial level.

So that valid comparisons could be made between 2007/2008 and 2010/2011; results are presented for the 150 facilities that participated in both survey years. This represents 95% of the total sample for 2010/2011. Respondent characteristics measured are essentially the same in both surveys.

1.2. Key Findings

The survey was constructed to gather the family member's observations or experience with the care and services provided at the nursing home. It is not intended to provide a proxy for the experience of residents, but rather is a measure of family experience with issues where they have direct experience. The scale most often used (always, usually, sometimes, never) was intended to measure the frequency with which family members perceived or observed that something did or did not occur.

In 2010 the average overall care rating provided by respondents was 8.2 out of 10; this is a significant change from 8.1 in 2007. Overall, 47% of those family members surveyed rated the care at the nursing home as 9 or 10 out of 10; compared to 44% in 2007. Forty-one per cent (41%) rated the care as 7 or 8 out of 10 (compared to 42% in 2007) and 12% rated the care from 0 to 6 out of 10 (compared to 14% in 2007). While small, this significant improvement in the global ratings between 2007 and 2010 is reflected in larger improvements for a number of questions addressing specific issues. Overall this suggests a modest but consistent improvement between 2007 and 2010 for sites constant in both years.

Approximately one in three (31%) respondents were unhappy with the care the resident received at the nursing home in the last 6 months; compared to 33% in 2007. Overall, 92% of respondents would definitely (56%) or probably (36%) recommend the nursing home where their family member resided to someone else; compared to 91% in 2007.

In addition, the survey found family members rated smaller nursing homes (those with fewer beds) more positively than large facilities. A new question for 2010 found that 22% of respondents rated the food served at their home as 9 or 10 out of 10; 41% rated the food as 7 or 8 out of 10 and 38% rated the food as 0 to 6 out of 10.

To simplify data interpretation, survey questions were grouped into sets of items that relate to a specific theme. In addition, composite variables were computed for each of these themes, and results are presented in order of the strength of their relationship to the overall rating of care.

Nursing home staffing; care of resident belongings; nursing home environment

- **86%** of those respondents who tried to find a nurse/aide during any of their visits said they were *always* (43%) or *usually* (43%) able to find a nurse/aide when they wanted one, a significant improvement from 83% in 2007. The Calgary Zone also showed a significant improvement from 2007.

- **64%** of respondents reported there were *usually* (47%) or *always* (17%) enough nurses or aides in the nursing home, a significant improvement from 53% in 2007. The Calgary, Edmonton and Central Zones also showed significant improvements from 2007.

- **90%** of respondents reported the resident *always* (39%) or *usually* (51%) looked and smelled clean, similar to 89% in 2007. The Edmonton Zone showed a significant improvement from 2007.

- **92%** of family members surveyed said the resident's room *always* (51%) or *usually* (41%) looked and smelled clean, a significant improvement from 91% in 2007. The Edmonton and Central Zones also showed a significant improvement from 2007.

- **94%** reported public areas of the nursing home *always* (59%) or *usually* (35%) looked and smelled clean, similar to 93% in 2007. The Edmonton Zone showed a significant improvement from 2007.

- **34%** stated that the resident's personal medical belongings had been damaged or lost "once" (20%) or "two or more times" (14%) in the previous 6 months, similar to 33% in 2007.

- Overall, there is no significant difference in the frequency at which clothes were damaged or lost between the 2007 and 2010 surveys. However, more than half of the respondents (**59%**) indicated that clothes were lost or damaged once or more times.

The nursing home staffing; care of resident belongings and nursing home environment composite had the strongest relationship with the overall rating of care.

Kindness and respect

- **95%** of respondents reported they *always* (68%) or *usually* (27%) saw nurses and aides treat residents with courtesy and respect over the last 6 months, no change from 2007.

- **94%** of respondents *always* (63%) or *usually* (31%) saw nurses and aides treat the resident with kindness over the last 6 months, similar to 93% in 2007. The Calgary Zone showed a significant improvement from 2007.

- **88%** of respondents *always* (50%) or *usually* (38%) felt that nurses and aides really cared about the resident over the last 6 months, similar to 87% in 2007. The Calgary Zone showed a significant improvement from 2007.

- **14%** reported they saw nurses/aides be rude to any resident (including their family member), similar to 13% in 2007.

- **35%** of those surveyed saw residents (including their family member) behave in a way that made it hard for nurses/aides in the last 6 months compared to 32% in 2007. **92%** felt nurses/aides *always* (54%) or *usually* (38%) handled situations with difficult residents appropriately compared to 90% in 2007. The Calgary Zone showed a significant improvement from 2007.

- **6%** said they saw nurses/aides fail to protect any resident's privacy while the resident was dressing, bathing or toileting, no change form 2007. The Edmonton Zone showed a significantly poorer result compared to 2007.

- **97%** of respondents reported they were *always* (76%) or *usually* (21%) treated with courtesy and respect by nurses and aides, no change from 2007.

Providing information; encouraging family involvement

- **88%** of those respondents that sought information about the resident reported that they *always* (48%) or *usually* (40%) received the required information as soon as they wanted, similar to 87% in 2007.

- **92%** of respondents who asked about payments and expenses *always* (73%) or *usually* (19%) received all the information they wanted about payments or expenses compared to 94% in 2007.

- **93%** of respondents reported that the nurses and aides *always* (64%) or *usually* (29%) explained things in a way that was easy for them to understand, similar to 92% in 2007.

- **3%** reported nurses/aides tried to discourage them from asking questions about the resident, no change from 2007.

- **31%** of respondents were unhappy with the care the resident received at the nursing home in the last 6 months, a significant improvement from 33% in 2007. The Calgary Zone also showed a significant improvement from 2007.

- **33%** of the respondents that were unhappy with the care the resident received at the nursing home in the last 6 months, stopped themselves from talking to any nursing home staff about their concerns because they thought the staff would take it out on the resident, similar to 32% in 2007.

- **56%** of respondents that voiced their concerns were *always* (12%) or *usually* (44%) satisfied with the way the nursing home staff handled these problems compared to 54% in 2007.

- **79%** of those surveyed had participated in a care conference, a significant increase from 71% in 2007. The Calgary, Edmonton and South Zones also showed significant increases from 2007. Of the respondents who had not participated, a significantly higher proportion of these had nonetheless been asked to in 2010 than in 2007 (**51%** in 2010 versus 38% in 2007). The Calgary, Edmonton and North Zones also showed significant increases from 2007.

- **83%** of respondents reported they were involved in decisions about the resident's care compared to 80% in 2007. Of those, **91%** said they were *always* or *usually* involved as much as they wanted to be, similar to 90% in 2007.

Meeting basic needs

- **68%** of respondents said they helped with the care of the resident when they visited in the past 6 months compared to 70% in 2007. The North Zone showed a significant improvement from 2007. **15%** of respondents felt nursing home staff expected them to help, a significant decrease from 17% in 2007. The Calgary, Edmonton and Central Zones also showed significant improvements from 2007.

- **43%** helped the resident with drinking at least once in the last 6 months, similar to 44% in 2007. **23%** of those that helped did so because they felt staff didn't help or made the resident wait too long, similar to 24% in 2007.

- **44%** helped the resident with eating at least once in the last 6 months, similar to 45% in 2007. **21%** of those that helped did so because they felt staff didn't help or made the resident wait too long, no change from 2007.

- **23%** of those surveyed helped the resident with toileting at least once in the last 6 months, similar to 24% in 2007. However, **49%** helped because they felt staff didn't help or made the resident wait too long, no change from 2007.

The following were new questions included in the 2010 survey:
Received medical services and treatments

- **60%** of respondents said their family member *always* received the medical services and treatments they needed; 34% said this was *usually* the situation.

Medication concerns

- **93%** of respondents expressed they *never* (53%) or *sometimes* (40%) had concerns about the resident's medication. **94%** of the respondents who had concerns about the resident's medication reported them to the nursing home staff. **84%** of respondents that talked with nursing home staff said their concerns were *always* (47%) or *usually* (37%) resolved.

Upper and lower quartile facilities
A major aspect of the study explored differences between facilities that achieved higher than average overall care ratings and those with lower ratings. Those facilities that belong exclusively to the upper quartile received an overall care rating of 9.2 out of 10 from respondents compared to 7.5 for those facilities that belong exclusively to the lower quartile. This analysis will be critically important for those facilities in the lower quartiles in determining the importance and focus of quality improvement initiatives. Facilities wishing to improve can look to those upper quartile performers for examples of how to achieve exemplary performance in various areas. The following are highlights of the differences between those facilities belonging exclusively to the upper or lower quartiles with 95% confidence.

- Upper quartile facility respondents felt there were *always* or *usually* enough nurses and aides in the nursing home to a greater extent compared to lower quartile facilities (85% upper and 54% lower), and they were more likely to find a nurse or aide when they wanted one (97% upper and 80% lower).

- Upper quartile respondents said the resident's clothes were damaged or lost to a lesser extent than lower quartile respondents (34% upper versus 66% lower).

- A smaller proportion of upper quartile facility respondents reported the resident's medical belongings damaged or lost (18% upper versus 42% lower).

- Upper quartile facility respondents are more likely to feel they *always* or *usually* get information about the resident from a nurse or an aide as soon as they wanted (95% upper versus 76% lower).

- Upper quartile facility respondents were far less likely to be unhappy with the care the resident received than lower quartile facility respondents (14% upper versus 43% lower).

- Upper quartile facility respondents believe that nurses and aides either didn't help or made the resident wait too long to a lesser extent than lower quartile respondents for:
    - Toileting (35% upper versus 64% lower)
    - Drinking (11% upper versus 29% lower)
    - Eating (8% upper versus 27% lower)

An important finding from this analysis was that facilities in the upper quartile were operating **fewer** number of beds on average (e.g., 66 versus 177) than facilities in the lower quartile. This suggests smaller nursing homes are pre-disposed to more positive ratings from respondents than large facilities. However, it also important to note the upper quartile includes a few larger facilities that have achieved this level of performance.

The survey also found that publicly operated facilities obtained significantly higher overall care ratings compared to private and voluntary operated facilities (Public 8.4 out of 10; Voluntary 8.1 out of 10; Private 8.0 out of 10).

1.3. In Summary

The results highlight areas of excellence, areas for improvement and areas where improvements have been made since the 2007/2008 survey was conducted. Within the province, there is considerable variation in performance between facilities in all dimensions of care. We suggest those organizations seeking to improve should look to those long term care facilities in the upper quartile as a valuable resource for sharing best practices, ideas and experience.

The survey found what most influenced families' overall care ratings were:

- Nursing home staffing levels.

- Care of residents' belongings.

- Assistance with daily living activities such as toileting, drinking and eating.

From this perspective, we suggest the following be considered for improvement efforts:

- Improving the number and availability of long term care staff.

- Ensuring the care and security of residents' personal belongings.

- Creating environments and staff relationships similar to those found in smaller nursing homes.

While these dimensions of care (from the perspective of family feedback) have the strongest relationship to the overall rating of care, we recognize that all dimensions of care are important. Individual facilities will need to determine where to focus quality improvement efforts to best meet the care and service needs of their residents and family members.

1.4. Overview of Report Documents

Provincial Technical Report

Executive summary, survey methodology, analytical approach, relevant background information, detailed results and interpretive narrative.

This document also contains the following appendices:

Appendix A

NH-CAHPS® questionnaire used for this study including cover letter and reminder materials.

Appendix B

Details of the analytical and statistical techniques used for predictive modeling.

Facility Reports

Facility-Level Report:

Detailed descriptive results for each facility with comparisons to provincial and Alberta Health Services zone averages in which they are located.

Quartile Report:

Detailed descriptive results for each facility showing comparisons by quartile group.

Comment Report:

Open-ended comments for each facility categorized by comment type and dimension.

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2. BACKGROUND AND METHODOLOGY

2.1. Background

In 2010 the Health Quality Council of Alberta (HQCA) engaged the services of Agility Metrics Inc. to conduct a follow-up study to the 2007 survey of Albertans who had a family member residing in a nursing home in Alberta. The 2010 survey was based in large part on the 2007 survey in terms of methodology and sample size. For detailed information on the background to the 2007 survey, please consult *Long Term Care Family Experience Survey – Provincial Technical Report (November 2008).*[1]

A key objective of the 2010 survey was to provide benchmarking against 2007 results in order to identify areas where improvements had been made and pinpoint areas where improvements are still needed.

2.2. The Survey Instrument

The CAHPS Nursing Home Family Instrument used in the HQCA 2007 survey is comprised of 64 questions plus one open-ended comment, and was used with the permission of the Agency for Healthcare Research and Quality (AHRQ).

The questionnaire collects the following information:

a) Patient and respondent characteristics.
b) Reported family experience and perception of nursing home activities and services.
c) Family member ratings of the care provided to the resident by the nursing home.
d) Willingness to recommend the nursing home.
e) Suggestions on how care and services provided at the nursing home could be improved.

To simplify the interpretation of the data and enhance the reliability of the results, questions have been grouped into sets of items that are related and which are shown to address a common underlying construct or issue. Having demonstrated that these questions are sufficiently related to belong to a common scale or factor, composite variables for each factor have been calculated from the individual questions that belong in that factor.

The 21 individual questions from the survey in **Appendix A** used to compute the 4 composite variables are identified below:

- **Nursing home staffing, care of belongings and environment:** Can find a nurse or aide / how often there are enough nurses or aides / resident room looks and smells clean / resident looks and smells clean / public areas look and smell clean / resident medical belongings lost / resident clothes lost.

- **Kindness and r espect:** Nurses and aides treated residents with respect / nurses and aides treated residents with kindness / nurses and aides really cared about residents / nurses and aides were rude to residents / nurses and aides were appropriate with difficult resident.

- **Providing i nformation a nd e ncouraging fa mily i nvolvement:** Nurses and aides give respondent information about resident / nurses and aides explain things in understandable way / nurses and aides discourage respondent questions / respondent stops self from complaining / respondent involved in decisions about care / respondent given info about payments and expenses.

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[1] http://www.hqca.ca/assets/pdf/LTCSurvey/HQCA_LTC_Family_Survey_Technical_Report.pdf

- **Meeting basic needs:** Resident helped because waited too long for help with eating / resident helped because waited too long for help with drinking / resident helped because waited too long for help with toileting.

Minor changes were made to the survey instrument in 2010 and these are summarized below:

Questions added in 2010:

- Q51. Using any number from 0 to 10 where 0 is the worst food possible and 10 is the best food possible, what number would you use to rate the food at this nursing home?

- Q52. In the last 6 months, how often did your family member receive all of the medical services and treatments they needed?

- Q53. In the last 6 months, how often did you have concerns about your family member's medication?

- Q54. Did you talk with any nursing home staff about these medication concerns?

- Q55. In the last 6 months, how often were your concerns about your family member's medication resolved?

Questions removed in 2010:

- Q53. In the last 6 months, did you help your family member with managing finances, such as paying bills or filling out insurance claims?

- Q54. Power of attorney is a legal document that allows you to make decisions about your family member's finances or property. Do you have the power of attorney for your family member

- Q55. A legally appointed guardian or agent is a person who has the legal authority to make important decisions for another person because he or she cannot. This includes decisions about such things as health care and living arrangements. Are you your family member's legally appointed guardian or agent?

- Q56. Is someone else your family member's legally appointed guardian or agent?

Throughout this report, when a question number has changed between 2007 and 2010, both numbers are indicated, with the 2010 number preceding the 2007 number, for example: "Q57 / Q52. In the last 6 months, how often did you get all the information you wanted about payments or expenses?"

The 2010 questionnaire was mailed to 11,690 respondents asking them to evaluate their perceptions of the quality of care provided to their family member living in a nursing home. A total of 8,179 respondents completed the survey resulting in a response rate of 70.0%.

2.3. Survey Process and Methodology

2.3.1. Privacy, Confidentiality and Ethics

In accordance with the requirements of the Health Information Act of Alberta (HIA), an amendment to the HQCA privacy impact assessment for surveys was submitted to and accepted by the Office of the Information and Privacy Commissioner of Alberta (OIPC) specifically for the Long Term Care Resident and Family Experience surveys in 2007. For the 2010 survey, a notification letter was sent to the OIPC notifying them of the repeat of the family experience survey using the same survey protocols, methodology, data collection processes and analysis as in 2007. As a provincial custodian under the HIA, the HQCA follows detailed policies and procedures to ensure security of the health information it handles. The HQCA requested and received family contact information and resident descriptive information from each participating facility. The HQCA then compiled a single sample database with the minimum amount of

personal information required for administration of the survey. The family contact information was then provided to Agility Metrics Inc. to conduct the survey. Agility Metrics Inc. is required under contract to HQCA to adhere to all of the HQCA's obligations under the HIA to protect this data.

The sponsor (HQCA), purpose, voluntary nature of participation, confidentiality, and survey process were communicated clearly to potential respondents during the survey process. Those respondents who declined to participate were dropped from the survey process.

2.3.2. Survey Protocol

The survey was conducted as a census of all eligible participants for whom contact data was available. Given the small size of most nursing homes, random sampling techniques were not required and would have added little value at the expense of increased complexity for the few larger sites where random selection might have been justified.

Eligible respondents were identified by the HQCA first by identifying nursing home residents who met the eligibility criteria and then by identifying the responsible person for those residents. An eligible sample member was the person listed by the nursing home as the most involved family member or person of a resident living at the nursing home. In addition to family members, friends or legal guardians were considered to be eligible respondents if they had the most contact with the resident and experience with their care.

Residents in designated assisted living (DAL) facilities and those without a registered family member or most involved person contact were *excluded* from the survey. Where it was possible to identify families with residents in the final stages of palliative care, these families were not contacted to avoid disturbing them during this sensitive time. If a nursing home resident had passed away after compilation of the contact list but prior to the family member receiving the survey, the family member was given the option to complete the survey if they desired. Due to the data processing and mail time requirements, all residents of contacted families had been in the facility for at least one month. Residency of less than one month would have excluded them from participation.

A final list of potential respondents was provided to Agility Metrics Inc. for the purpose of mailing the self-administered survey questionnaire packages. A 3-stage mailing protocol was used to ensure maximum participation rates:

Table 1: Survey Mailing Protocol

Step 1	November 22, 2010	Mailing of questionnaire package to all respondents in final sample
Step 2	December 10, 2010	Mailing of postcard reminders to all non-respondents
Step 3	January 10, 2011	Mailing of questionnaire package with modified cover letter to all non-respondents

Respondents participated by completing the survey in one of two ways:

1) By returning the questionnaire using the pre-paid return envelope.

2) By completing the survey on-line over the Internet using a unique, single-use survey access code imprinted on each questionnaire cover page.

The data collection window for this survey was from November 22, 2010 to February 20, 2011.

2.3.3. Data Collection

Completed paper questionnaires were returned to Agility Metrics for data processing. A double data entry protocol was used to minimize data entry errors; the 7,396 paper questionnaires were coded twice and a program tested the two data records for differences. Differences were validated against the completed survey form and corrected to be identical.

2.3.4. Overall Response Rate

To reduce the potential for "non-response bias", it is desirable to achieve a high response rate. As in 2007, the response rate for the 2010 survey was excellent by health care standards, at **70.0%**. **Table 2** below shows overall response rate by completion method, for both 2007 and 2010 surveys. This high response rate and large sample yields a margin of error of less than or equal to 1% at the provincial level.

Table 2: Overall Response Rate

Description	2007		2010	
	Count	Response Rate	Count	Response Rate
Total sample	**11,311**	**100%**	**11,690**	**100%**
Completed paper surveys	7,457	65.9%	7,396	63.3%
On-line Web responses	486	4.3%	783	6.7%
Total Response	**7,943**	**70.2%**	**8,179**	**70.0%**

2.3.5. Response Rate by Alberta Health Services Zone

The population 20 years or older for the five surveyed Alberta Health Services (AHS) zones was approximately 2.6 million. The total number of beds for the **157** surveyed nursing homes in 2010 was 13,061, thus the returned questionnaires (8,179) represent 62% of the total capacity (total number of beds differs from total sample, given the selection protocol applied). At the zone level, the Central Zone showed the highest response rate, at 75.8% while the lowest response rate was registered for the Edmonton Zone, at 67.3%.

Table 3: Response Rate by Alberta Health Services Zone

Zone	Total Number of Beds (Surveyed Facilities) 2010	Total Eligible Sample (Surveyed Facilities) 2010	Returned Surveys (Surveyed Facilities) 2010	Response Rate 2010
Calgary	4,915	4,453	3,108	69.8%
Edmonton	4,151	3,669	2,470	67.3%
Central	1,947	1,736	1,316	75.8%
North	1,218	1,113	763	68.6%
South	830	719	522	72.6%
Alberta	**13,061**	**11,690**	**8,179**	**70.0%**

2.4. Report Structure

2.4.1. Alberta Health Services Zones

Currently, Alberta Health Services (AHS) delivers care in five geographical zones. Given that in 2007 the province was divided into regional health authorities (RHAs), RHAs were mapped to zones to allow for benchmarking at the zone level between the 2007 and 2010 results. This mapping is illustrated in **Table 4** below.

Table 4: Mapping of RHAs to Zones

RHA - 2007	Zone - 2010
R3-Calgary	Calgary
R6-Capital	Edmonton
R4-DavidThompson	Central
R5-East Central	Central
R7-Aspen	North
R9-Northern Lights	North
R8-Peace County	North
R1-Chinook	South
R2-Palliser	South

2.4.2. Facilities Common to Both 2007 and 2010 Samples

In 2007, a total of **173** nursing homes participated in the survey, of which **150** also participated in 2010. In addition, 7 facilities were present in the 2010 sample but not in the 2007 sample. In total, **157** facilities participated in 2010.

In o rder th at th e zone composition is identical, i n te rms o f fa cilities, fo r b oth periods, results in th is te chnical report are p resented f or t he 15 0 facilities w hich participated i n <u>both</u> 2007 and 2010 surveys, representing a sample of 7,754, or 94.8% of the total sample for 2010.

2.4.3. Interpretation of Tables and Identification of Significant Differences

Throughout this report, data is presented in the aggregate and by zone for all facilities which participated in both the 2007 and 2010 surveys, and results from the two periods are shown.

For all questions comprising the composite variables (see Care Rating Forecasting - Definition of Composite Variables) statistical tests were computed on weighted mean scores which were developed for computation of the composites. A standardized score out of 100 is first computed for the response, then the mean score out of 100 is computed for the group of interest. Weighted mean scores are reported as a mean score for the group of interest, not as a response proportion.

Where there is a statistically significant difference between the two periods, the cell is highlighted in green to illustrate an improvement in 2010 vis-à-vis 2007 and in red to illustrate a decline in 2010 vis-à-vis 2007. Additionally, an up or down arrow indicates the direction of the change. Please refer to the table below as an example:

Zone / Resident's Room Looks and Smells Clean	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010↑	2007	2010↑	2007	2010	2007	2010	2007	2010↑
Never	2%	2%	2%	1%	1%	1%	1%	0%	0%	0%	1%	1%
Sometimes	12%	10%	9%	7%	6%	4%	4%	3%	4%	4%	8%	7%
Usually	49%	45%	47%	45%	34%	31%	27%	32%	38%	39%	43%	41%
Always	38%	43%	42%	47%	59%	65%	68%	64%	58%	57%	48%	51%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2392	2762	1940	2193	1126	1269	676	727	592	498	6726	7449

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference; p < .001

2.5. Analytical Methodology

- **Global st atistics:** Descriptive statistics based on all 8,179 respondents were analyzed to provide a provincial level set of data.

- **Quartile Rankings:** Grouping of facilities into quartiles.[2]

- **Analysis of respondents' answers from upper and lower quartiles:** Statistics on respondents from the **upper** quartile nursing homes were compared to statistics on respondents from **lower** quartile facilities. Each facility was assigned to a quartile based on its calculated average overall care rating. Significant differences between the experience of upper and lower quartile facilities respondents were identified.

- **Benchmarking and respondents direct feedback data:** To assist facilities to benchmark their results against others for the purpose of quality improvement work, outputs comparing each facility to other facilities grouped by zone and quartile were provided. Detailed respondent comments (de-identified) and overall statistics on comments by composite category were also provided by facility.

- **Predictive model:** A predictive model was produced to help stakeholders understand the relationship between family's specific experiences and perceptions about nursing home services and the overall global care ratings.

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[2] Quartiles are used to group sorted results into four equal parts, each with 25% of the total sample. The lowest quartile for example, represents the lowest scoring 25% of values. More accurately, the "percentile" of a distribution of values is a number xp such that a percentage p of the population values are less than or equal to xp. The 25th percentile is also referred to as the .25 quartile or lower quartile of a variable, and is the value where 25% (p) of the values of the variable fall below that value. Unless otherwise indicated, quartiles in this report represent respondent level rather than facility level results.

3. DETAILED RESULTS

3.1. Survey Respondent Characteristics

Several questions about respondent characteristics are included in the survey questionnaire. These are intended to:

a) Understand who visits the resident (their demographic characteristics and their relationship to the resident), and

b) Evaluate how these characteristics might impact the results.

Respondent characteristics are grouped into three (3) categories:

(I) Respondents' relationship with resident and level of involvement:

- Respondent relationship to resident
- Frequency of visits
- Most experienced person with resident's care

(II) Socio-demographic profile of respondents:

- Age
- Gender
- Education
- Ethnicity
- Language

(III) Proportions of respondents requiring assistance in completing the survey:

- Respondents that needed assistance to complete the survey
- Type of assistance provided to respondents to complete the survey

Detailed results for each attribute are reported on the following pages. The information provided is for the entire survey sample and is presented by the five AHS zones at the time of the study.

3.1.1. Respondent Relationship to Resident

Respondents were asked to report their relationship to the resident named on the survey cover letter.

- As in 2007, the majority of respondents were a family member of the resident. Fifty-eight per cent (58%) reported the resident was their parent, while 18% reported they were the spouse of the resident.

Figure 1: Respondent Relationship to Resident

Q1. Who is the person named on the cover letter?
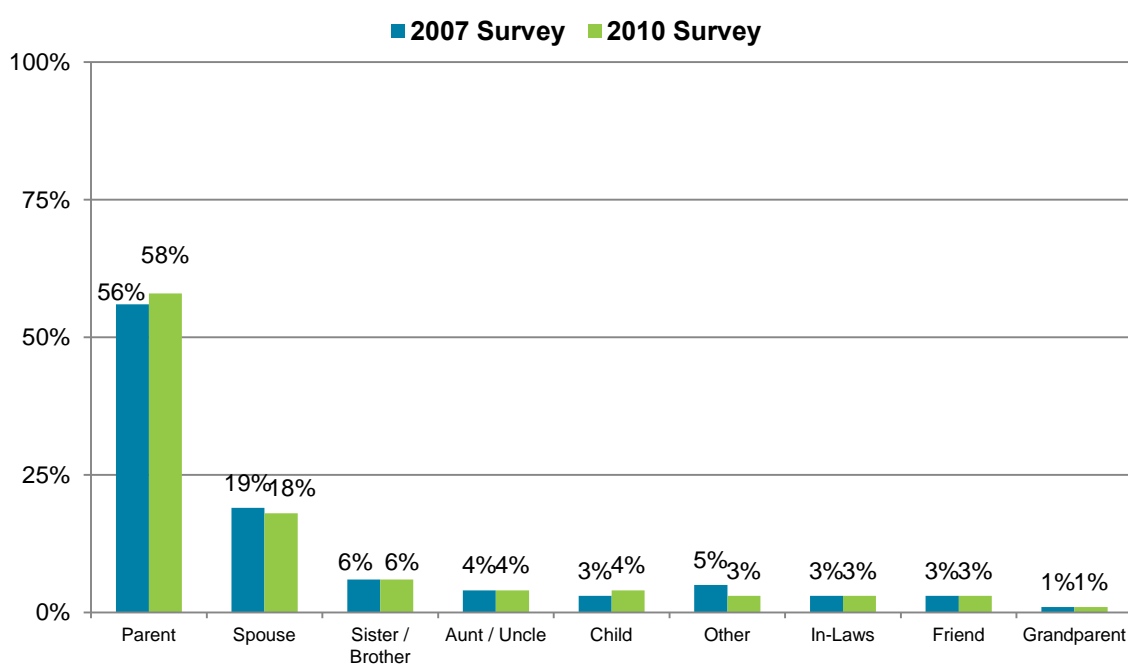
Table 5: Respondent Relationship to Resident

Zone / Respondent Relationship with Resident	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
My Parent	57%	60%	56%	57%	56%	59%	55%	53%	55%	53%	56%	58%
My Spouse / Partner	17%	18%	20%	18%	20%	18%	18%	18%	20%	22%	19%	18%
My Sister / Brother	5%	5%	7%	6%	7%	6%	8%	9%	6%	6%	6%	6%
My Aunt / Uncle	5%	4%	4%	4%	4%	3%	6%	4%	5%	5%	4%	4%
My Child	2%	3%	4%	5%	3%	4%	3%	6%	2%	3%	3%	4%
Other	5%	3%	4%	3%	4%	3%	3%	3%	5%	3%	5%	3%
My Mother / Father-in-law	3%	2%	2%	3%	3%	4%	4%	3%	3%	4%	3%	3%
My Friend	3%	3%	2%	3%	2%	2%	3%	3%	3%	3%	3%	3%
My Grandparent	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2489	2804	2009	2232	1179	1288	703	751	616	513	6996	7588

Note: Individual proportions may not sum to 100% due to rounding of decimals.

Promoting and improving patient safety and health service quality across Alberta

3.1.2. Frequency of Visits

- The majority of respondents (71%) had visited the resident more than 20 times in the previous 6 months, a decrease from 72% in 2007. The Central and North Zones saw slightly lower results than the provincial average.

- Given the high frequency of visits, it is reasonable to state that respondents were well-informed enough to provide their perceptions of the care their family member received.

Figure 2: Frequency of Visits

Q9. In the last 6 months, about how many times did you visit your family member in the nursing home?
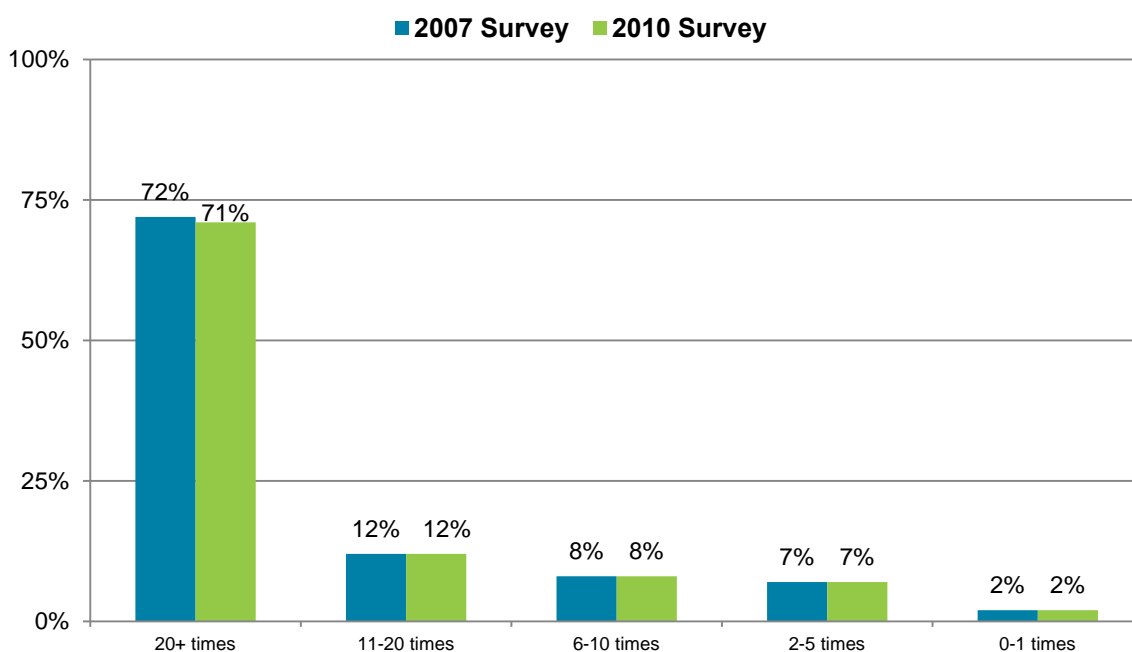
Table 6: Frequency of Visits

Zone / Frequency of Visits	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
20+ times	73%	73%	75%	75%	65%	65%	67%	62%	72%	76%	72%	71%
11-20 times	11%	12%	11%	11%	14%	15%	12%	13%	11%	8%	12%	12%
6-10 times	6%	7%	7%	7%	11%	11%	10%	12%	7%	7%	8%	8%
2-5 times	7%	6%	6%	5%	7%	8%	9%	9%	8%	8%	7%	7%
0-1 times	2%	2%	2%	2%	3%	2%	2%	3%	2%	2%	2%	2%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2470	2827	1996	2246	1165	1291	698	756	607	512	6936	7632

Note: Individual proportions may not sum to 100% due to rounding of decimals.

* Respondents that visited 0-1 times in the last 6 months were instructed to skip to question 58 in the questionnaire.

3.1.3. Most Experienced Person with Resident Care

- In 2010, the majority of respondents also stated they were the person who had the most experience with the resident's care (88%), a proportion very similar to that of 2007 (87%).

Figure 3: Most Experienced Person with Resident Care

Q65. Considering all of the people who visit your family member in the nursing home, are you the person who has the most experience with his/her care?
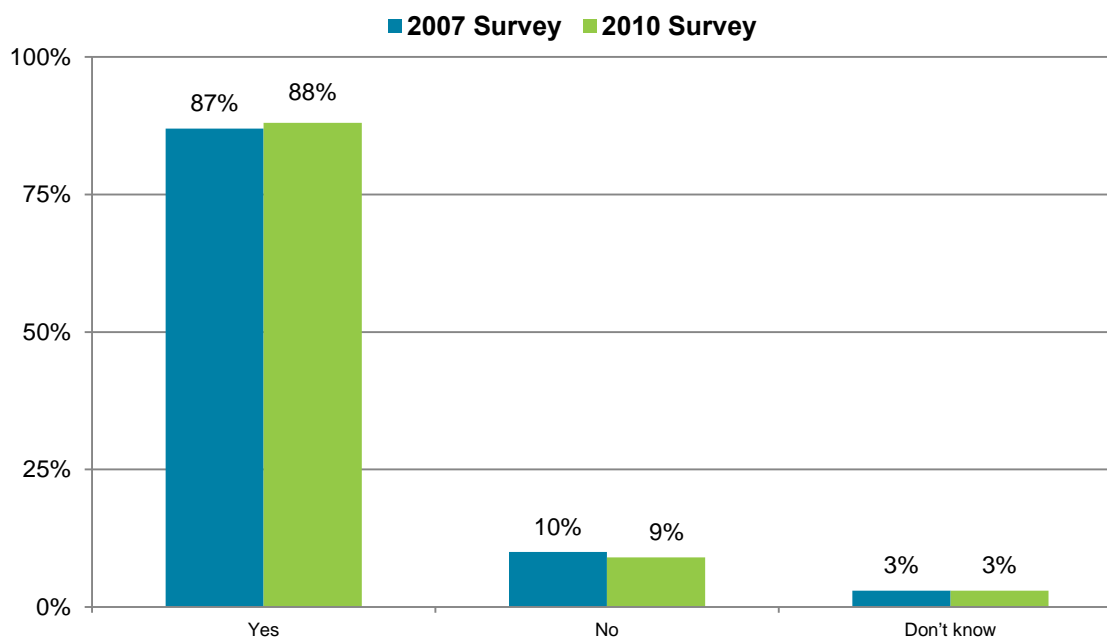
Table 7: Most Experienced Person with Resident Care

Zone / Most Experienced Person with Resident Care	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	89%	89%	87%	88%	86%	88%	84%	85%	86%	90%	87%	88%
No	9%	8%	10%	9%	10%	9%	13%	10%	10%	8%	10%	9%
Don't know	2%	3%	3%	3%	4%	4%	4%	5%	4%	3%	3%	3%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2436	2812	1985	2228	1155	1281	688	750	603	505	6867	7576

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.4. Respondent Age Distribution

- The age distribution pattern was similar in both 2007 and 2010. Sixty per cent (60%) of respondents were under the age of 65, of which the majority were in the 55 to 64 age group. This pattern was consistent across zones.

Figure 4: Respondent Age Distribution

Q58. What is your age?

■ 2007 Survey ■ 2010 Survey
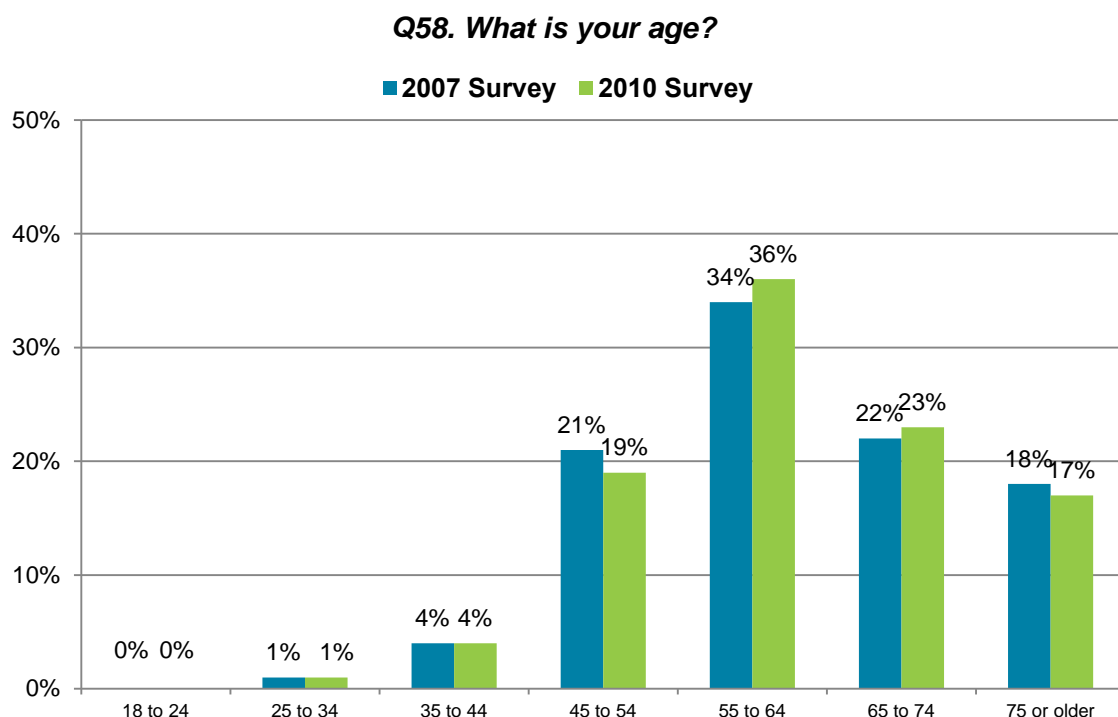
Table 8: Respondent Age Distribution

Zone / Respondent Age Distribution	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
18 to 24	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
25 to 34	1%	0%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%
35 to 44	4%	3%	5%	5%	4%	4%	4%	5%	3%	2%	4%	4%
45 to 54	22%	20%	20%	20%	19%	19%	21%	18%	18%	15%	21%	19%
55 to 64	35%	37%	33%	35%	33%	36%	34%	35%	36%	35%	34%	36%
65 to 74	21%	22%	23%	23%	24%	24%	24%	23%	20%	29%	22%	23%
75 or older	17%	18%	18%	17%	19%	17%	17%	18%	22%	19%	18%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2463	2816	1991	2241	1160	1281	691	748	607	512	6912	7598

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.5. Respondent Gender

- Overall, 64% of respondents were female and 36% were male; these proportions were identical in 2007. The proportions of female versus male were similar across zones.

Figure 5: Respondent Gender

Q59. Are you male or female?

■ 2007 Survey ■ 2010 Survey
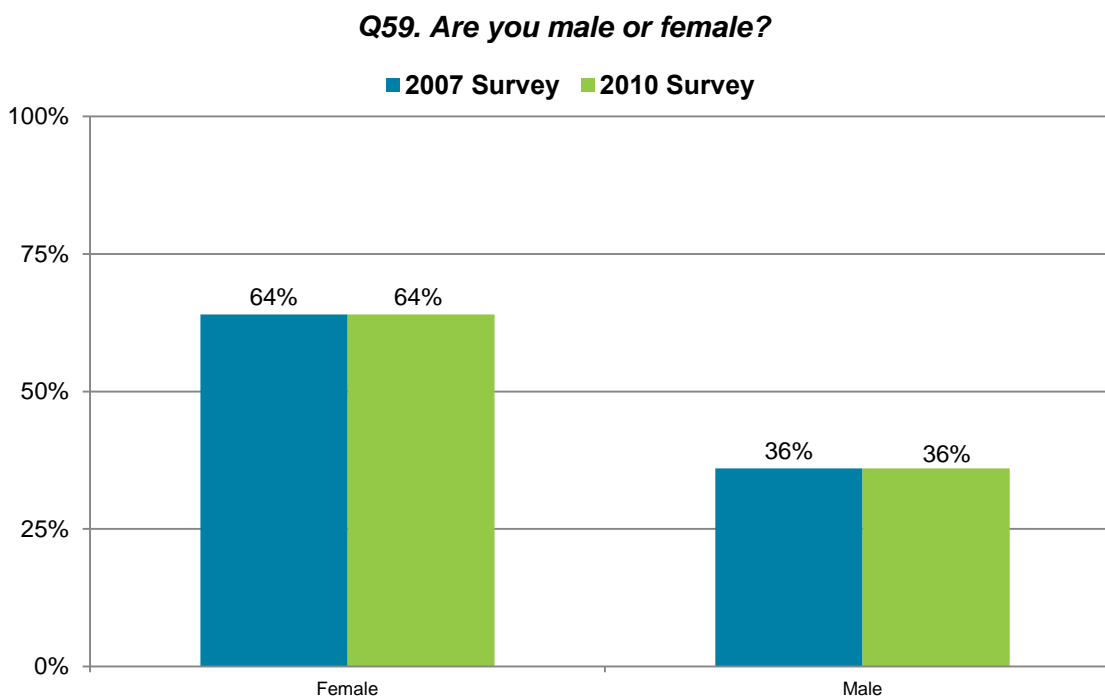
Table 9: Respondent Gender

Zone / Respondent Gender	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Female	65%	64%	63%	64%	64%	67%	67%	67%	64%	65%	64%	64%
Male	36%	37%	37%	36%	36%	34%	33%	33%	36%	35%	36%	36%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2456	2815	1994	2237	1160	1274	692	753	607	513	6909	7592

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.6. Respondent Education

- In 2010, 24% of respondents had completed high school; 41% had some post-secondary education, and 22% had a university degree at the Bachelor's, Master's or PhD level. 13% reported not having completed high school. These proportions were very similar to those of 2007.

- Respondents' education also varied by region. In the Calgary and Edmonton Zones, greater proportions held university degrees while in the Central and North Zones there were larger than average proportions with some grade school or high school education.

Figure 6: Respondent Education

Q60. What is the highest grade or level of school that you have completed?
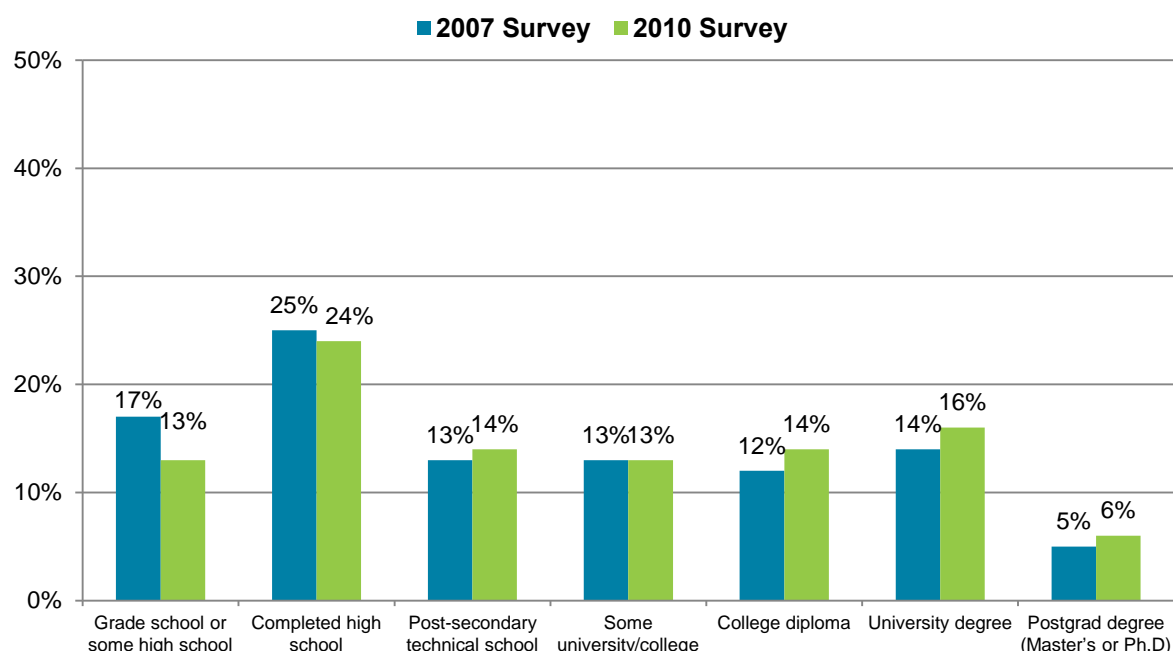
Table 10: Respondent Education

Zone / Respondent Education	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Grade school or some high school	11%	8%	15%	11%	25%	20%	31%	24%	21%	18%	17%	13%
Completed high school	23%	22%	26%	23%	24%	25%	30%	28%	23%	26%	25%	24%
Post-secondary technical school	12%	14%	13%	14%	14%	15%	12%	13%	13%	12%	13%	14%
Some university/college	16%	15%	13%	13%	11%	10%	10%	10%	13%	14%	13%	13%
College diploma	14%	14%	11%	13%	14%	17%	9%	14%	14%	16%	12%	14%
University degree	19%	21%	16%	19%	9%	9%	7%	9%	12%	10%	14%	16%
Postgrad degree (Master's or PhD)	7%	8%	6%	7%	3%	3%	1%	3%	4%	4%	5%	6%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2378	2708	1932	2163	1111	1242	670	719	594	496	6685	7328

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.7. Respondent Ethnicity

- Approximately 97% of 2010 respondents were White / Caucasian as shown in **Table 11.**

Table 11: Respondent Ethnicity

Zone / Respondent Ethnicity	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
White/Caucasian	96%	97%	95%	96%	99%	99%	97%	98%	97%	98%	96%	97%
Other	4%	3%	5%	4%	1%	1%	3%	2%	3%	2%	4%	3%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2437	2695	1950	2127	1148	1257	685	719	603	496	6823	7294

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.8. Respondent Language

- 94% of respondents reported speaking mainly English at home; similar to that of 2007.
- The most commonly cited other language spoken was Chinese (unspecified) and Cantonese.

Table 12: Respondent Language

Zone / Respondent Language	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
English	94%	94%	91%	91%	95%	97%	91%	93%	95%	96%	93%	94%
French	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%
Other	6%	6%	9%	9%	5%	2%	7%	5%	5%	4%	7%	6%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2485	2817	2011	2239	1169	1283	698	758	615	510	6978	7607

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.9. Respondent Needed Assistance to Complete the Survey

- Only 4% of respondents needed assistance to complete the survey; no change from 2007.

- Results were very similar across all zones.

Figure 7: Respondent Needed Assistance to Complete the Survey

Q63. Did someone help you complete this survey?
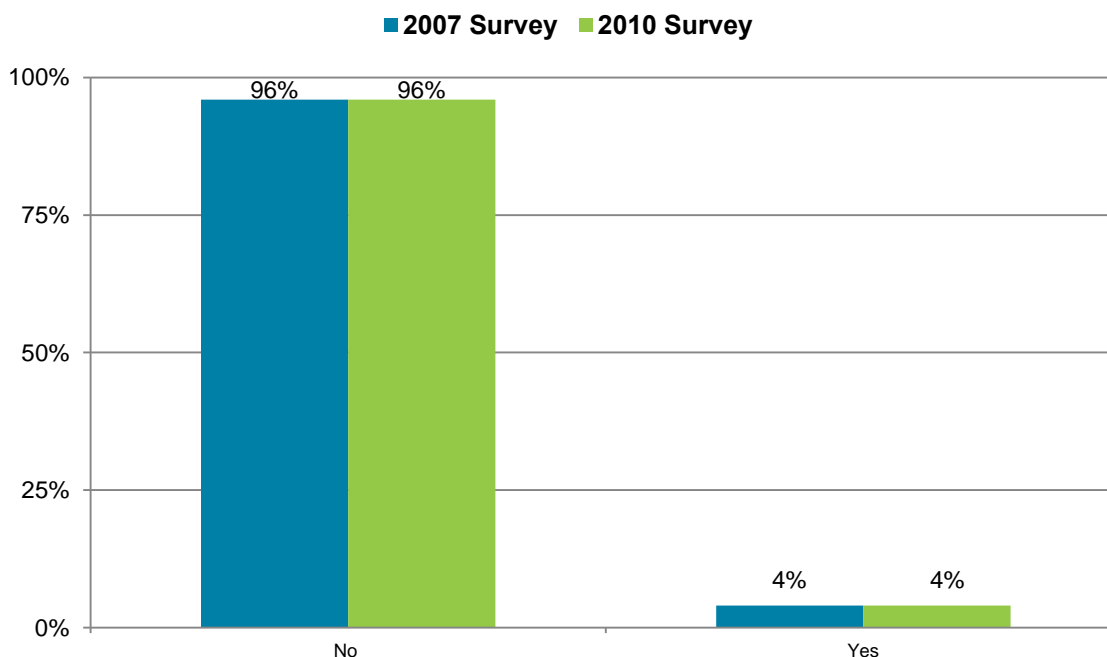
Table 13: Respondent Needed Assistance to Complete the Survey

Zone / Respondent Needed Assistance to Complete Survey	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	97%	97%	96%	96%	96%	96%	95%	96%	96%	97%	96%	96%
Yes	3%	3%	4%	4%	4%	4%	6%	4%	4%	4%	4%	4%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2467	2823	2001	2239	1158	1280	692	750	609	510	6927	7602

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.1.10. Type of Assistance Provided for Completing the Survey

- For question 64, respondents were allowed to check more than one box. Each row in the table below indicates the percentage of answers instead of respondents.

Figure 8: Type of Assistance Provided for Completing the Survey

Q64. How did that person help you?
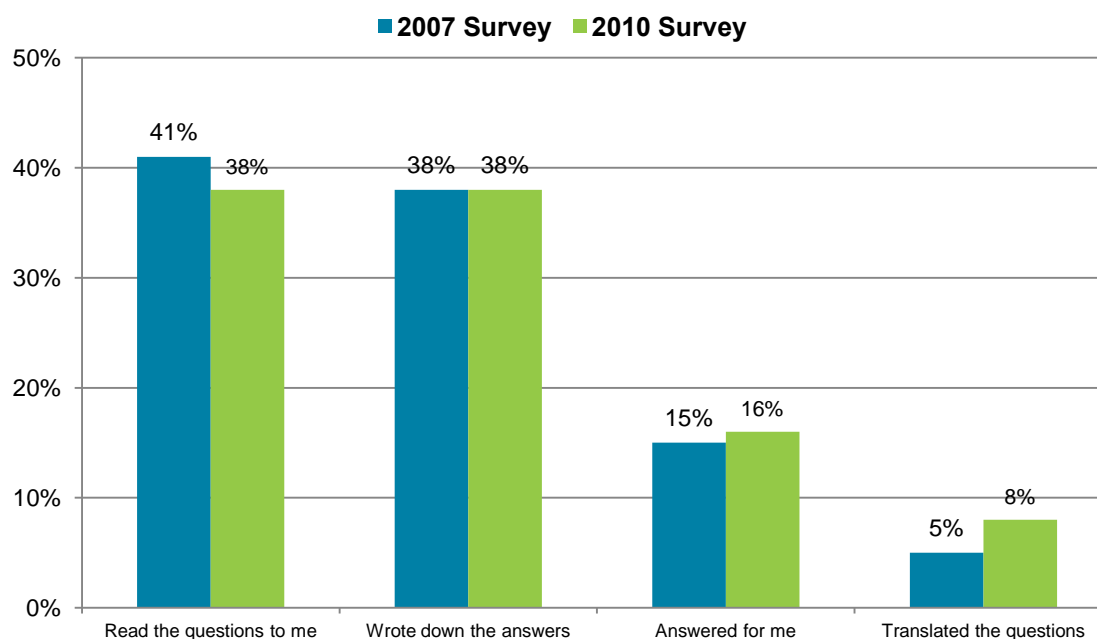
Table 14: Type of Assistance Provided for Completing the Survey

Zone / Type of Assistance Provided (Check all that apply)	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Read the questions to me	39%	38%	39%	36%	46%	37%	45%	47%	40%	33%	41%	38%
Wrote down the answers	38%	36%	40%	39%	37%	39%	41%	40%	31%	29%	38%	38%
Answered for me	15%	17%	15%	14%	14%	20%	9%	9%	29%	29%	15%	16%
Translated the questions	9%	9%	5%	10%	3%	3%	5%	4%	0%	10%	5%	8%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	96	117	99	119	76	59	56	47	35	21	362	363

Note: proportions in each column do not add up. Each row is considered as separate.

3.2. Resident Characteristics

Several questions to profile the resident were included in the survey questionnaire. The main reason for profiling the resident is to evaluate whether these characteristics have any impact on family survey results.

Shared rooms, resident ability to make decisions for themselves, and permanence in the nursing home have all been previously shown to impact survey results.

Resident characteristics include:

- Discharged or deceased.
- Time lived in the nursing home.
- Permanency in nursing home.
- Resident in shared room.
- Resident with serious memory problems.
- Resident autonomy.
- Resident gender.

3.2.1. Discharged or Deceased

- In the case where the resident named on the cover letter was no longer living in the named facility, respondents were asked whether the resident was deceased or had been discharged.

- In both survey years there was a higher proportion of residents who were deceased than who had been discharged.

- Respondents whose resident had been discharged (7% of total sample) were instructed not to complete the survey, however respondents whose resident had passed away (1% of total sample) were given the option of completing the survey.

Figure 9: Discharged or Deceased

Q3. Was your family member discharged from this facility or did he or she die?
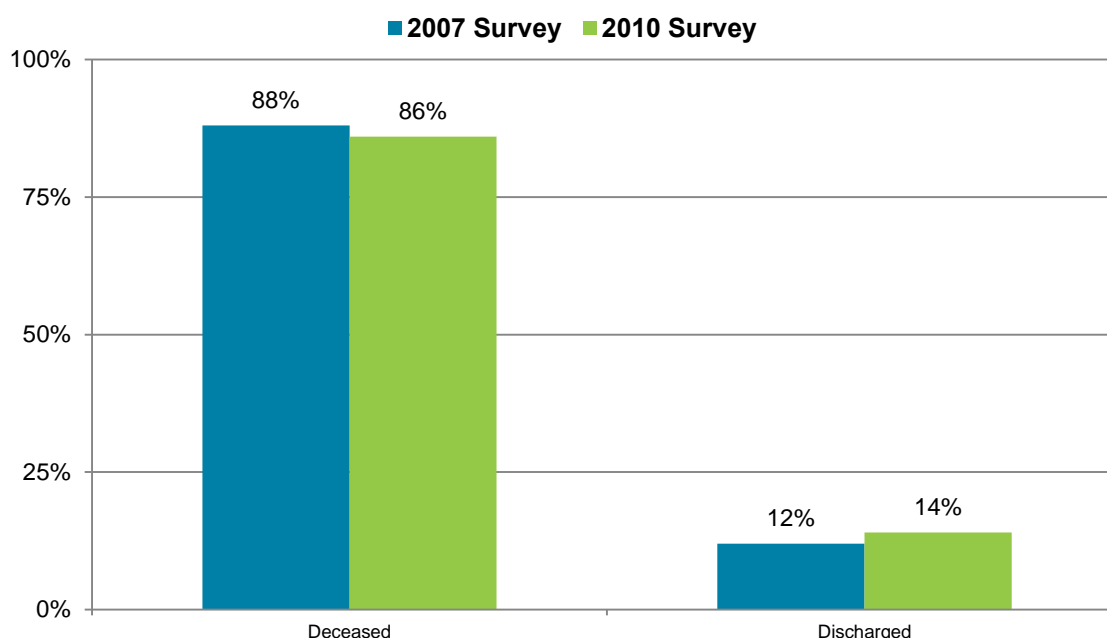
Table 15: Discharged or Deceased

Zone / Discharged or Deceased	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Deceased	91%	88%	86%	85%	88%	80%	80%	91%	91%	87%	88%	86%
Discharged	9%	12%	14%	15%	12%	20%	20%	9%	9%	13%	12%	14%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	170	145	126	115	92	74	45	32	55	31	488	397

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.2.2. Time Lived in the Nursing Home

- Approximately 89% of respondents reported the resident had lived at least 6 months in the nursing home, a decrease from 95% in 2007.

Figure 10: Time Lived in the Nursing Home

Q4. In total, about how long has your family member lived in this nursing home?
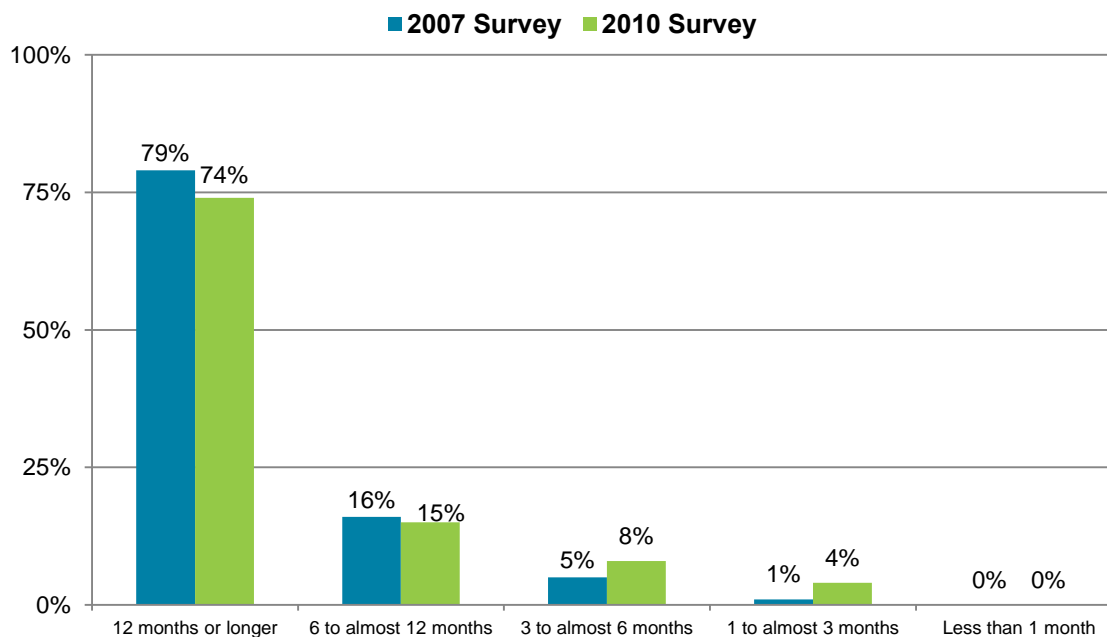
Table 16: Time Lived in the Nursing Home

Zone / Time Lived in the Nursing Home	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**
12 months or longer	77%	73%	80%	73%	80%	75%	79%	78%	80%	74%	79%	74%
6 to almost 12 months	18%	15%	14%	15%	15%	13%	14%	12%	15%	16%	16%	15%
3 to almost 6 months	4%	8%	5%	8%	5%	6%	7%	7%	4%	7%	5%	8%
1 to almost 3 months	0%	3%	1%	4%	1%	6%	1%	4%	1%	3%	1%	4%
Less than 1 month	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2448	2792	1985	2218	1161	1280	684	748	603	509	6881	7547

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.2.3. Permanency in Nursing Home

- Approximately 93% of respondents stated they expected the resident would live permanently in the current nursing home; this proportion was unchanged from 2007.

Figure 11: Permanency in Nursing Home

Q5. Do you expect your family member to live in this or any other nursing home permanently?
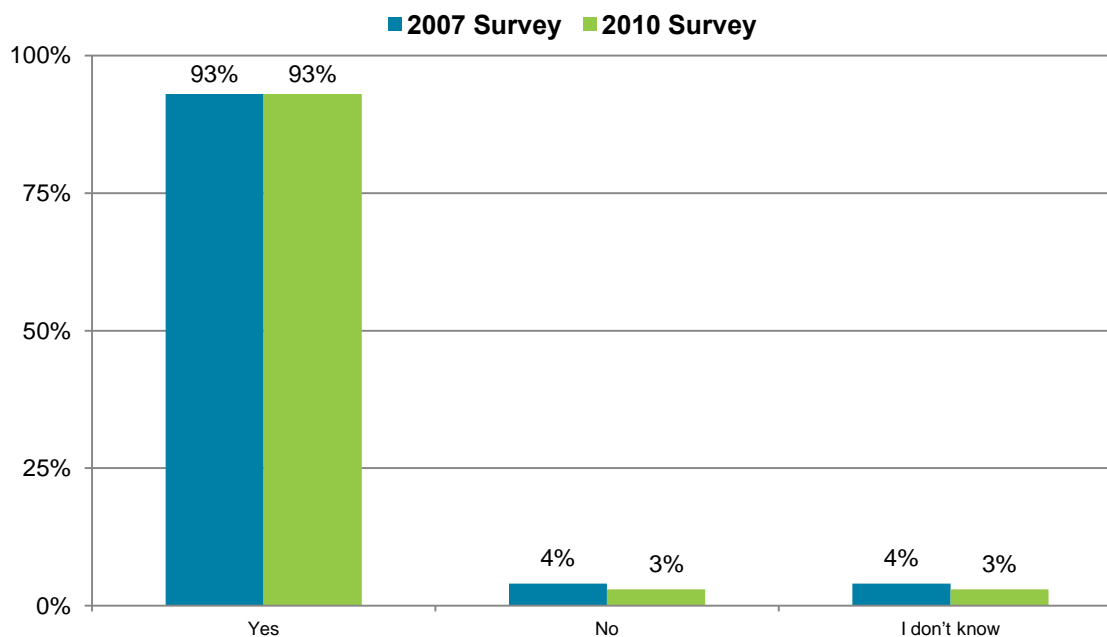
Table 17: Permanency in Nursing Home

Zone / Permanency in Nursing Home	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	93%	93%	93%	93%	94%	95%	93%	94%	93%	92%	93%	93%
No	4%	3%	3%	4%	3%	3%	4%	3%	4%	4%	4%	3%
I don't know	4%	3%	4%	4%	3%	3%	3%	4%	3%	4%	4%	3%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2401	2759	1950	2192	1133	1254	681	735	589	501	6754	7441

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.2.4. Resident in Shared Room

- Overall, 52% of respondents stated the resident shared a room with another person at the nursing home. This proportion varies from one zone to another. Proportions are similar between survey years.

Figure 12: Resident in Shared Room

Q6. In the last 6 months, has your family member ever shared a room with another person at this nursing home?
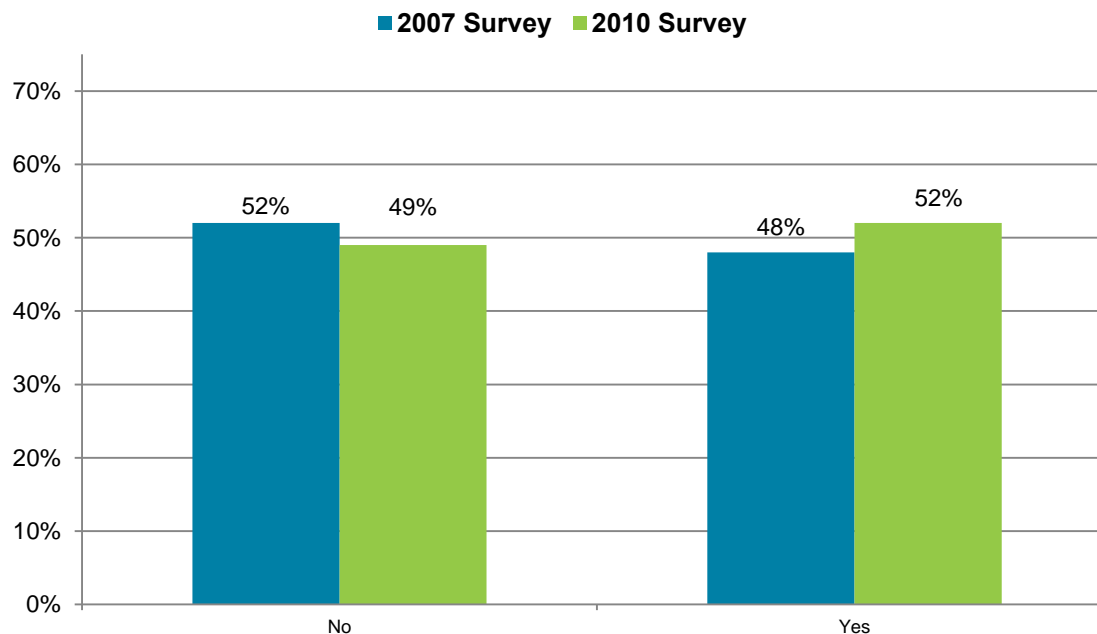
Table 18: Resident in Shared Room

Zone / Resident in Shared Room	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	48%	41%	51%	49%	55%	59%	60%	53%	55%	56%	52%	49%
Yes	52%	59%	49%	51%	45%	41%	40%	47%	45%	44%	48%	52%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2448	2798	1977	2224	1159	1279	685	748	606	509	6875	7558

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- Residents in a shared room or not and noise level acceptability are associated beyond what is expected by chance alone (Chi-Square test = 44.74, p < .001). Therefore, the acceptability of the noise level around the resident's room is related to whether the room is shared or not.

Table 19: Shared Room and Noise Level Acceptability

Q31. In the last 6 months, how often was the noise level around the resident's room acceptable to you?	Resident Shared a Room (N=3775)	Resident Not in a Shared Room (N=3548)
Never	2%	1%
Sometimes	9%	5%
Usually	40%	37%
Always	50%	56%

3.2.5. Resident with Serious Memory Problem

- Overall, 68% of respondents reported the resident had serious memory problems, a slightly higher proportion than in 2007 (65%). The Calgary, North and South Zones also saw an increase from 2007.

Figure 13: Resident with Serious Memory Problem

Q7. Does your family member have serious memory problems because of Alzheimer's disease, dementia, stroke, accident, or something else?
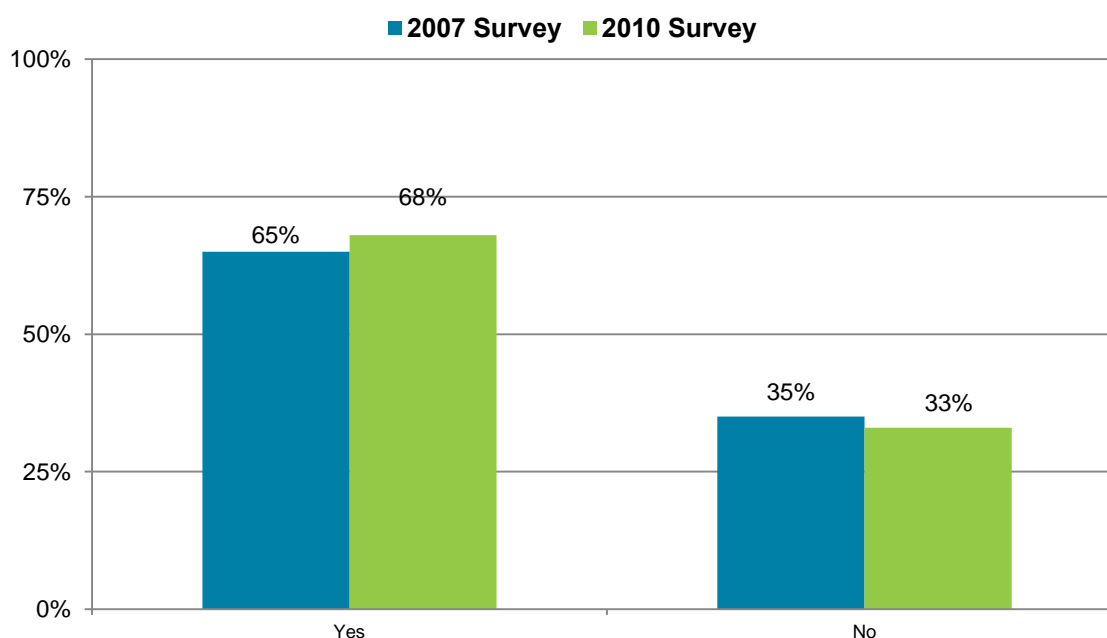
Table 20: Resident with Serious Memory Problem

Zone / Resident with Serious Memory Problem	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	63%	68%	67%	65%	64%	66%	65%	71%	71%	75%	65%	68%
No	37%	32%	33%	35%	36%	34%	35%	29%	29%	25%	35%	33%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2412	2776	1955	2180	1129	1257	674	744	600	500	6770	7457

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.2.6.   Resident Autonomy

- In both survey years, 37% of respondents reported the resident was capable of "usually" or "always" making decisions about their daily life.

Figure 14: Resident Autonomy

Q8. In the last 6 months, how often was your family member capable of making decisions about his or her own daily life, such as when to get up, what clothes to wear, and which activities to do?
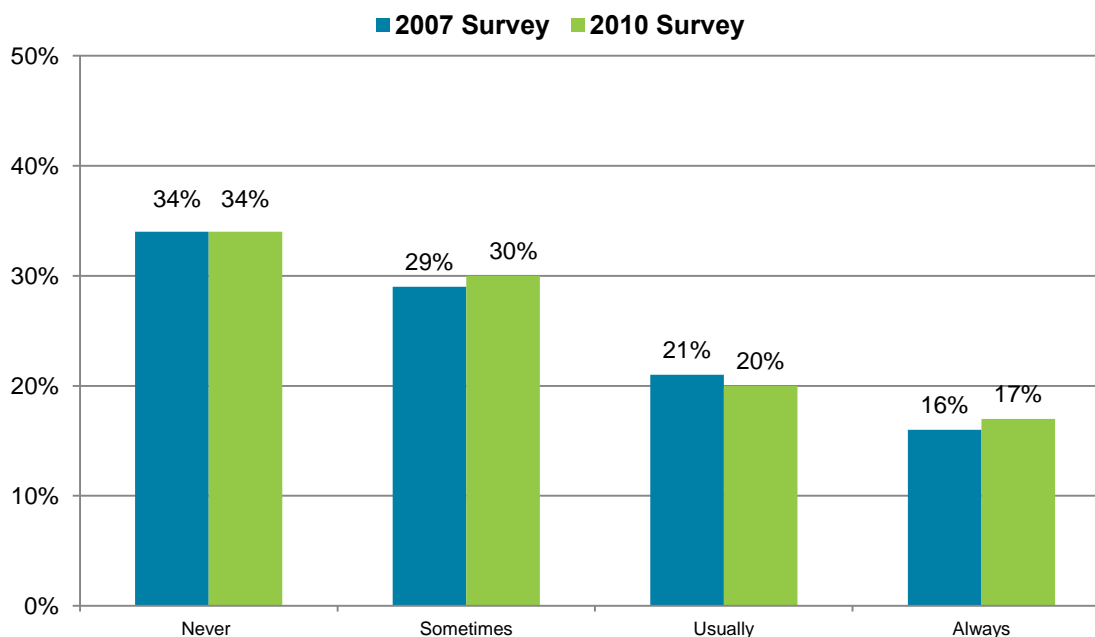
Table 21: Resident Autonomy

Zone / Resident Autonomy	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	30%	30%	37%	36%	34%	33%	34%	38%	37%	35%	34%	34%
Sometimes	27%	31%	27%	28%	29%	31%	32%	30%	32%	35%	29%	30%
Usually	23%	21%	20%	19%	22%	19%	20%	19%	20%	19%	21%	20%
Always	19%	18%	16%	17%	15%	17%	14%	13%	10%	12%	16%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2408	2766	1952	2184	1134	1258	672	732	591	500	6757	7440

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.2.7. Resident Gender

- Overall, 69% of residents were female (slightly higher than in 2007).

Figure 15: Resident Gender
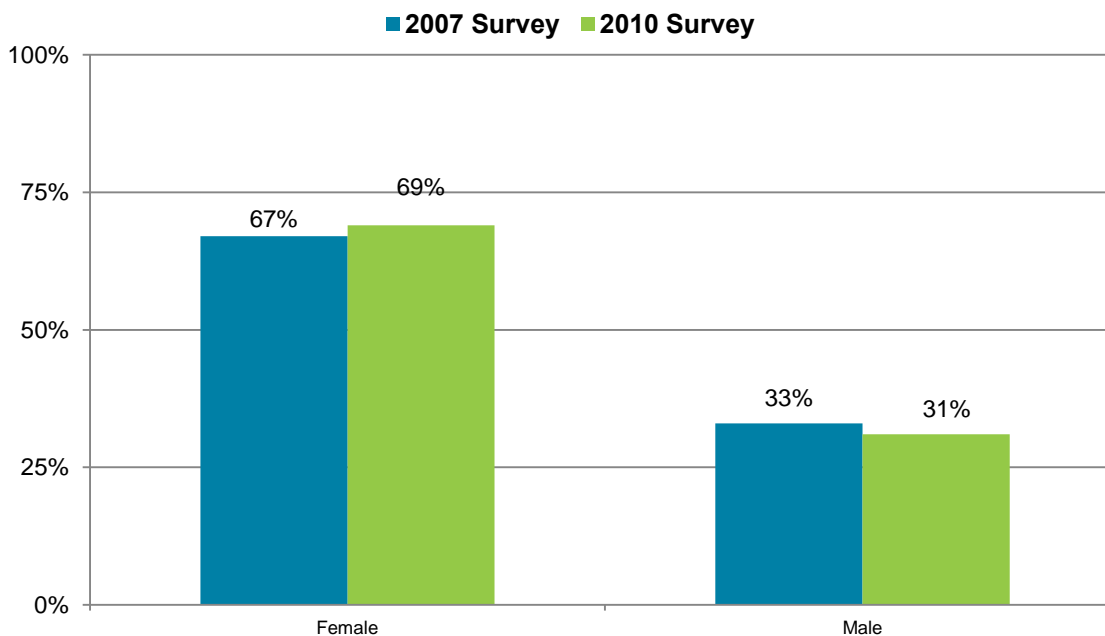
Table 22: Resident Gender

Zone / Resident Gender	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Female	69%	70%	68%	70%	64%	67%	66%	64%	68%	69%	67%	69%
Male	31%	30%	32%	30%	36%	33%	34%	36%	32%	31%	33%	31%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2518	2720	2028	2215	1202	1252	714	659	626	517	7088	7363

Note: Individual proportions may not sum to 100% due to rounding of decimals.

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3.2.8. Resident Characteristics and Differences in Global Care Rating

- Significantly higher global care ratings were given by respondents whose resident was expected to live in a nursing home permanently, had a serious memory problem or had a reduced autonomy level.

- Significantly higher ratings were obtained when the resident was male versus female.

Resident Characteristic	Significant Differences in Global Overall Care Rating
Q2. Whether resident is still in named nursing home or not	No significant difference
Q3. Discharged or Deceased	No significant difference
Q4. Time lived in the nursing home (less than 6 months or over 6 months)	No significant difference
Q5. Permanency in nursing home	Significantly **higher** for resident expected to live in nursing home permanently than for resident not expected to live in nursing home permanently
Q6. Resident in shared room	No significant difference
Q7. Resident with a serious memory problem	Significantly **higher** for resident with a serious memory problem than for resident with no serious memory problem
Q8. Resident autonomy	Significantly **higher** for resident with reduced autonomy level than for resident with higher autonomy level
Resident gender (administration data)	Significantly **higher** for male resident than for female resident

3.3. Forecasting Model for Global Overall Care Ratings

3.3.1. Care Rating Forecasting - Definition of Composite Variables

To simplify the interpretation of the data and enhance the reliability of the results, questions have been grouped into sets of items that are related and which are shown to address a common underlying construct or issue. Having demonstrated that these questions are sufficiently related to belong to a common scale or factor, composite variables for each factor have been calculated from the individual questions that belong in that factor.

The detailed analysis and methodology for identification, validation, and computation of composites are provided in **Section 3.12**. This analysis (and subsequent multivariate analysis) suggests that these variables are valid, reliable, and have significant predictive power with respect to the overall rating of care and other outcome variables.

The 21 individual questions from the survey in **Appendix A** used to compute the 4 composite variables are identified below:

- **Nursing home staffing, care of belongings and environment:** Can find a nurse or aide / how often there are enough nurses or aides / resident room looks and smells clean / resident looks and smells clean / public areas look and smell clean / resident medical belongings lost / resident clothes lost.

- **Kindness and respect:** Nurses and aides treated resident with respect / nurses and aides treated resident with kindness / nurses and aides really cared about resident / nurses and aides were rude to resident / nurses and aides were appropriate with difficult resident.

- **Providing information and encouraging family involvement:** Nurses and aides give respondent information about resident / nurses and aides explain things in understandable way / nurses and aides discourage respondent questions / respondent stops self from complaining / respondent involved in decisions about care / respondent given info about payments and expenses.

- **Meeting basic needs:** Resident helped because staff did not help or resident waited too long for help with eating / resident helped because staff did not help or resident waited too long for help with drinking / resident helped because staff did not help or resident waited too long for help with toileting.

The following composites are reported in the order of their strength of relationship to the overall care rating; beginning with the composite with the strongest relationship to and impact on the overall care rating.

3.4. Nursing Home Staffing, Care of Belongings and Environment

This composite has the strongest relationship to the overall care rating; therefore change efforts targeted at this dimension are predicted to have the greatest impact on the overall rating of care. A total of 7 questions are included in the *Nursing home staffing, care of belongings and environment* composite:

1. Can find a nurse or aide.
2. How often there are enough nurses or aides.
3. Resident's room looks and smells clean.
4. Resident looks and smells clean.
5. Public areas look and smell clean.
6. Resident's medical belongings lost.
7. Resident's clothes lost.

Additional related items that are reported here but are not included in the composite calculation:

8. Noise level around resident's room acceptable to respondent.
9. Able to find a place to talk in private.

Details about each attribute are reported in this section. The information provided is for the entire survey sample and the five AHS zones.

3.4.1. Ease of Finding a Nurse or Aide

- In both survey years, 86% of respondents tried to find a nurse or aide during any of their visits, in the last 6 months.

Table 23: Respondents Who Tried to Find a Nurse or Aide in Last Six Months

Zone / Respondent Who Tried to Find a Nurse or Aide in Last Six Months	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	89%	89%	88%	87%	83%	83%	78%	79%	85%	86%	86%	86%
No	11%	11%	12%	13%	17%	17%	22%	21%	15%	14%	14%	14%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2390	2756	1939	2184	1121	1264	675	724	586	502	6711	7430

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- As shown in **Table 24**, significantly more respondents in 2010 said they were able to find a nurse or aide when they wanted one compared to 2007. This also applies to the Calgary Zone.

Figure 16: Ease of Finding Nurse or Aide

Q11. In the last 6 months, how often were you able to find a nurse or aide when you wanted one?

■ 2007 Survey ■ 2010 Survey

	Never	Sometimes	Usually	Always
2007 Survey	0%	16%	44%	39%
2010 Survey	1%	13%	43%	43%
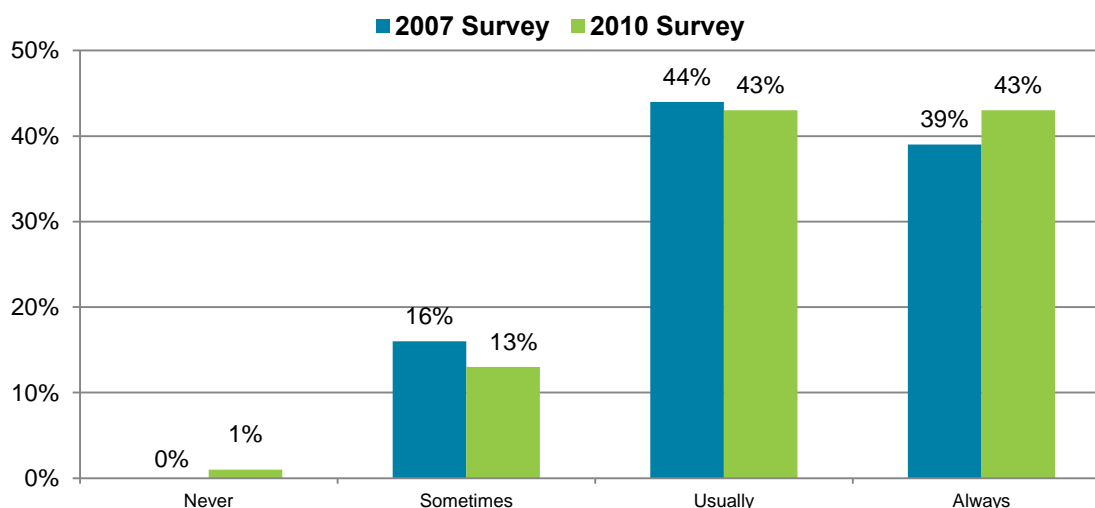
Table 24: Ease of Finding Nurse or Aide

Zone / Able to Find a Nurse or Aide	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010↑
Never	0%	1%	1%	1%	0%	0%	0%	0%	0%	1%	0%	1%
Sometimes	17%	13%	19%	16%	13%	12%	11%	10%	12%	7%	16%	13%
Usually	47%	43%	46%	46%	40%	41%	38%	38%	42%	44%	44%	43%
Always	36%	43%	34%	37%	47%	47%	50%	52%	46%	48%	39%	43%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2090	2422	1675	1882	923	1038	517	566	496	429	5701	6337

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference; p < .001*

3.4.2. Perception of Staffing Levels

- In 2010, significantly more respondents felt there were enough nurses and aides, compared to 2007. Significant increases were seen in the Calgary, Edmonton and Central Zones.

Figure 17: Perception of Staffing Levels

Q48. In the last 6 months, how often did you feel that there were enough nurses and aides in the nursing home?
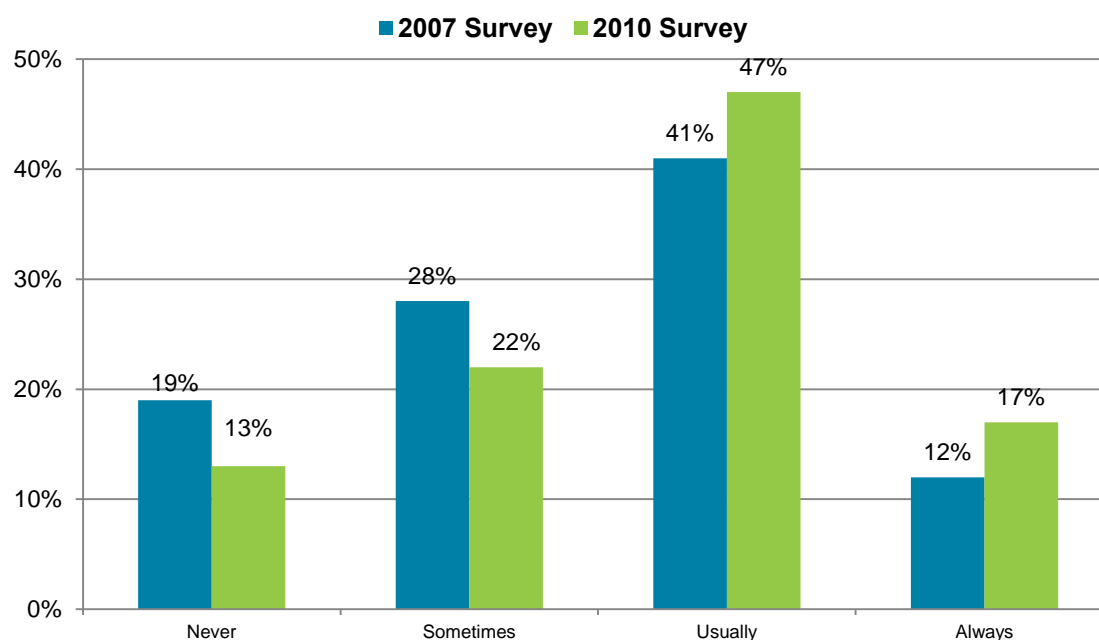
Table 25: Perceptions of Staffing Levels

Zone / Enough Nurses and Aides in Nursing Home	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010↑	2007	2010↑	2007	2010	2007	2010	2007	2010↑
Never	18%	12%	24%	18%	18%	12%	15%	10%	14%	10%	19%	13%
Sometimes	28%	20%	31%	26%	25%	22%	23%	21%	25%	21%	28%	22%
Usually	42%	50%	37%	43%	42%	46%	44%	49%	45%	48%	41%	47%
Always	12%	18%	8%	13%	16%	20%	18%	20%	16%	21%	12%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2343	2711	1915	2163	1100	1244	655	707	578	490	6591	7315

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference; p < .001

3.4.3. Resident's Room Looks and Smells Clean

- In 2010, significantly more respondents thought that resident rooms looked and smelled clean compared to 2007. At the zone level, significant increases were seen in the Edmonton and Central Zones.

Figure 18: Resident's Room Looks and Smells Clean

Q30. In the last 6 months, how often did your family member's room look and smell clean?
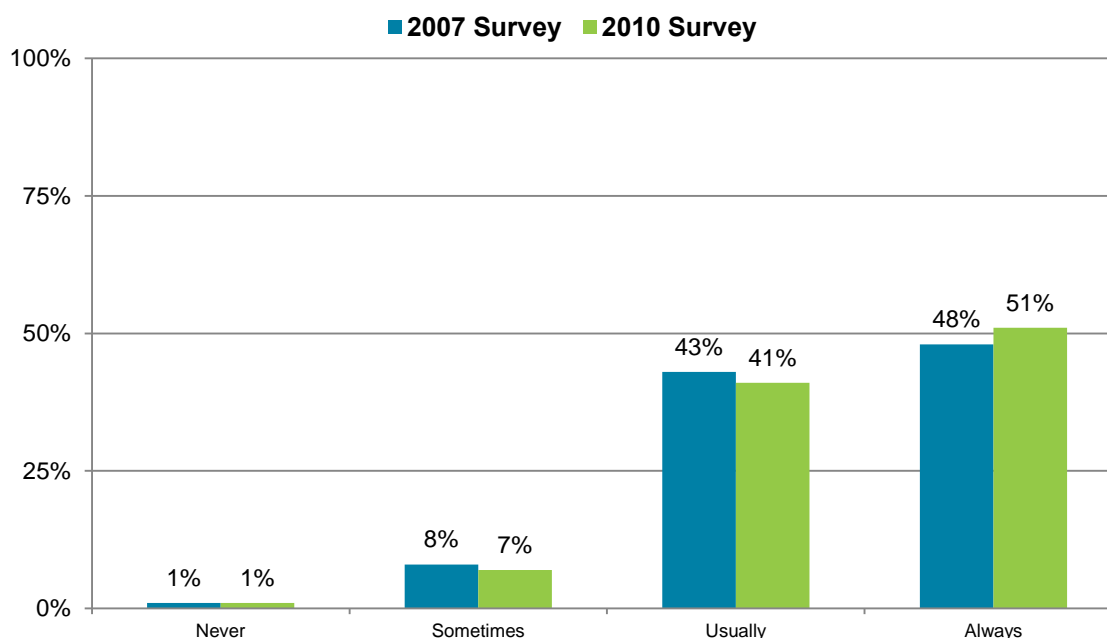
Table 26: Resident's Room Looks and Smells Clean

Zone / Resident's Room Looks and Smells Clean	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	**2010**	**2007**	**2010↑**	**2007**	**2010↑**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010↑**
Never	2%	2%	2%	1%	1%	1%	1%	0%	0%	0%	1%	1%
Sometimes	12%	10%	9%	7%	6%	4%	4%	3%	4%	4%	8%	7%
Usually	49%	45%	47%	45%	34%	31%	27%	32%	38%	39%	43%	41%
Always	38%	43%	42%	47%	59%	65%	68%	64%	58%	57%	48%	51%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2392	2762	1940	2193	1126	1269	676	727	592	498	6726	7449

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference; p < .001

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3.4.4. Resident Looks and Smells Clean

- According to respondents, residents looked and smelled clean as often in 2010 as they did in 2007, except for the Edmonton Zone, which saw a significant increase in 2010.

Figure 19: Resident Looks and Smells Clean

Q22. In the last 6 months, how often did your family member look and smell clean?
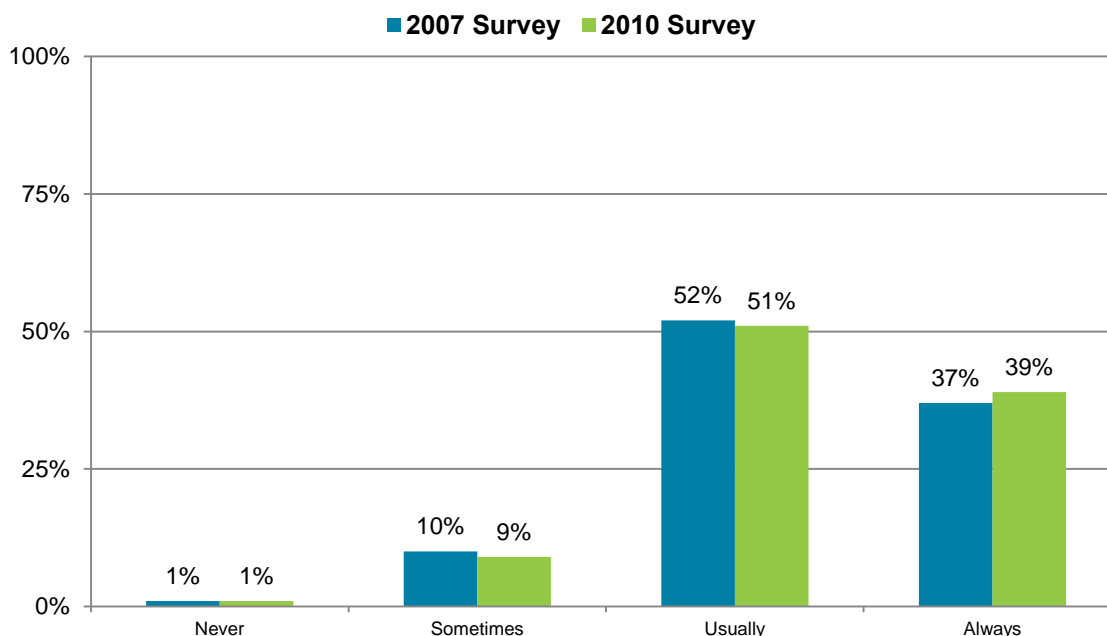
Table 27: Resident Looks and Smells Clean

Zone / Resident Looks and Smells Clean	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010
Never	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Sometimes	12%	11%	11%	9%	7%	7%	7%	5%	7%	6%	10%	9%
Usually	53%	53%	55%	53%	48%	46%	47%	50%	46%	48%	52%	51%
Always	34%	34%	32%	37%	45%	47%	45%	44%	46%	45%	37%	39%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2379	2749	1931	2178	1119	1267	669	724	586	498	6684	7416

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference; p < .001*

3.4.5. Public Areas Look and Smell Clean

- According to 59% of respondents, public areas "always" looked and smelled clean; similar to 57% in 2007. The Edmonton Zone saw a significant increase from 2007.

Figure 20: Public Areas Look and Smell Clean

Q33. In the last 6 months, how often did the public areas of the nursing home look and smell clean?
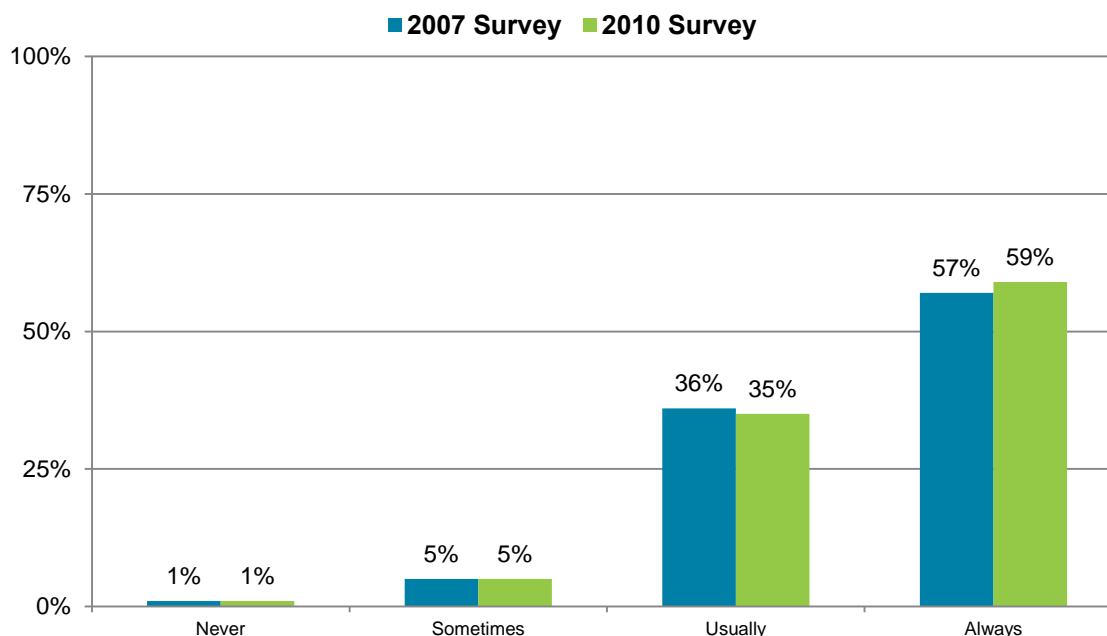
Table 28: Public Areas Look and Smell Clean

Zone / Public Areas Look and Smell Clean	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010
Never	1%	1%	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%
Sometimes	7%	7%	6%	4%	3%	3%	2%	2%	3%	2%	5%	5%
Usually	43%	40%	39%	38%	31%	25%	24%	27%	30%	35%	36%	35%
Always	50%	52%	54%	58%	66%	72%	74%	70%	67%	62%	57%	59%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2397	2759	1941	2190	1129	1266	679	727	590	497	6736	7439

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference; p < .001*

3.4.6. Resident's Medical Belongings Lost

- Overall, medical belongings were damaged or lost as frequently in 2010 as they were in 2007. Approximately one in three respondents (34%) stated that the resident's personal medical belongings had been damaged or lost "once" (20%) or "two or more times" (14%) in the previous 6 months.

- Similar results were obtained across all zones.

Figure 21: Resident's Medical Belongings Damaged or Lost

Q35. Personal medical belongings are things like hearing aids, eye-glasses, and dentures. In the last 6 months, how often were your family member's personal medical belongings damaged or lost? (reverse scoring)
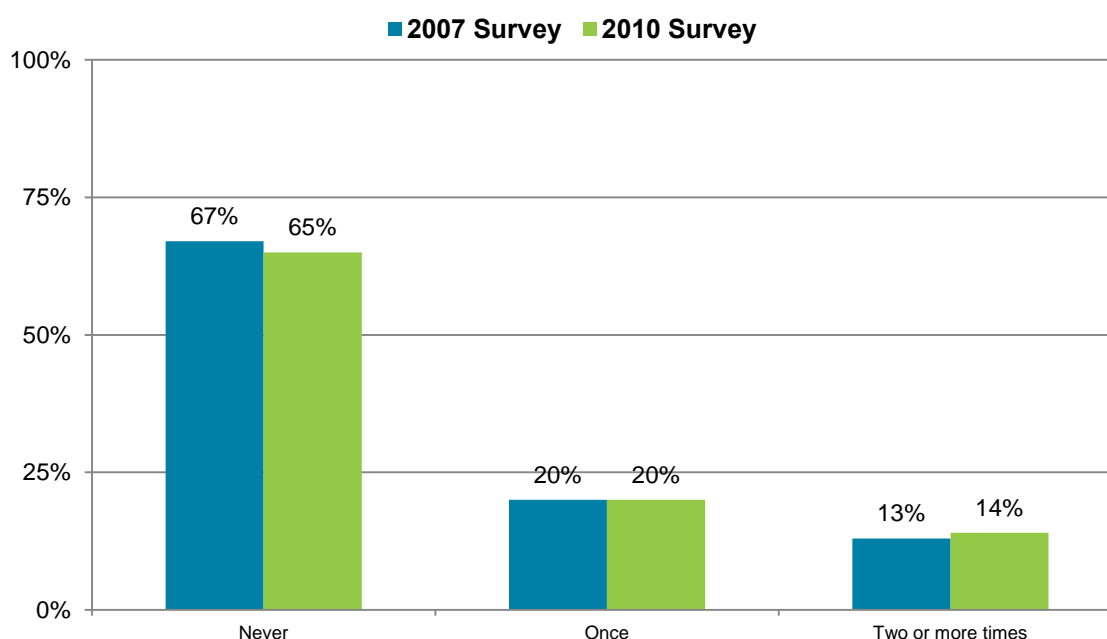
Table 29: Resident's Medical Belongings Damaged or Lost

Zone / Resident's Medical Belongings Damaged or Lost	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	63%	61%	68%	65%	70%	70%	70%	69%	67%	73%	67%	65%
Once	21%	21%	19%	21%	19%	19%	18%	20%	21%	18%	20%	20%
Two or more times	15%	18%	13%	15%	11%	10%	12%	11%	12%	9%	13%	14%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2351	2716	1901	2141	1099	1240	670	719	583	494	6604	7310

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.4.7. Resident's Clothes Lost

- 70% of respondents stated that the resident used the nursing home's laundry service for his or her clothes in the last 6 months; no change from 2007. Similar results were obtained across all zones.

Table 30: Use of Nursing Home Laundry Service

Zone / Use of Nursing Home Laundry Service	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	68%	69%	70%	69%	74%	74%	74%	76%	66%	65%	70%	70%
No	32%	31%	30%	31%	26%	26%	26%	24%	34%	35%	30%	30%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2384	2751	1931	2187	1109	1252	676	719	592	497	6692	7406

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- Overall, there is no significant difference in the frequency at which clothes were damaged or lost between the 2007 and 2010 surveys. More than half of the respondents (59%) indicated that clothes were damaged or lost "once or twice" or "three times or more" in the last 6 months.

Figure 22: Resident's Clothes Damaged or Lost

Q37. In the last 6 months, when your family member used the laundry service, how often were clothes damaged or lost? (reverse scoring)
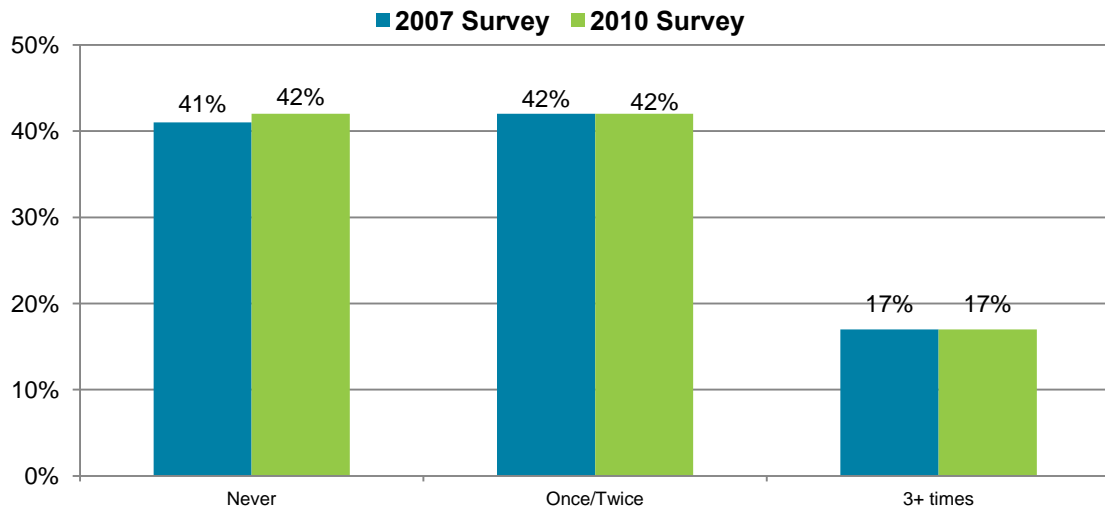
Table 31: Resident's Clothes Damaged or Lost

Zone / Resident's Clothes Damaged or Lost	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	33%	37%	43%	43%	43%	44%	49%	49%	49%	48%	41%	42%
Once/Twice	46%	43%	41%	42%	42%	40%	35%	38%	38%	41%	42%	42%
3+ times	20%	20%	16%	16%	14%	16%	16%	13%	13%	11%	17%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	1529	1802	1281	1424	766	873	470	513	370	311	4416	4923

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.4.8. Noise Level around Resident's Room

- There are no significant differences between survey years in how often noise levels around the resident's room were acceptable to the respondent. In 2010, 91% of respondents rated noise levels as usually or always acceptable.

Figure 23: Noise Level around Resident's Room

Q31. In the last 6 months, how often was the noise level around your family member's room acceptable to you?
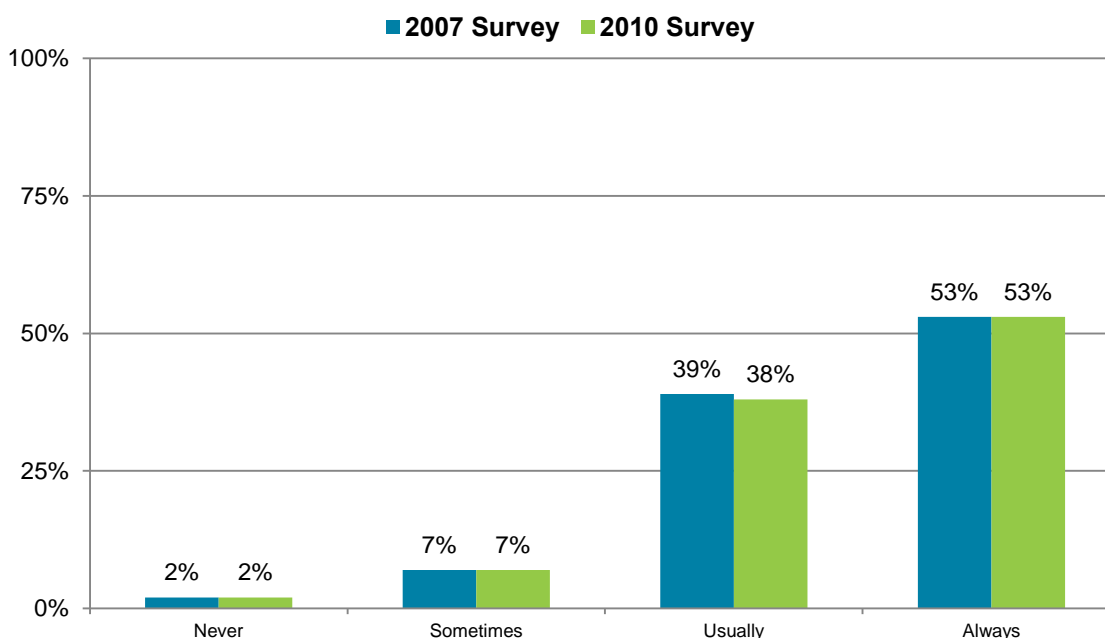
Table 32: Noise Level around Resident's Room

Zone / Noise Level Around Resident's Room	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	2%	2%	2%	2%	1%	1%	1%	1%	1%	2%	2%	2%
Sometimes	9%	9%	8%	7%	4%	5%	3%	4%	4%	4%	7%	7%
Usually	43%	42%	41%	41%	34%	32%	33%	30%	33%	34%	39%	38%
Always	46%	47%	50%	50%	61%	62%	63%	65%	63%	59%	53%	53%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2394	2752	1942	2193	1124	1266	676	727	591	499	6727	7437

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.4.9. Able to Find a Place to Talk in Private

- In 2010, 93% of respondents indicated they could "usually" or "always" find a place to talk in private, similar to 2007. Significantly fewer respondents from the Calgary Zone were able to find a place to talk in private in 2010 compared to 2007.

Figure 24: Able to Find a Place to Talk in Private

Q32. In the last 6 months, how often were you able to find a place to talk to your family member in private?
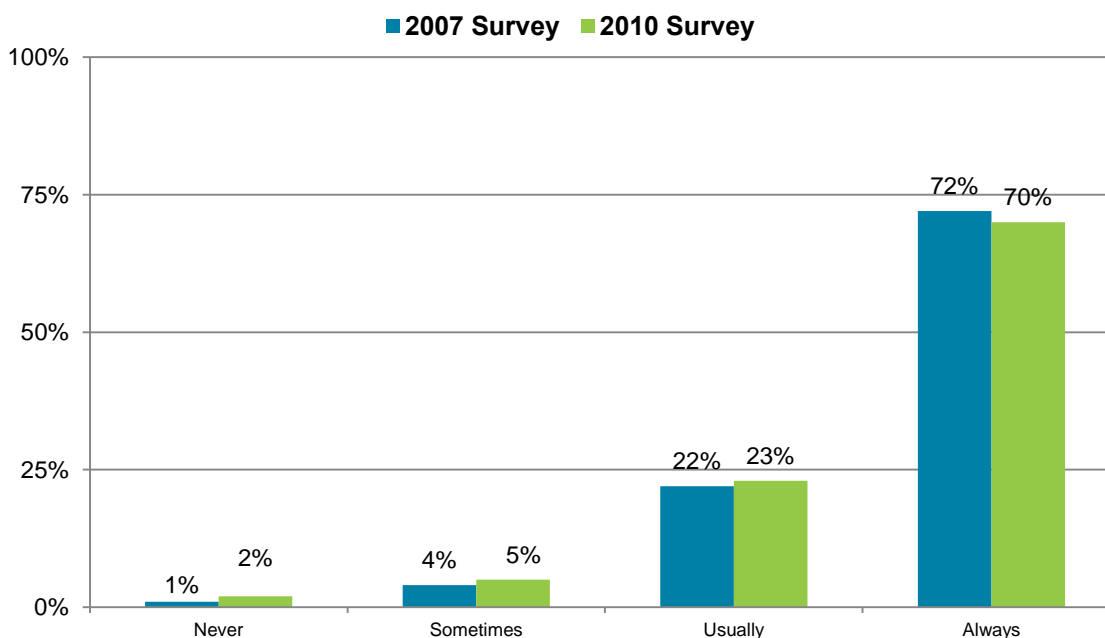
Table 33: Able to Find a Place to Talk in Private

Zone / Able to Find a Place to Talk in Private	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↓	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	2%	2%	1%	2%	1%	1%	2%	2%	1%	1%	1%	2%
Sometimes	5%	7%	5%	5%	3%	3%	3%	3%	4%	3%	4%	5%
Usually	24%	27%	22%	22%	21%	18%	20%	20%	20%	19%	22%	23%
Always	68%	64%	72%	71%	76%	78%	75%	75%	75%	76%	72%	70%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2370	2742	1929	2173	1111	1259	674	716	582	496	6666	7386

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference; p < .001

3.5. Kindness and Respect

This composite has the second strongest relationship to the overall care rating and includes the following 5 questions:

1. Nurses and aides treat resident with courtesy and respect.
2. Nurses and aides treat resident with kindness.
3. Nurses and aides really care about resident.
4. Nurses and aides were rude to resident.
5. Nurses and aides were appropriate with difficult resident.

Additional related items that are reported here but are not included in the composite calculation:

6. Protection of resident's physical privacy.
7. Respondents treated with courtesy and respect.

Details about each attribute are reported in this section. The information provided is for the entire survey sample and is reported by the five AHS zones.

3.5.1. Nurses and Aides Treat Resident with Courtesy and Respect

- Overall, scores are similar between survey years. In 2010, 68% of respondents reported they "always" saw nurses and aides treat residents with courtesy and respect over the last 6 months, while 27% reported this was "usually" what they observe.

Figure 25: Nurses and Aides Treat Resident with Courtesy and Respect

Q12. In the last 6 months, how often did you see the nurses and aides treat your family member with courtesy and respect?
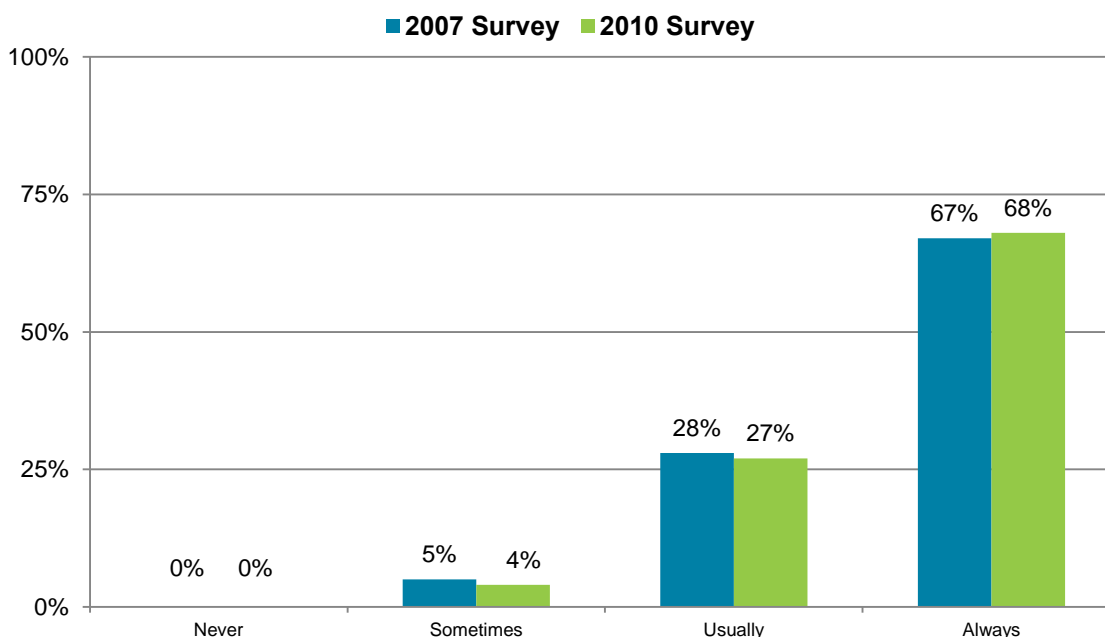
Table 34: Nurses and Aides Treat Resident with Courtesy and Respect

Zone / Nurses and Aides Treat Resident with Courtesy and Respect	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	1%	1%	1%	0%	0%	0%	0%	1%	0%	1%	0%	0%
Sometimes	6%	5%	5%	5%	3%	3%	3%	3%	3%	3%	5%	4%
Usually	31%	29%	29%	29%	27%	24%	23%	24%	22%	24%	28%	27%
Always	62%	66%	65%	65%	70%	73%	74%	73%	75%	72%	67%	68%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2403	2765	1944	2209	1128	1274	676	729	593	505	6744	7482

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.5.2. Nurses and Aides Treat Resident with Kindness

- In 2010, 63% of respondents "always" saw nurses and aides treat the resident with kindness over the last 6 months, while 31% reported this was "usually" what they observed, similar to 2007.

- In the Calgary Zone, significantly more respondents saw residents treated with kindness in 2010 compared to 2007.

Figure 26: Nurses and Aides Treat Resident with Kindness

Q13. In the last 6 months, how often did you see the nurses and aides treat your family member with kindness?
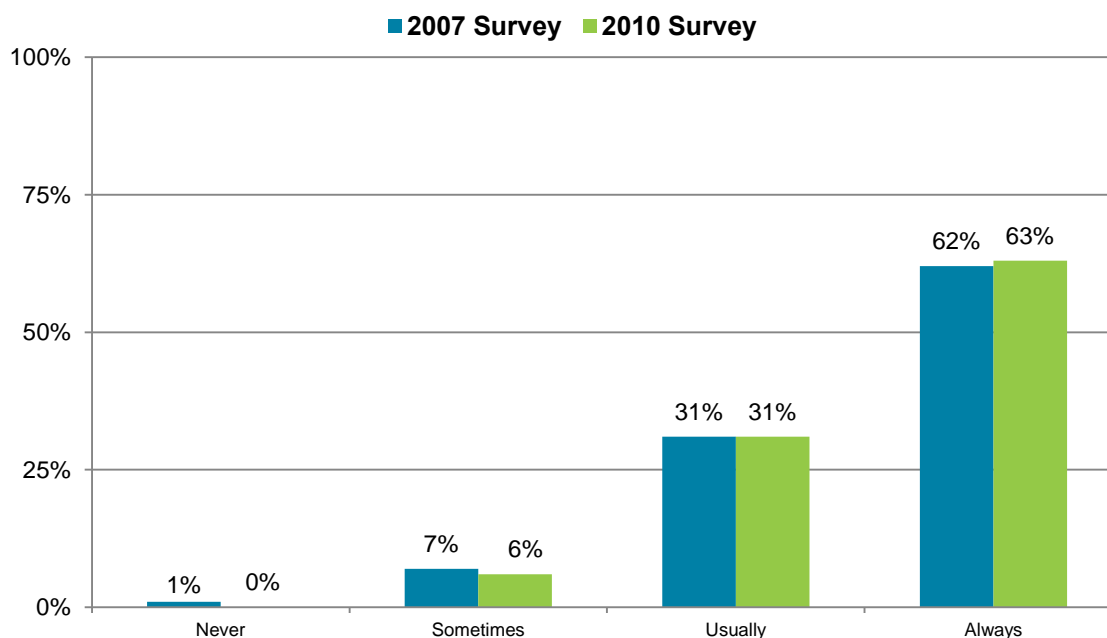
Table 35: Nurses and Aides Treat Resident with Kindness

Zone / Nurses and Aides Treat Resident with Kindness	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Sometimes	9%	7%	7%	6%	4%	4%	4%	3%	3%	4%	7%	6%
Usually	34%	32%	31%	33%	27%	27%	25%	27%	27%	27%	31%	31%
Always	56%	60%	61%	61%	68%	68%	71%	69%	70%	69%	62%	63%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2401	2758	1947	2207	1124	1274	679	731	594	505	6745	7475

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference; p < .001

3.5.3. Nurses and Aides Really Cared about Resident

- Overall, 50% of respondents "always" felt that nurses and aides really cared about the resident over the last 6 months, while 38% reported this was "usually" the case. The Calgary Zone saw significantly higher results in 2010 compared to 2007.

Figure 27: Nurses and Aides Really Cared about Resident

Q14. In the last 6 months, how often did you feel that the nurses and aides really cared about your family member?
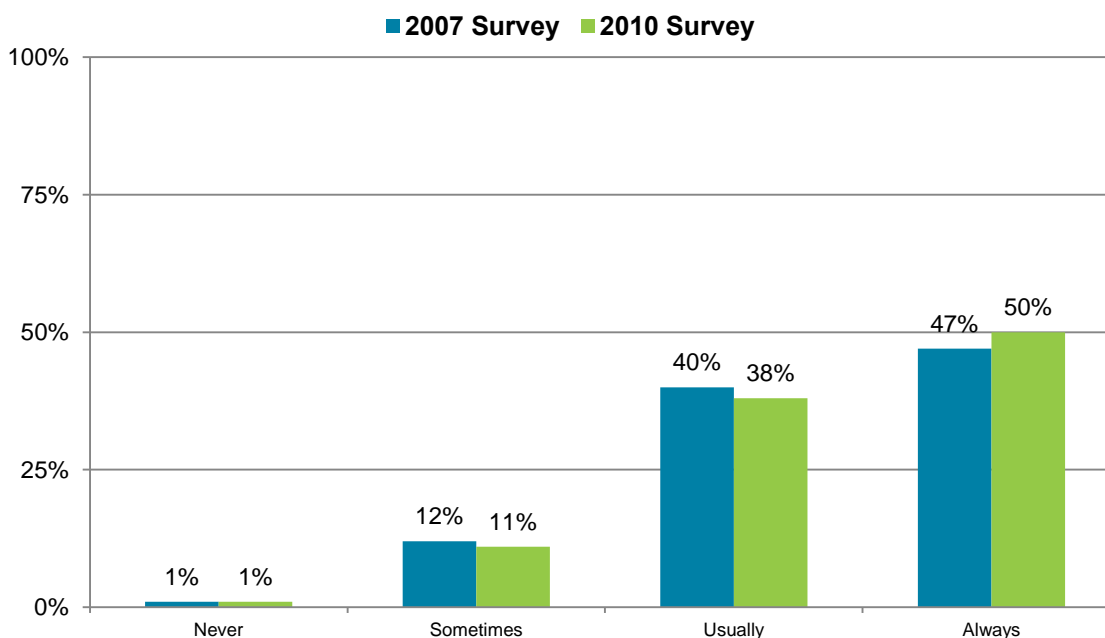
Table 36: Nurses and Aides Really Cared about Resident

Zone / Nurses and Aides Really Cared about Resident	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	**2010↑**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**
Never	2%	2%	1%	1%	0%	1%	1%	0%	0%	1%	1%	1%
Sometimes	15%	13%	13%	12%	9%	8%	8%	8%	8%	7%	12%	11%
Usually	43%	38%	41%	42%	38%	36%	35%	34%	36%	36%	40%	38%
Always	40%	47%	45%	45%	53%	56%	57%	57%	56%	57%	47%	50%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2386	2755	1944	2201	1126	1266	679	729	595	503	6730	7454

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference; p < .001

3.5.4. Nurses and Aides Were Rude to Resident

- Overall, 14% of respondents saw nurses and aides being rude to their family member or any other resident over the last 6 months. There were no significant differences between 2007 and 2010.

Figure 28: Nurses and Aides Were Rude to Resident

Q15. In the last 6 months, did you ever see any nurses or aides be rude to your family member or any other resident? (reverse scoring)
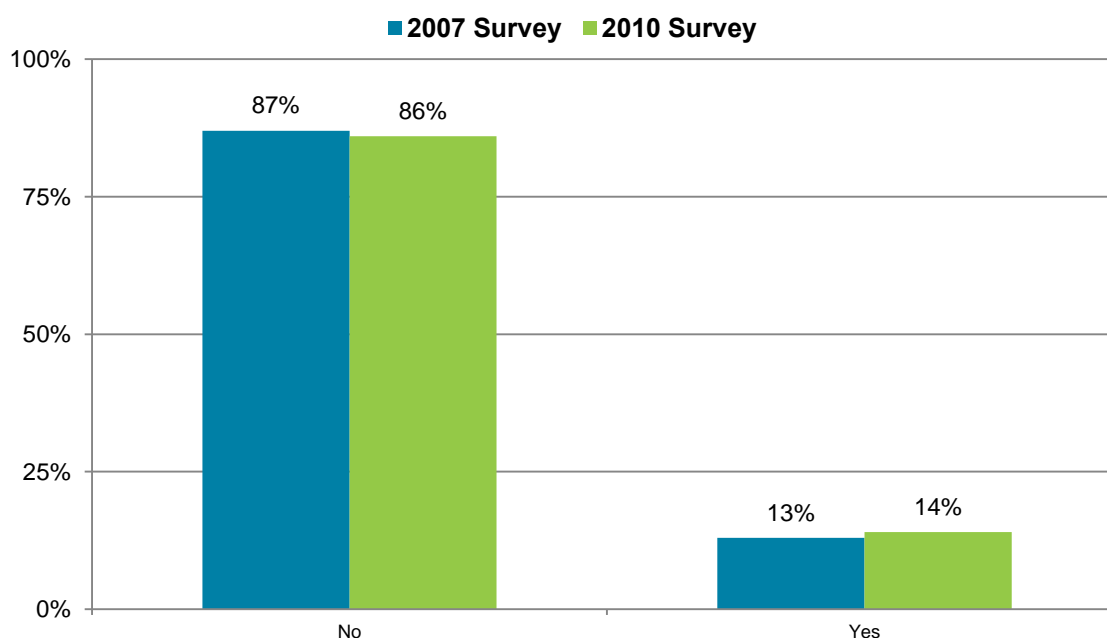
Table 37: Nurses and Aides Were Rude to Resident

Zone / Nurses and Aides Were Rude to Resident	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	85%	85%	87%	86%	90%	88%	89%	87%	87%	86%	87%	86%
Yes	15%	15%	13%	14%	10%	12%	11%	13%	13%	14%	13%	14%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2388	2743	1925	2195	1115	1256	674	714	591	496	6693	7404

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.5.5. Nurses and Aides Were Appropriate with Difficult Residents

- Overall, in 2010, 35% of respondents saw residents, including their family member, behave in a way that made it hard for nurses or aides; increased from 32% in 2007.

Table 38: Saw Residents Behave in a Way That Made it Hard for Nurses or Aides

Zone / Saw Residents Behave in a Way That Made it Hard for Nurses or Aides	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	34%	39%	33%	35%	27%	29%	28%	30%	31%	31%	32%	35%
No	66%	61%	67%	65%	73%	71%	72%	70%	69%	69%	68%	65%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2375	2727	1922	2174	1110	1245	670	714	579	492	6656	7352

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- In 2010, 92% of those respondents that saw resident(s) behave in a way that made it hard for nurses or aides in the last 6 months reported that nurses and aides "always" or "usually" handled these situations appropriately; up from 90% in 2007.

- Significantly more respondents from the Calgary Zone indicated that nurses and aides handled these situations appropriately compared to 2007.

Figure 29: Nurses and Aides Were Appropriate with Difficult Residents

Q24. In the last 6 months, how often did the nurses and aides handle this situation in any way you felt was appropriate?
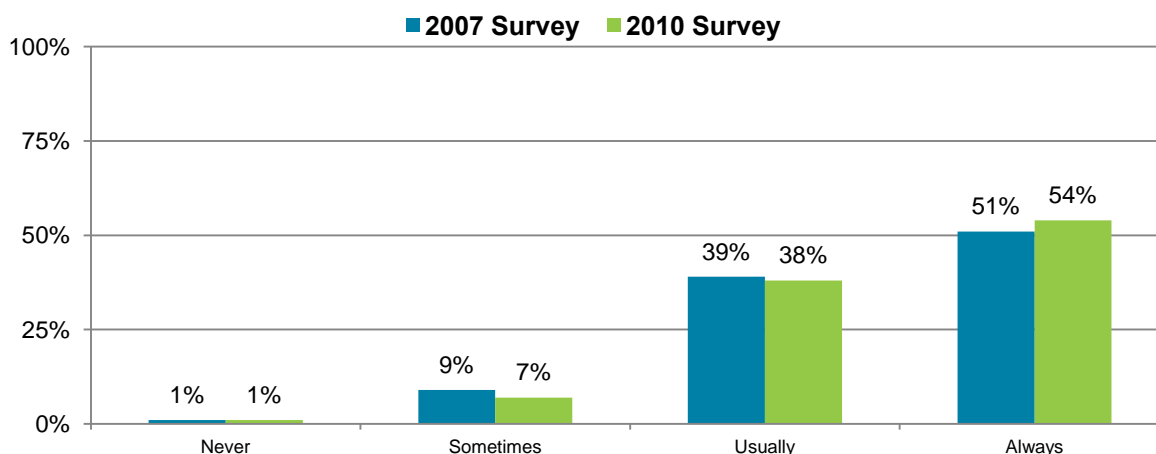
Table 39: Nurses and Aides Were Appropriate with Difficult Residents

Zone / Nurses and Aides Were Appropriate with Difficult Residents	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	1%	1%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%
Sometimes	11%	6%	9%	8%	7%	5%	9%	7%	6%	6%	9%	7%
Usually	42%	39%	36%	40%	37%	34%	41%	33%	38%	37%	39%	38%
Always	46%	53%	53%	51%	55%	60%	50%	60%	55%	57%	51%	54%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	801	1051	630	748	292	346	185	213	177	152	2085	2510

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference; p < .001*

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3.5.6. Protection of Resident's Physical Privacy

- Overall, in both survey years, 6% of respondents saw nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area. The Edmonton Zone saw a significant decrease in performance compared to 2007.

Figure 30: Protection of Residents Physical Privacy

Q34. In the last 6 months, did you ever see the nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area? (reverse scoring)
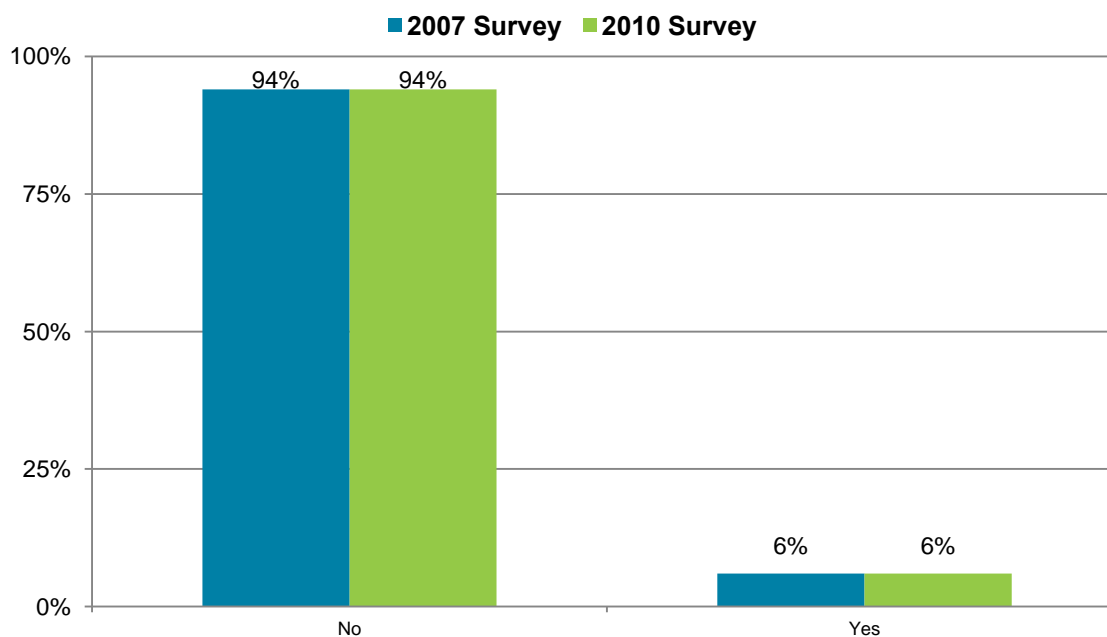
Table 40: Nurses and Aides Failed to Protect Resident's Privacy

Zone / Nurses and Aides Failed to Protect Resident's Privacy	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010↓	2007	2010	2007	2010	2007	2010	2007	2010
No	93%	94%	95%	94%	97%	96%	96%	96%	95%	95%	94%	94%
Yes	7%	6%	5%	7%	4%	4%	4%	5%	6%	5%	6%	6%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2362	2724	1930	2161	1105	1246	673	713	585	488	6655	7332

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference (from a Two Proportion Z-Test)

3.5.7. Respondent Treated with Courtesy & Respect by Nurses and Aides

- No significant differences were seen between 2007 and 2010. In 2010, most respondents (76%) reported they were "always" treated with courtesy and respect by nurses and aides.

Figure 31: Respondent Treated with Courtesy & Respect by Nurses and Aides

Q25. In the last 6 months, how often did the nurses and aides treat you with courtesy and respect?
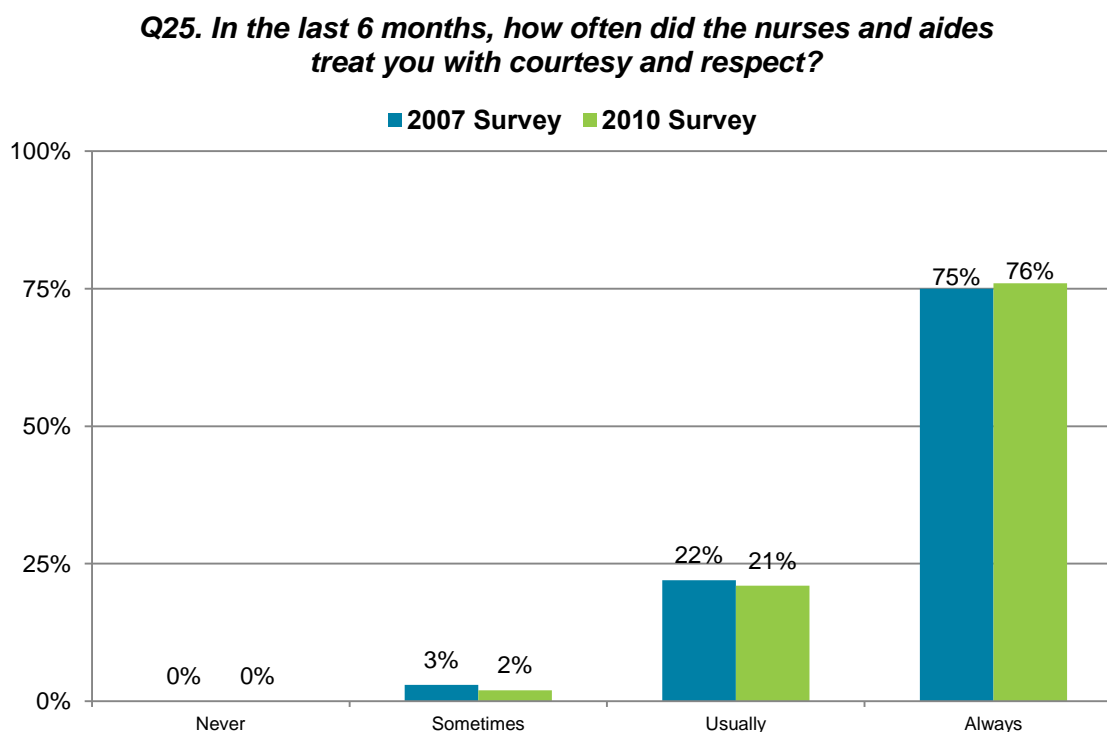
Table 41: Respondent Treated with Courtesy & Respect by Nurses and Aides

Zone / Treated with Courtesy and Respect by Nurses and Aides	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sometimes	3%	3%	3%	2%	2%	2%	3%	1%	2%	1%	3%	2%
Usually	25%	22%	22%	23%	19%	18%	17%	21%	18%	20%	22%	21%
Always	72%	75%	74%	74%	79%	80%	80%	78%	80%	78%	75%	76%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2395	2762	1936	2195	1125	1267	678	729	589	498	6723	7451

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.6. Providing Information and Encouraging Family Involvement

This composite has the third strongest relationship to the overall care rating and includes the following 6 questions:

1. Nurses and aides give respondent information about resident.
2. Nurses and aides explain things in understandable way.
3. Nurses and aides discourage respondent questions.
4. Respondent stops self from complaining.
5. Respondent involved in decisions about care.
6. Respondent given info about payments and expenses as soon as they wanted.

Additional related items that are reported here but are not included in the composite calculation:

7. Participated in care conference in last 12 months.
8. Given opportunity to participate in care conference in last 12 months.
9. Unhappy with care at some time in past 6 months.
10. Talked with nursing home staff about concerns
11. Satisfied with the way these concerns were handled.
12. Asked for information about payments or expenses.

Details about each attribute are reported in this section. The information provided is for the entire survey sample and the five AHS zones.

3.6.1. Nurses and Aides Give Respondent Information about Resident

- In 2010, 89% of respondents sought information about the resident from a nurse or aide. Similar results were obtained in 2007.

Table 42: Seeking Information about Resident

Zone / Seeking Information About Resident	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	90%	90%	89%	88%	85%	87%	85%	86%	85%	88%	88%	89%
No	10%	10%	11%	12%	15%	13%	15%	14%	15%	12%	12%	11%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2372	2748	1934	2183	1120	1256	675	719	583	497	6684	7403

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- In 2010, 48% of those respondents that sought information about the resident reported that they "always" received the required information as soon as they wanted; 40% reported this was "usually" the practice. No significant differences were reported between 2010 and 2007.

Figure 32: Nurses and Aides Responsiveness in Providing Information

Q27. In the last 6 months, how often did you get this information as soon as you wanted?
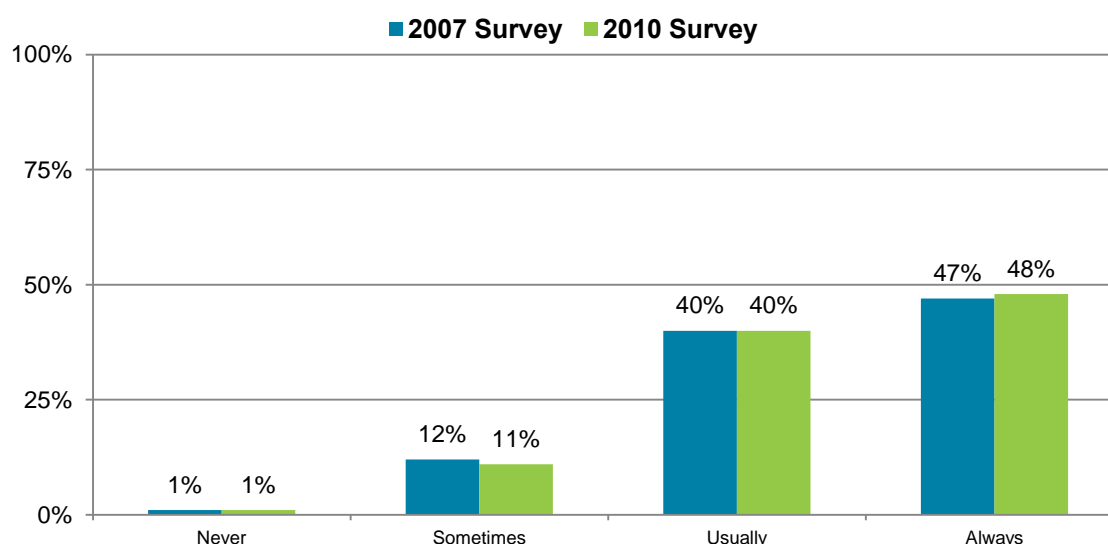
Table 43: Nurses and Aides Responsiveness in Providing Information

Zone / Nurses and Aides Responsiveness in Providing Information	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	2%	1%	2%	1%	1%	1%	1%	2%	1%	1%	1%	1%
Sometimes	14%	13%	13%	12%	9%	8%	5%	8%	9%	6%	12%	11%
Usually	42%	41%	44%	43%	35%	37%	36%	34%	33%	40%	40%	40%
Always	42%	45%	41%	44%	55%	54%	57%	56%	57%	54%	47%	48%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2107	2440	1700	1899	937	1080	565	613	490	429	5799	6461

Note: Individual proportions may not sum to 100% due to rounding of decimals.

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3.6.2. Nurses and Aides Explain Things in Understandable Way

- Overall, no significant differences were reported between 2007 and 2010. In 2010, 64% of respondents reported that the nurses and aides "always" explained things in a way that was easy for them to understand; 29% said this was "usually" the practice.

Figure 33: Nurses and Aides Explain Things in Understandable Way

Q28. In the last 6 months, how often did the nurses and aides explain things in a way that was easy for you to understand?
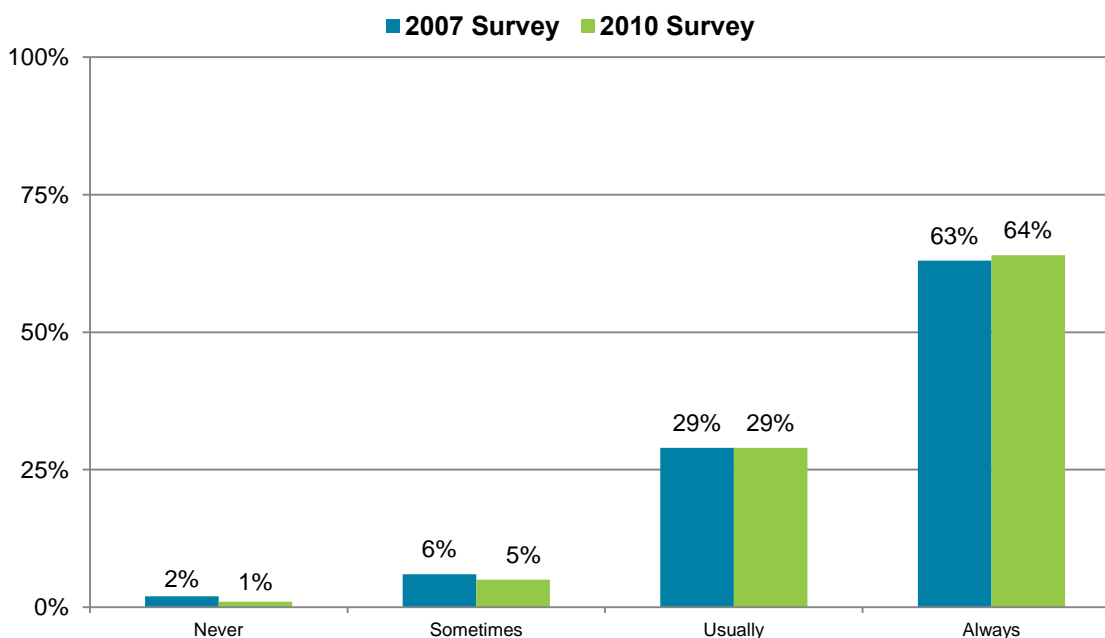
Table 44: Nurses and Aides Explain Things in Understandable Way

Zone / Nurses and Aides Explain Things in Understandable Way	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	2%	1%	2%	2%	1%	1%	2%	1%	1%	1%	2%	1%
Sometimes	7%	6%	7%	6%	5%	4%	4%	4%	5%	5%	6%	5%
Usually	32%	32%	31%	31%	26%	26%	23%	25%	24%	22%	29%	29%
Always	58%	61%	61%	61%	69%	70%	71%	70%	70%	71%	63%	64%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2361	2738	1916	2166	1109	1255	674	723	582	497	6642	7379

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.6.3. Nurses and Aides Discourage Respondent Questions

- In 2010, 3% of respondents reported that nurses and aides discouraged them from asking questions about the resident. No significant differences were reported between 2007 and 2010.

Figure 34: Nurses and Aides Discourage Respondent Questions

Q29. In the last 6 months, did the nurses and aides ever try to discourage you from asking questions about your family member? (reverse scoring)
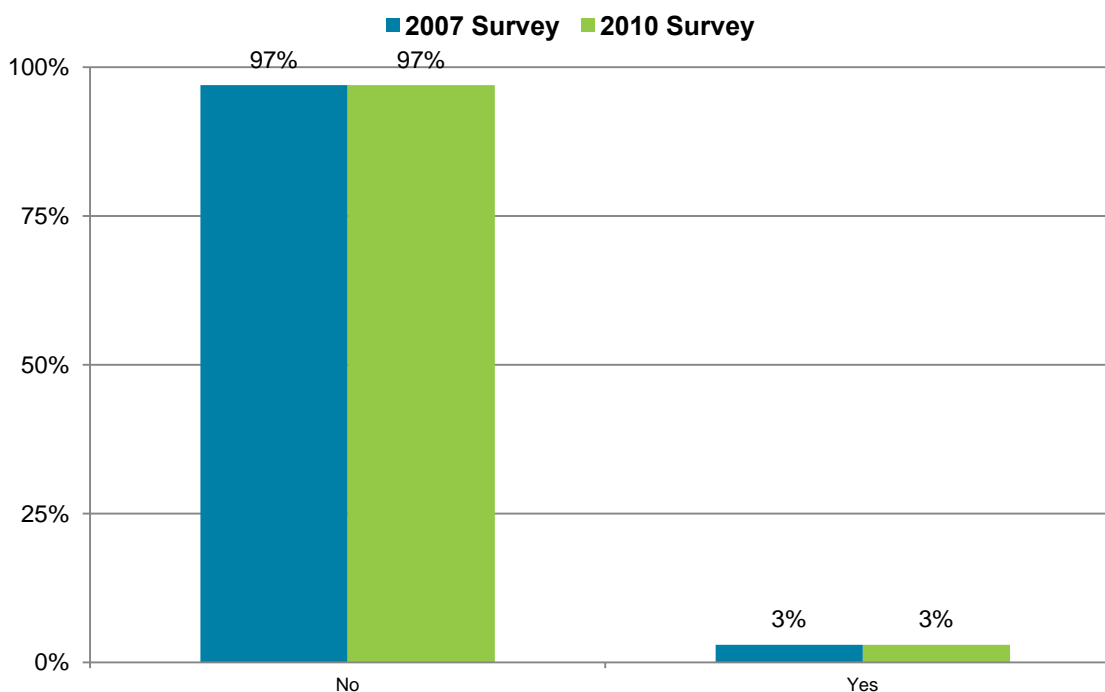
Table 45: Nurses and Aides Discourage Respondent Questions

Zone / Nurses and Aides Discourage Respondent Questions	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	96%	97%	96%	97%	97%	98%	98%	98%	98%	98%	97%	97%
Yes	4%	3%	4%	3%	3%	3%	2%	3%	2%	2%	3%	3%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2370	2740	1927	2185	1123	1261	675	720	587	498	6682	7404

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.6.4. Respondents Stopped Themselves from Complaining

- Approximately 33% of the respondents that were unhappy with the care the resident received at the nursing home in the last 6 months, stopped themselves from talking to any nursing home staff about their concerns because they thought the staff would take it out on the resident. No significant differences were reported between 2007 and 2010.

Figure 35: Respondents Stopped Themselves from Complaining

Q41. In the last 6 months, did you ever stop yourself from talking to any nursing home staff about your concerns because you thought they would take it out on your family member? (reverse scoring)
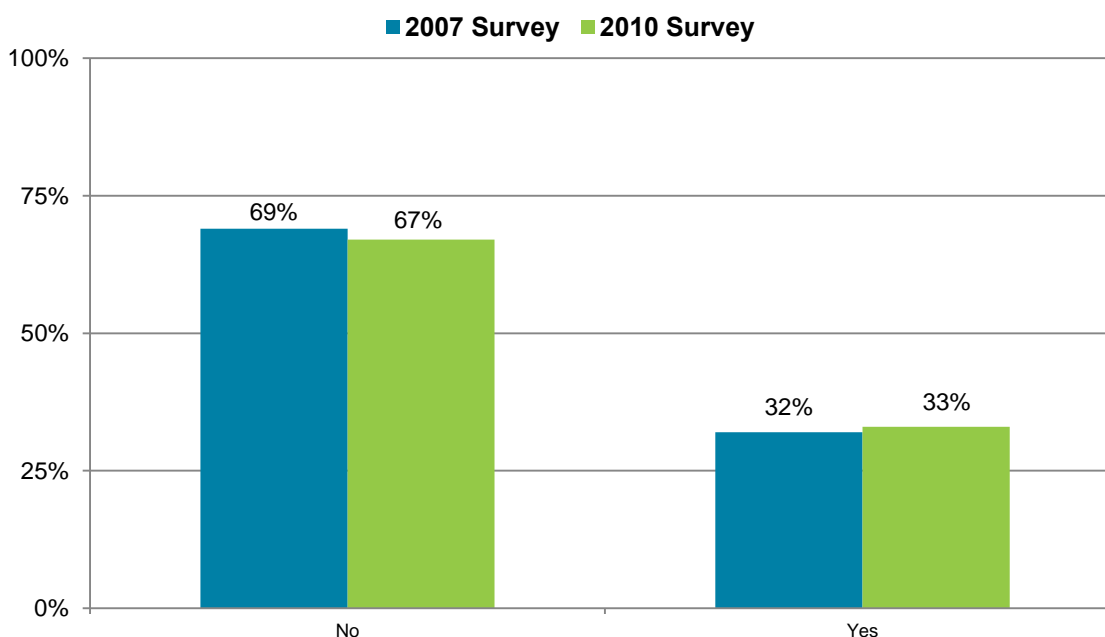
Table 46: Respondents Stopped Themselves from Complaining

Zone / Respondents Stopped Themselves from Complaining	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	71%	67%	68%	68%	64%	66%	63%	67%	71%	68%	69%	67%
Yes	29%	33%	32%	32%	36%	35%	38%	33%	29%	32%	32%	33%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	882	883	688	719	284	293	144	164	145	124	2143	2183

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.6.5. Respondent Involvement in Decisions about Care

- In 2010, 83% of respondents reported they were involved in decisions about the resident's care, up from 80% in 2007.

Table 47: Respondent Involvement in Decisions about Care

Zone / Respondent Involvement in Decisions about Care	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	81%	85%	78%	82%	82%	82%	79%	79%	81%	84%	80%	83%
No	19%	15%	22%	18%	19%	18%	21%	21%	20%	16%	20%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2355	2738	1914	2161	1100	1235	663	714	585	487	6617	7335

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- In 2010, 57% of respondents felt they were "always" involved in decisions about their family member's care as much as they wanted and 34% said this was "usually" the situation. Overall, results are similar between survey years and across AHS zones.

Figure 36: Respondent Involvement in Decisions about Care

Q43. In the last 6 months, how often were you involved as much as you wanted to be in the decisions about your family member's care?
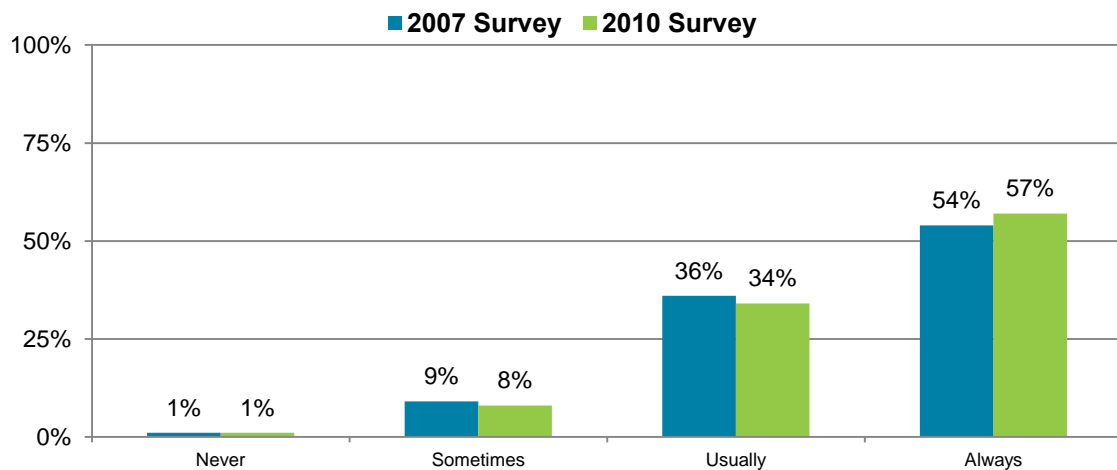
Table 48: Respondent Involvement in Decisions about Care

Zone / Respondent Involvement in Decisions about Care	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%
Sometimes	10%	9%	10%	9%	8%	7%	9%	8%	6%	7%	9%	8%
Usually	37%	35%	37%	33%	36%	35%	33%	32%	29%	31%	36%	34%
Always	52%	56%	51%	57%	55%	57%	57%	59%	65%	61%	54%	57%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	1860	2284	1461	1718	868	982	506	551	457	403	5152	5938

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.6.6. Respondent Given Information about Payments or Expenses

- 26% of respondents asked the nursing home for information about payments or expenses in the last 6 months; results between survey years are similar.

Table 49: Respondent Asking about Payments or Expenses

Zone / Respondent Asking about Payments or Expenses	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	72%	74%	75%	75%	70%	75%	68%	67%	76%	75%	72%	74%
Yes	28%	26%	25%	25%	30%	25%	32%	33%	24%	25%	28%	26%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2422	2706	1980	2158	1123	1232	678	707	594	493	6797	7296

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- In 2010, 73% of respondents who asked about payments and expenses "always" received all the information they wanted; 19% said this was "usually" the practice. Overall, there were no significant differences between 2007 and 2010.

Figure 37: Respondent Given Information about Payments or Expenses

Q57. In the last 6 months, how often did you get all the information you wanted about payment or expenses?
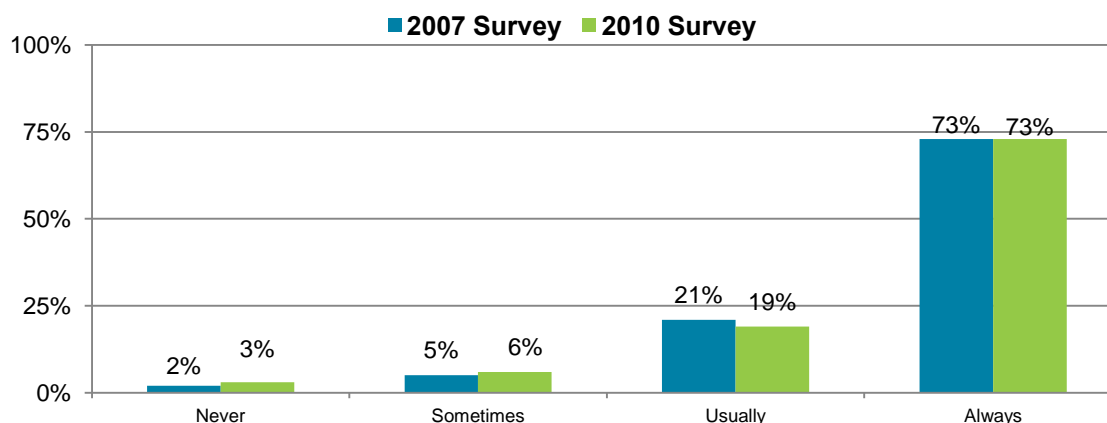
Table 50: Respondent Given Information about Payments or Expenses

Zone / Respondent Given Info about Payments or Expenses	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	3%	2%	2%	1%	2%	4%	1%	5%	1%	3%	2%	3%
Sometimes	5%	6%	4%	4%	5%	6%	5%	9%	6%	6%	5%	6%
Usually	25%	18%	18%	18%	20%	22%	18%	18%	15%	23%	21%	19%
Always	67%	74%	77%	77%	73%	69%	75%	68%	78%	68%	73%	73%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	666	702	485	530	327	304	210	230	139	123	1827	1889

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.6.7. Participated in Care Conference in Last 12 Months

- A significantly higher proportion of respondents (79%), had participated in a care conference in 2010, up from 71% in 2007. Significant improvements were also seen in the Calgary, Edmonton and South Zones.

Figure 38: Participated in Care Conference in Last 12 Months

Q44. In the last 12 months, have you been part of a care conference, either in person or by phone?
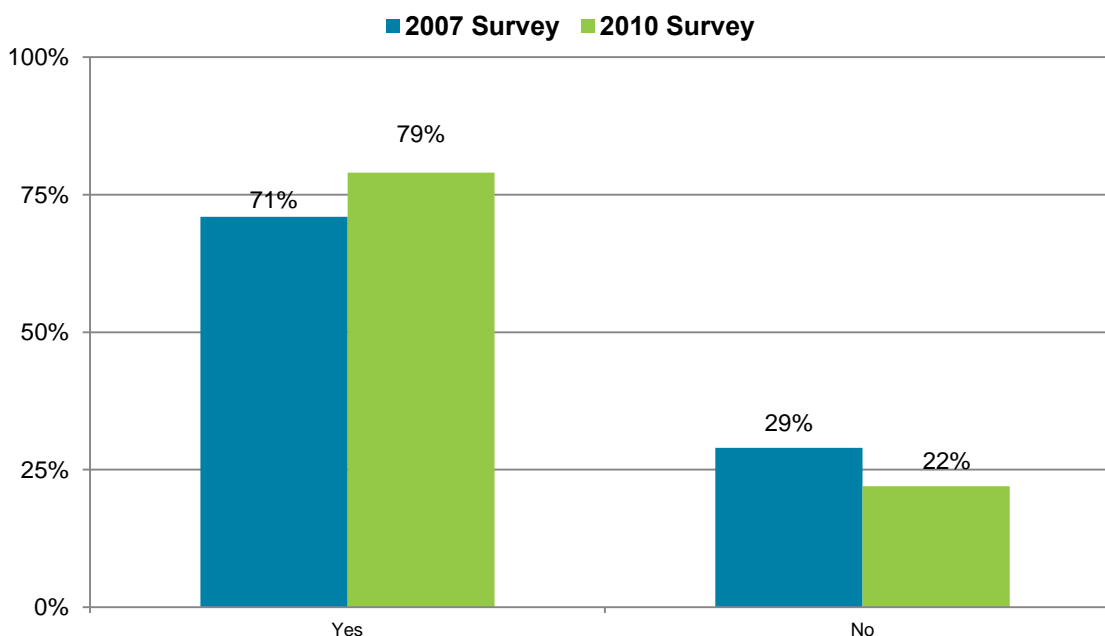
Table 51: Participated in Care Conference in Last 12 Months

Zone / Participated in Care Conference in the Last 12 Months	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010↑	2007	2010	2007	2010	2007	2010↑	2007	2010↑
Yes	76%	83%	61%	75%	76%	79%	70%	72%	70%	76%	71%	79%
No	24%	17%	39%	25%	24%	21%	30%	28%	30%	24%	29%	22%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2353	2729	1912	2161	1098	1227	658	704	576	490	6597	7311

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference (from a Two Proportion Z-Test)*

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- Of the respondents who had not participated in a care conference (22%), a significantly higher proportion of these had nonetheless been asked to participate in 2010 compared to 2007 (51% in 2010 versus 38% in 2007). Significant improvements were also seen in the Calgary, Edmonton and North Zones.

Figure 39: Were Asked but Chose Not to Participate in a Care Conference

Q45.Were you given the opportunity to be part of a care conference in the last 12 months either in person or by phone?
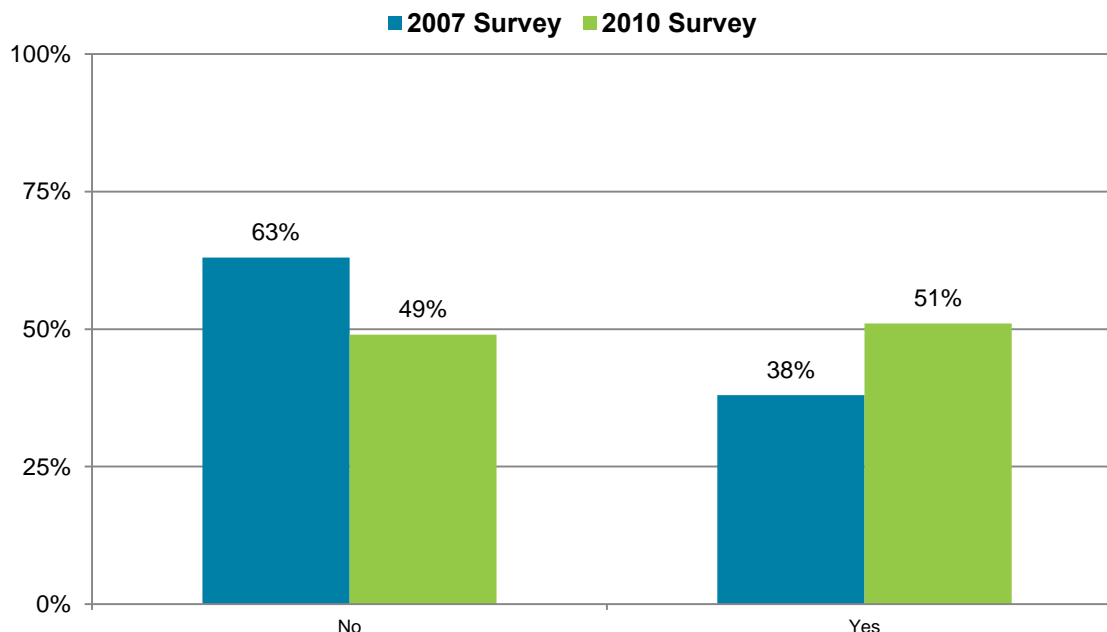
Table 52: Were Asked but Chose Not to Participate in a Care Conference

Zone / Respondents Asked But Chose Not to Participate in a Care Conference	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010↑	2007	2010	2007	2010↑	2007	2010	2007	2010↑
No	59%	44%	73%	60%	41%	44%	66%	55%	57%	52%	63%	49%
Yes	41%	56%	27%	40%	59%	56%	34%	45%	43%	48%	38%	51%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	510	418	674	496	234	229	183	184	153	109	1754	1436

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference (from a Two Proportion Z-Test)

3.6.8. Unhappy with Care at the Nursing Home

- Approximately one in three respondents (31%) were unhappy with the care the resident received at the nursing home in the last 6 months. Overall results improved significantly in 2010 at the provincial level and in the Calgary Zone.

Table 53: Unhappy with Care at the Nursing Home

Zone / Unhappy with Care	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010↑
No	62%	67%	64%	66%	73%	75%	77%	76%	74%	74%	67%	69%
Yes	39%	33%	37%	34%	27%	25%	23%	24%	26%	26%	33%	31%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2364	2739	1928	2167	1110	1252	668	721	581	496	6651	7375

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference (from a Two Proportion Z-Test)

- 91% of respondents that were unhappy with the care the resident received at the nursing home in the last 6 months informed nursing home staff about their concerns.
- Results are similar between survey years, but a significant increase was noted for the Calgary Zone.

Figure 40: Respondent Informing Staff about Concerns
Q39. In the last 6 months, did you talk to any nursing home staff about this concern?
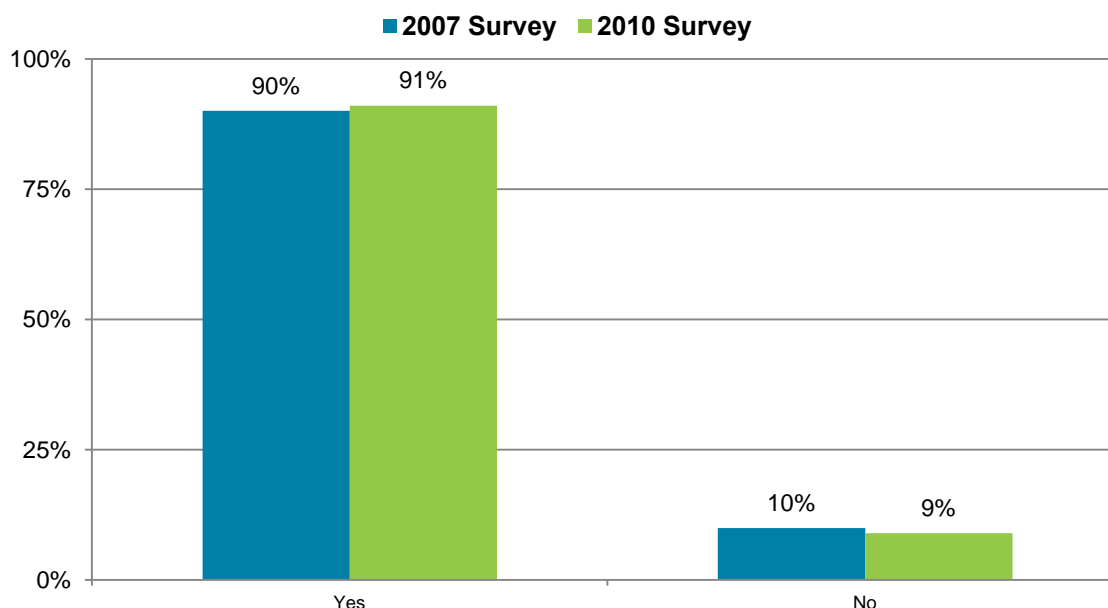
Table 54: Respondent Informing Staff about Concerns

Zone / Respondent Informing Staff about Concerns	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Yes	89%	93%	91%	91%	89%	89%	88%	88%	87%	88%	90%	91%
No	11%	7%	9%	10%	11%	11%	12%	12%	13%	12%	10%	9%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	893	892	693	730	285	297	147	171	147	125	2165	2215

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: Statistically significant difference (from a Two Proportion Z-Test)

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3.6.9. Satisfied with the Way Care Concerns Were Handled

- 12% of respondents that voiced their concerns were "always" satisfied with the way the nursing home staff handled these problems; 44% said they were "usually" satisfied.

- There were no significant differences between 2007 and 2010.

Figure 41: Satisfied with the Way Care Concerns Were Handled

Q40. In the last 6 months, how often were you satisfied with the way the nursing home staff handled these problems?
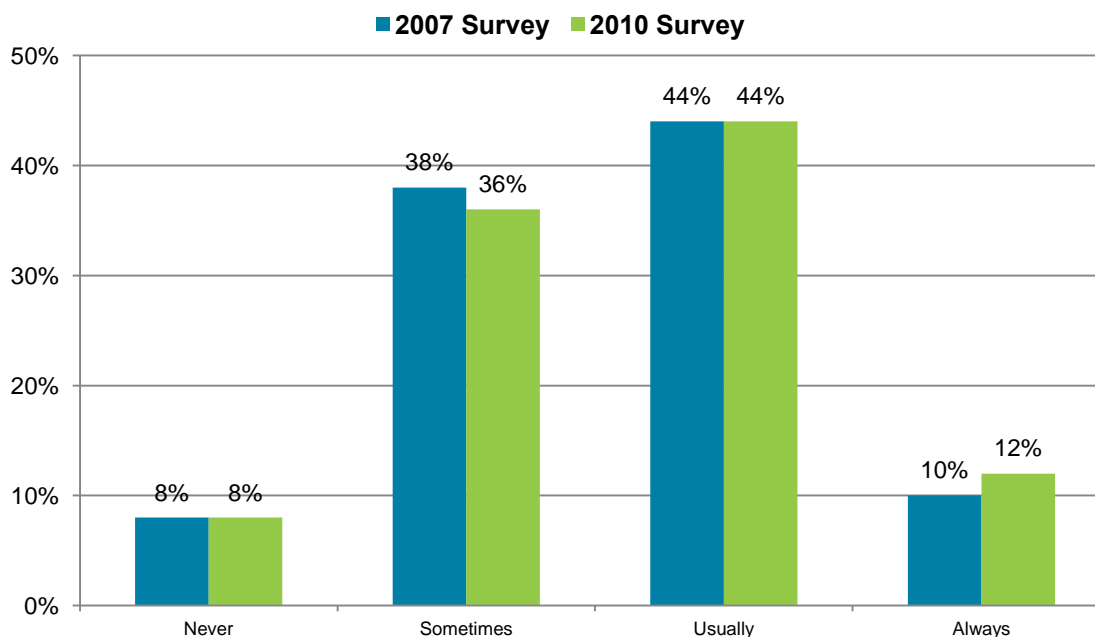
Table 55: Satisfied with the Way Care Concerns Were Handled

Zone / Satisfied with the Way Care Concerns Were Handled	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Never	8%	8%	7%	8%	8%	7%	13%	6%	7%	7%	8%	8%
Sometimes	38%	37%	40%	36%	37%	38%	38%	33%	35%	32%	38%	36%
Usually	45%	44%	44%	42%	45%	44%	37%	49%	43%	47%	44%	44%
Always	9%	10%	9%	15%	11%	11%	13%	12%	15%	14%	10%	12%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	789	822	615	651	252	259	127	146	124	109	1907	1987

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.7. Meeting Basic Needs

Of the four composites, this composite has the weakest relationship to the overall care rating.

A total of three questions are included in this composite:

1. Helped because staff didn't help or resident waited too long for help with eating.
2. Helped because staff didn't help or resident waited too long for help with drinking.
3. Helped because staff didn't help or resident waited too long for help with toileting.

Additional related item that is reported here but is not included in the composite calculation:

4. Nursing home staff expect family member to help.
5. Family member received all of the medical services and treatments they needed.

Details about each attribute are reported in this section. The information provided is for the entire survey population and the five AHS zones.

3.7.1. Nursing Home Staff Expect Family Member to Help

- Overall, significantly fewer respondents (68%) said they helped with the care of the resident when they visited in the past 6 months. A significant change was also seen in the North Zone.

Table 56: Helped with Care in Last 6 Months

Zone / Helped With Care in Last 6 Months	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010↑	2007	2010	2007	2010↑
Yes	70%	69%	73%	71%	67%	64%	67%	60%	67%	69%	70%	68%
No	30%	31%	27%	29%	33%	36%	33%	40%	33%	31%	30%	32%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2357	2738	1928	2173	1102	1239	666	711	582	490	6635	7351

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference (from a Two Proportion Z-Test)*

- Overall in 2010, significantly fewer respondents felt staff expected them to help with the care of their family member compared to 2007. Significant differences were also seen in the Calgary, Edmonton and Central Zones.

Figure 42: Nursing Home Staff Expect Family Member to Help

Q50. Do you feel that nursing home staff expect you to help with the care of your family member when you visit? (reverse scoring)
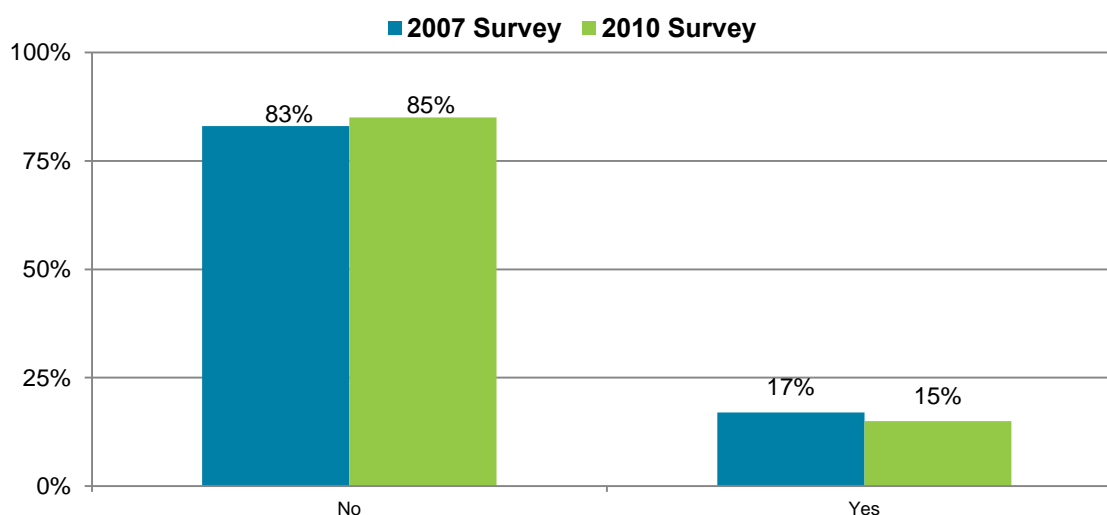
Table 57: Nursing Home Staff Expect Family Member to Help

Zone / Nursing Home Staff Expect Family Member to Help	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010↑	2007	2010↑	2007	2010↑	2007	2010	2007	2010	2007	2010↑
No	82%	85%	78%	82%	87%	90%	87%	88%	89%	89%	83%	85%
Yes	18%	16%	22%	18%	13%	10%	13%	12%	11%	11%	17%	15%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2335	2703	1902	2151	1097	1235	666	708	574	491	6574	7288

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference (from a Two Proportion Z-Test)*

3.7.2. Helped with Drinking

- Overall, in 2010, 43% of respondents helped the resident with drinking at least once in the last 6 months.

Table 58: Helped with Drinking

Zone / Helped With Drinking During a Visit in the Last 6 months	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**
No	59%	59%	52%	53%	57%	60%	62%	60%	56%	55%	57%	57%
Yes	41%	41%	48%	47%	43%	40%	38%	40%	44%	45%	44%	43%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2379	2761	1937	2197	1119	1256	674	729	584	500	6693	7443

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- 23% of those respondents that helped with drinking reported they helped because the nurses or aides either didn't help or made the resident wait too long. There are no significant differences between 2007 and 2010.

Figure 43: Helped with Drinking because Staff Did Not Help or Resident Waited Too Long

Q19. Was it because the nurses or aides either didn't help or made him or her wait too long? (reverse scoring)

■ 2007 Survey ■ 2010 Survey

No: 76% (2007), 77% (2010)
Yes: 24% (2007), 23% (2010)
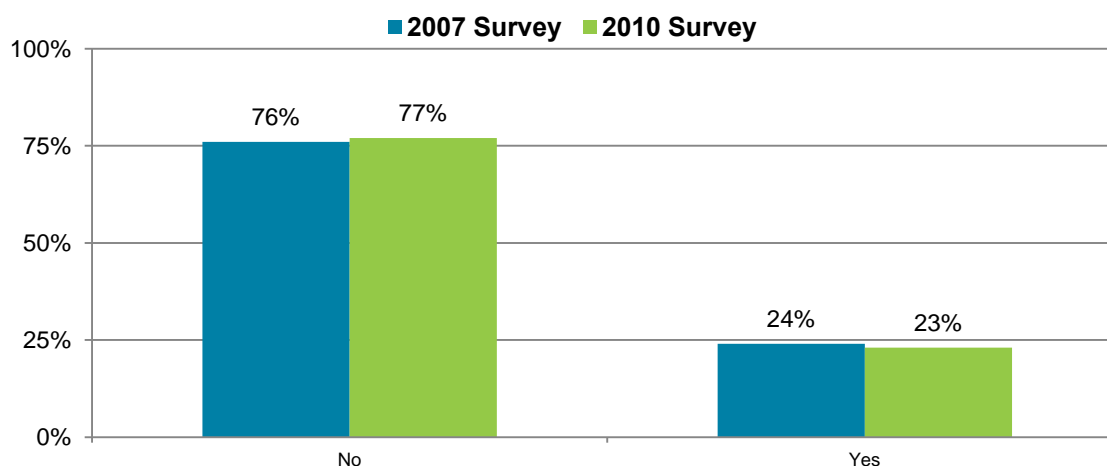
Table 59: Helped with Drinking because Staff Did Not Help or Resident Waited Too Long

Zone / Helped with Drinking Because Staff Did Not Help or Resident Waited Too Long	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**	**2007**	**2010**
No	73%	76%	73%	76%	80%	79%	85%	83%	83%	78%	76%	77%
Yes	27%	24%	27%	24%	20%	21%	15%	17%	17%	22%	24%	23%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	933	1104	883	986	469	475	245	277	244	215	2774	3057

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.7.3. Helped with Eating

- Overall, in 2010, 44% of respondents helped the resident with eating at least once in the last 6 months. Proportions are similar between survey years.

Table 60: Helped with Eating

Zone / Helped With Eating During a Visit in the Last 6 Months	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	59%	58%	49%	51%	56%	59%	60%	61%	55%	52%	55%	56%
Yes	41%	42%	51%	49%	44%	41%	40%	39%	45%	48%	45%	44%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2392	2766	1945	2204	1127	1265	676	729	592	504	6732	7468

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- Overall, in 2010, 21% of those respondents that helped with eating at least once in the last 6 months reported they helped because the nurses or aides either didn't help or made the resident wait too long. There are no significant differences between 2007 and 2010.

Figure 44: Helped with Eating because Staff Did Not Help or Resident Waited Too Long

Q17. Was it because the nurses or aides either didn't help or made him or her wait too long? (reverse scoring)

■ 2007 Survey ■ 2010 Survey

No: 79%, 79%
Yes: 21%, 21%
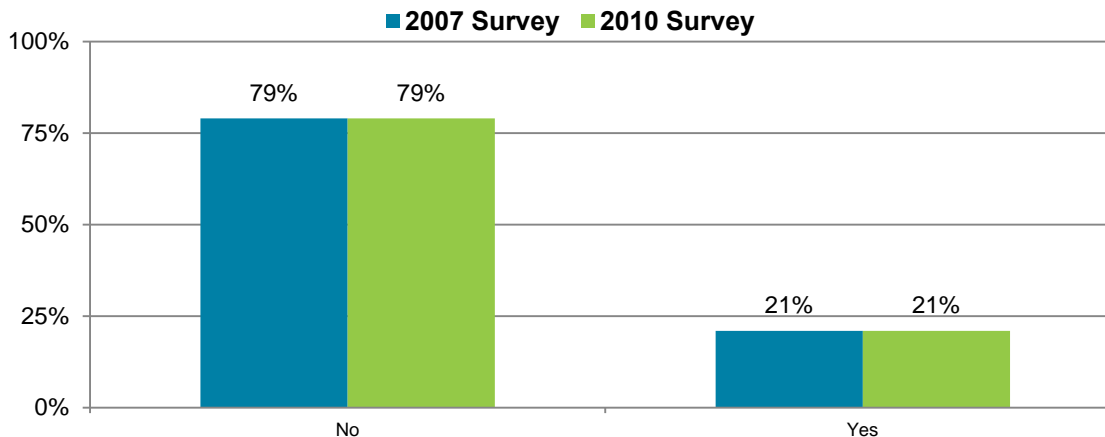
Table 61: Helped with Eating because Staff Did Not Help or Resident Waited Too Long

Zone / Helped with Eating because Staff Did Not Help or Resident Waited Too Long	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	78%	79%	74%	76%	84%	82%	84%	86%	86%	81%	79%	79%
Yes	22%	21%	27%	24%	16%	18%	16%	14%	14%	19%	21%	21%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	957	1135	945	1029	474	504	259	273	262	235	2897	3176

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.7.4. Helped with Toileting

- Overall, in 2010, 23% of respondents helped the resident with toileting at least once in the last 6 months. Proportions are similar between survey years.

Table 62: Helped with Toileting

Zone / Helped With Toileting During a Visit in the Last 6 Months	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	75%	76%	75%	76%	78%	80%	79%	81%	77%	77%	76%	77%
Yes	26%	24%	26%	24%	22%	20%	22%	19%	23%	23%	24%	23%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2381	2753	1931	2176	1121	1255	674	720	584	500	6691	7404

Note: Individual proportions may not sum to 100% due to rounding of decimals.

- Overall, 49% of those respondents that helped with toileting at least once in the last 6 months reported they helped because the nurses or aides either didn't help or made the resident wait too long. There are no significant differences between 2007 and 2010.

Figure 45: Helped with Toileting because Staff Did Not Help or Resident Waited Too Long

Q21. Was it because the nurses or aides either didn't help or made him or her wait too long? (reverse scoring)

■ 2007 Survey ■ 2010 Survey

No: 51%, 51%
Yes: 49%, 49%
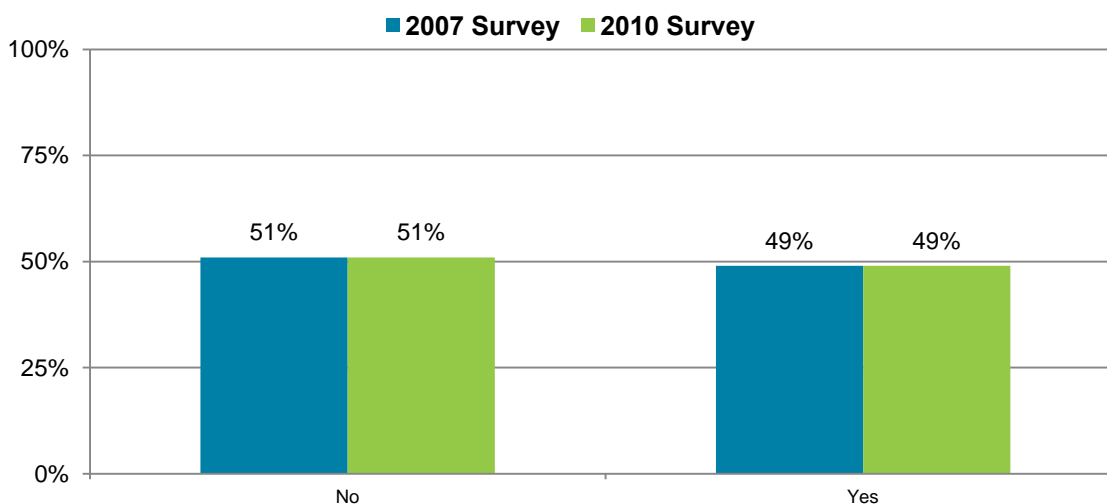
Table 63: Helped with Toileting because Staff Did Not Help or Resident Waited Too Long

Zone / Helped with Toileting because Staff Did Not Help or Resident Waited Too Long	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
No	49%	45%	45%	48%	55%	61%	59%	66%	65%	62%	51%	51%
Yes	51%	55%	55%	53%	45%	39%	41%	34%	35%	38%	49%	49%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	587	643	468	509	238	246	141	131	130	115	1564	1644

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.7.5. Received Medical Services and Treatments

- Overall, 60% of residents "always" received all the medical services and treatments they needed. Results varied across zones from 56% in the Edmonton Zone to 66% in the Central Zone.

Figure 46: Received Medical Services and Treatments

Q52. In the last 6 months, how often did your family member receive all of the medical services and treatments they needed? (2010 question only)
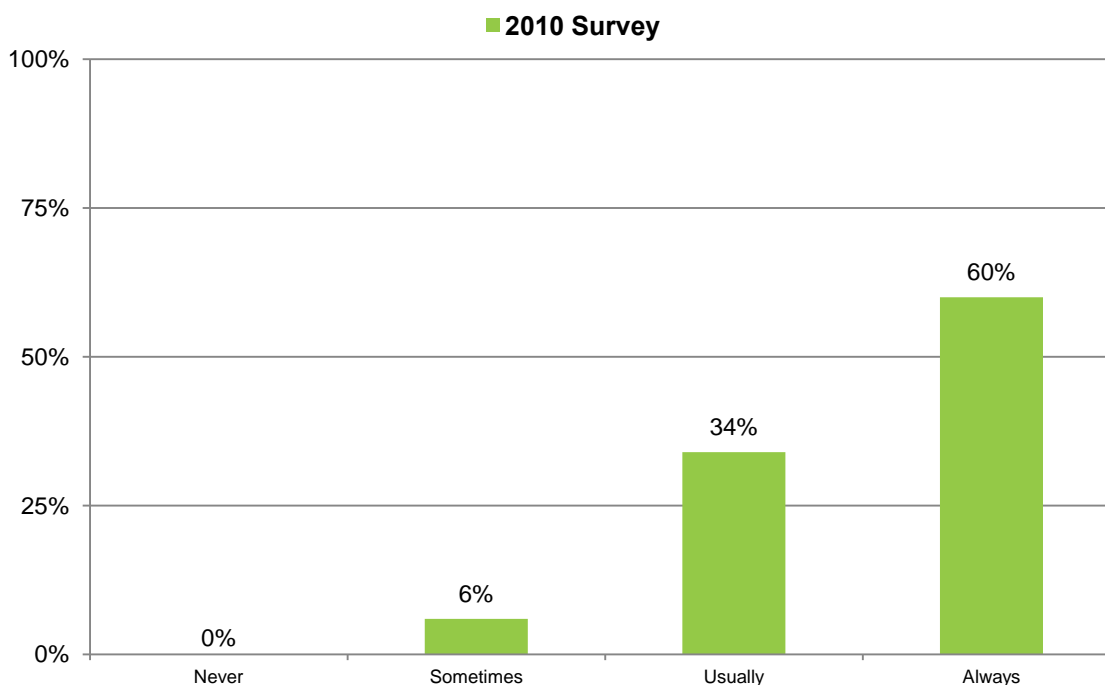
Table 64: Received Medical Services and Treatments

Zone / Received Medical Services and Treatments	Calgary Zone	Edmonton Zone	Central Zone	North Zone	South Zone	Total
	2010	2010	2010	2010	2010	2010
Never	0%	0%	1%	0%	0%	0%
Sometimes	7%	6%	4%	4%	4%	6%
Usually	33%	37%	30%	33%	32%	34%
Always	59%	56%	66%	63%	64%	60%
Grand Total	100%	100%	100%	100%	100%	100%
Number of Respondents	2723	2146	1238	708	489	7304

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.8. Key Findings - Global Overall Ratings

3.8.1. Global Rating of Care

- Global ratings reflect the respondent's overall evaluation of the nursing home. Such questions are not specific, but rather, they reflect a respondent's summative opinion about the facility. Global ratings are often used as stand-alone performance measures, and they are often used in multivariate analysis as outcome variables. In such analyses, more specific items can be compared in terms of their relationship to the outcome variable.

- Respondents were asked to rate the overall care provided at the nursing home on a scale of 0 to 10. In 2010, the average score for 7,379 respondents was 8.21 with a standard deviation of 1.6. This is significantly higher than the 2007 score of 8.1. A significant increase is also reported for the Calgary Zone.

Figure 47: Global Rating of Care at the Nursing Home

Q46. Using any number from 0 to 10 where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate the care at the nursing home?

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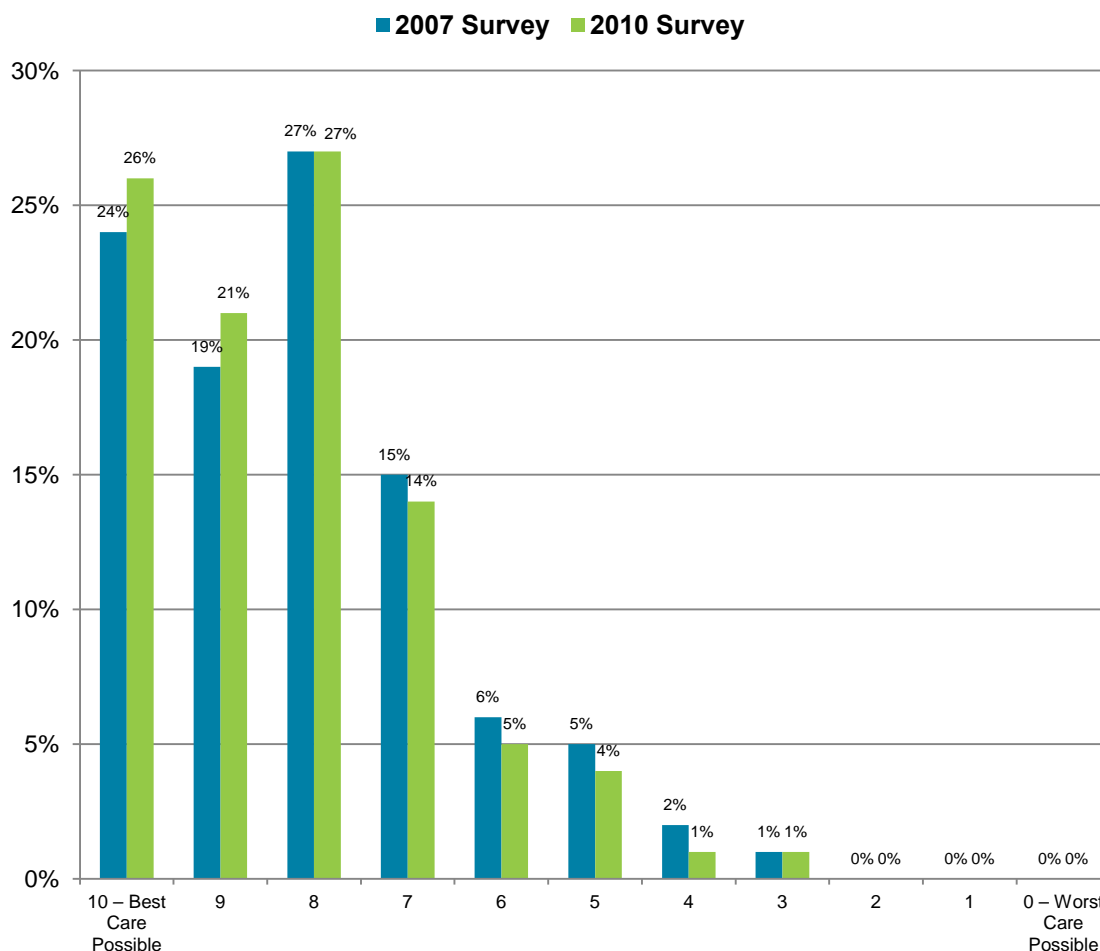
Table 65: Global Rating of Care at the Nursing Home

Zone / Global Rating of Care	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
10 – Best Care Possible	18%	21%	20%	23%	33%	34%	34%	34%	36%	33%	24%	26%
9	18%	21%	20%	19%	20%	23%	21%	22%	20%	24%	19%	21%
8	29%	28%	27%	28%	25%	23%	25%	26%	24%	23%	27%	27%
7	17%	15%	18%	17%	12%	12%	12%	11%	10%	12%	15%	14%
6	7%	6%	6%	6%	4%	3%	3%	3%	5%	3%	6%	5%
5	6%	5%	5%	4%	4%	3%	2%	4%	2%	3%	5%	4%
4	3%	2%	2%	1%	2%	1%	1%	1%	1%	1%	2%	1%
3	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%
2	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0 – Worst Care Possible	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Weighted Mean Score	78	80↑	79	81	84	86	85	85	86	86	81	82↑
Number of Respondents	2363	2748	1927	2177	1111	1248	674	716	584	490	6659	7379

Note: Individual proportions may not sum to 100% due to rounding of decimals.

↑↓: *Statistically significant difference; p < .001*

- Overall care ratings: Based on methods refined for other CAHPS surveys as well as the NH-CAHPS survey, the 0 to 10 global rating scale is generally collapsed into three score categories for reporting purposes:

  o 0 to 6: Lowest category

  o 7 and 8: Middle category

  o 9 and 10: Highest category

Table 66: Global Collapsed Ratings of Care at the Nursing Home

Zone / Global Rating of Care	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
9 – 10	36%	42%	39%	41%	53%	58%	55%	55%	57%	58%	44%	47%
7 – 8	46%	43%	45%	46%	37%	35%	37%	36%	34%	35%	42%	41%
0 – 6	18%	15%	16%	13%	10%	8%	8%	8%	9%	8%	14%	12%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2363	2748	1927	2177	1111	1248	674	716	584	490	6659	7379

Note: Individual proportions may not sum to 100% due to rounding of decimals.

Figure 48: Comparative Global Collapsed Ratings of Care

■ 2007 Survey ■ 2010 Survey

9 – 10

Calgary
- 36%
- 42%

Edmonton
- 39%
- 41%

Central
- 53%
- 58%

North
- 55%
- 55%

South
- 57%
- 58%

7 – 8

Calgary
- 46%
- 43%

Edmonton
- 45%
- 46%

Central
- 37%
- 35%

North
- 37%
- 36%

South
- 34%
- 35%

0 – 6

Calgary
- 18%
- 15%

Edmonton
- 16%
- 13%

Central
- 10%
- 8%

North
- 8%
- 8%

South
- 9%
- 8%
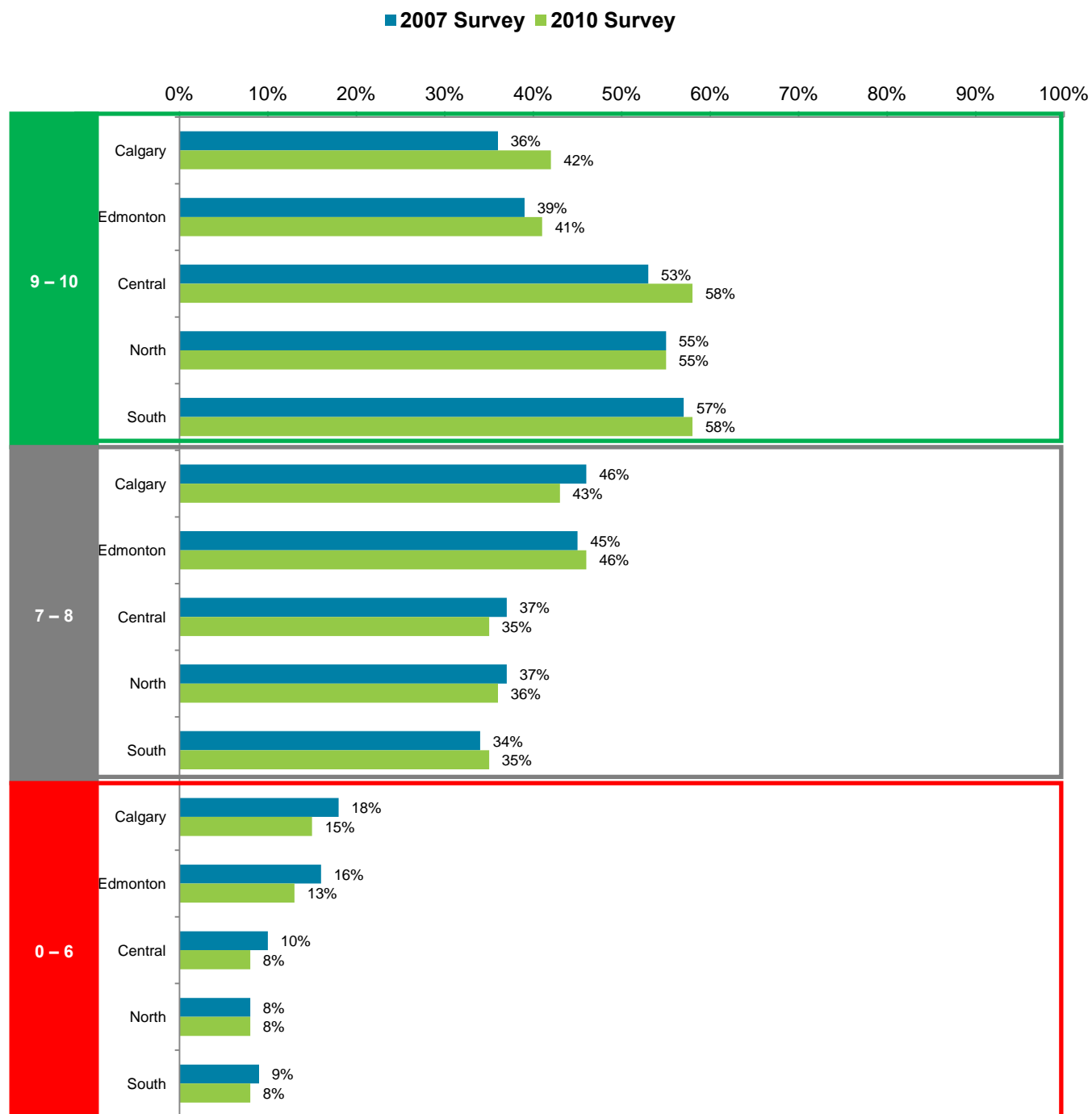
3.8.2. Nursing Home Recommendation

- Overall, 92% of respondents would "definitely" (56%) or "probably" (36%) recommend the nursing home. No significant differences were found across survey years or zones.

Figure 49: Nursing Home Recommendation

Q47. If someone needed nursing home care, would you recommend this nursing home to them?

■ 2007 Survey ■ 2010 Survey
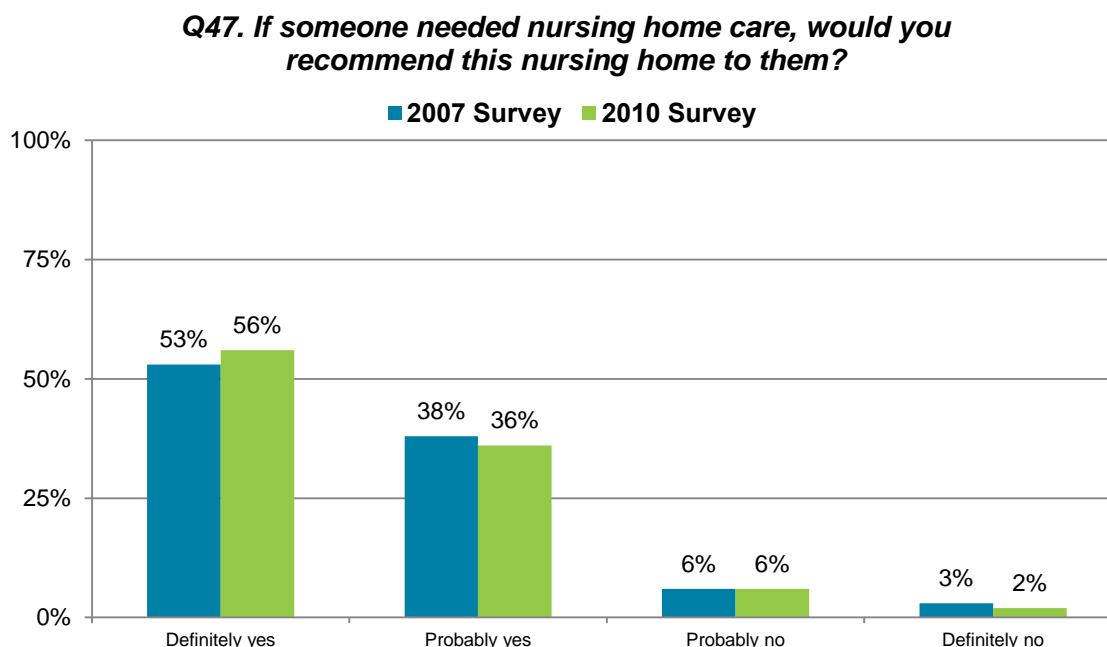
Table 67: Nursing Home Recommendation

Zone / Nursing Home Recommendation	Calgary Zone		Edmonton Zone		Central Zone		North Zone		South Zone		Total	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Definitely yes	47%	51%	51%	54%	59%	62%	64%	62%	61%	65%	53%	56%
Probably yes	42%	38%	40%	39%	35%	33%	32%	32%	34%	31%	38%	36%
Probably no	7%	7%	6%	6%	4%	4%	3%	4%	4%	3%	6%	6%
Definitely no	4%	4%	3%	2%	2%	1%	2%	1%	1%	1%	3%	2%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Respondents	2341	2725	1924	2172	1110	1245	674	715	584	491	6633	7348

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.8.3. Global Rating of Food at the Nursing Home

- Overall, 22% of respondents rated the food served at their home as 9 or 10 out of 10. Almost half of respondents (41%) rated the food as 7 or 8 out of 10. Finally, food was rated as 0 to 6 out of 10 by 38% of respondents. Two percent (2%) of respondents rated the food as the worst food possible or 0 out of 10.

Figure 50: Global Rating of Food at the Nursing Home

Q51. Using any number from 0 to 10 where 0 is the worst food possible and 10 is the best food possible, what number would you use to rate the food at this nursing home? (2010 only question)
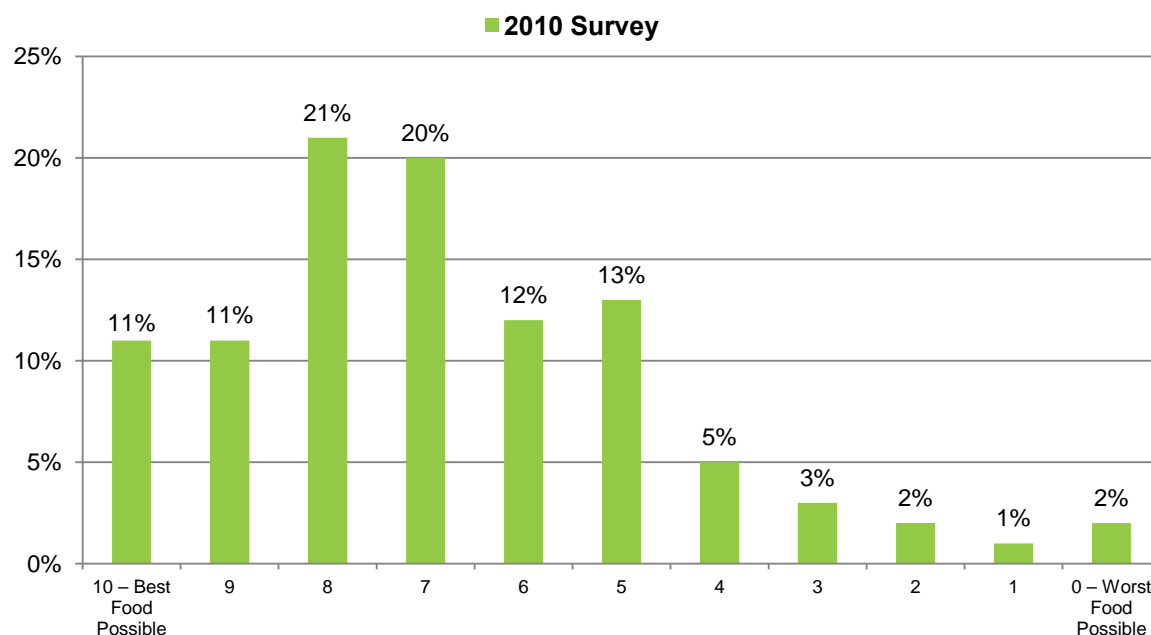
Table 68: Global Rating of Food at the Nursing Home

Zone / Global Rating of Food	Calgary Zone	Edmonton Zone	Central Zone	North Zone	South Zone	Total
	2010	2010	2010	2010	2010	2010
10 – Best Food Possible	9%	10%	14%	16%	14%	11%
9	10%	10%	12%	11%	10%	11%
8	20%	21%	20%	21%	21%	21%
7	21%	22%	16%	16%	16%	20%
6	13%	14%	10%	9%	11%	12%
5	13%	12%	12%	16%	13%	13%
4	5%	4%	5%	5%	5%	5%
3	4%	3%	4%	2%	4%	3%
2	2%	2%	2%	1%	2%	2%
1	1%	1%	2%	1%	1%	1%
0 – Worst Food Possible	1%	1%	2%	2%	2%	2%
Grand Total	100%	100%	100%	100%	100%	100%
Number of Respondents	2576	2076	1181	677	475	6985

Note: Individual proportions may not sum to 100% due to rounding of decimals.

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3.9. Medication Concerns

3.9.1. Concerns about Medication

- Overall, 93% of respondents expressed they "never" (53%) or "sometimes" (40%) had concerns about the resident's medication. Proportions are similar across zones.

Figure 51: Concerns about Medication

Q53. In the last 6 months, how often did you have concerns about your family member's medication? (2010 question only)
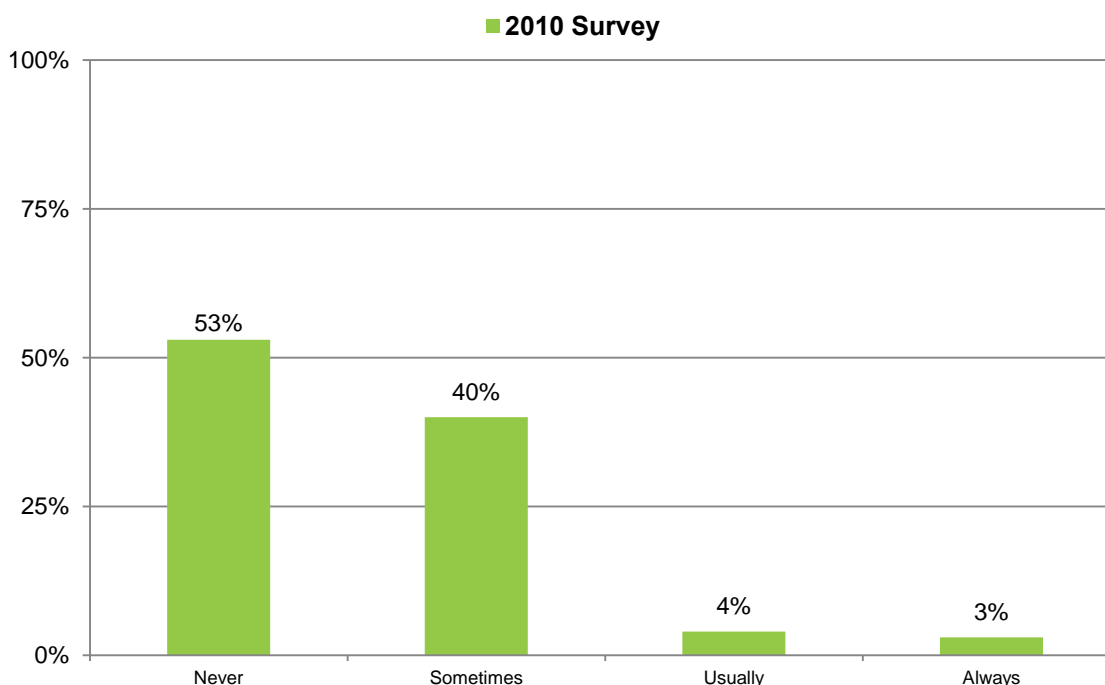
Table 69: Concerns about Medication

Zone / Concerns about Medication	Calgary Zone	Edmonton Zone	Central Zone	North Zone	South Zone	Total
	2010	2010	2010	2010	2010	2010
Never	54%	50%	53%	54%	56%	53%
Sometimes	39%	42%	41%	40%	39%	40%
Usually	4%	4%	3%	3%	3%	4%
Always	3%	3%	3%	3%	2%	3%
Grand Total	100%	100%	100%	100%	100%	100%
Number of Respondents	2724	2163	1240	709	492	7328

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.9.2. Talked about Medication Concerns

- Overall, of the respondents who had concerns about the resident's medication, 94% reported them to the nursing home staff. Proportions are similar across all zones.

Figure 52: Talked about Medication Concerns

Q54. Did you talk with any nursing home staff about these medication concerns? (2010 question only)

■ 2010 Survey
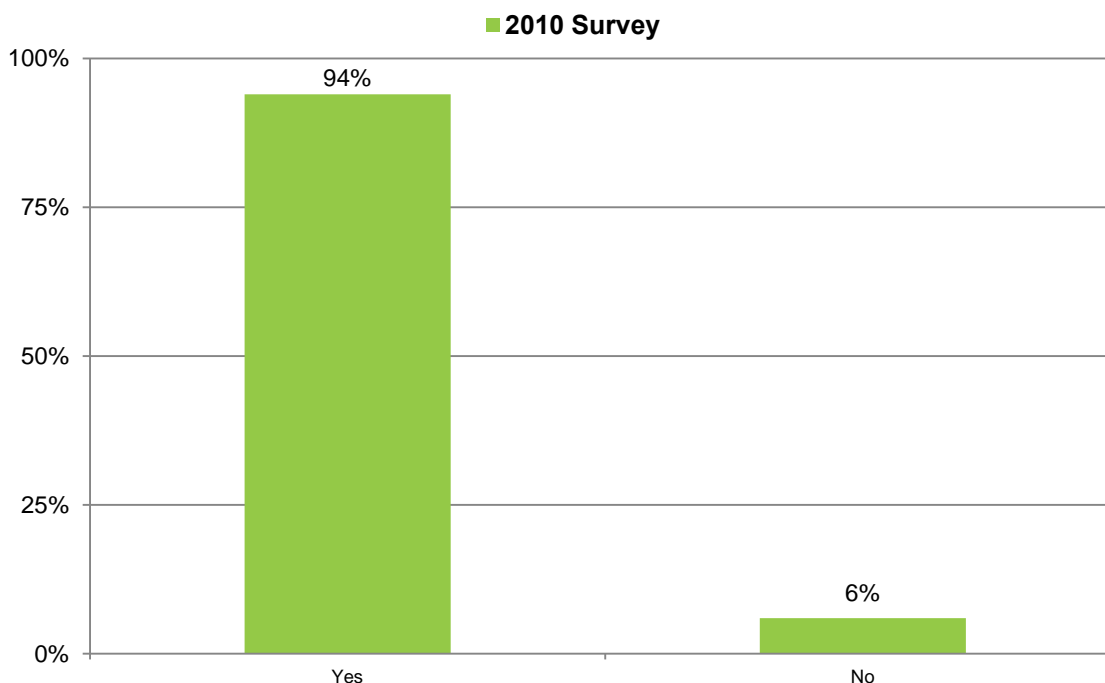
Table 70: Talked about Medication Concerns

Zone / Talked about Medication Concerns	Calgary Zone	Edmonton Zone	Central Zone	North Zone	South Zone	Total
	2010	2010	2010	2010	2010	2010
Yes	95%	92%	95%	94%	94%	94%
No	6%	8%	6%	7%	6%	6%
Grand Total	100%	100%	100%	100%	100%	100%
Number of Respondents	1252	1061	575	321	213	3422

Note: Individual proportions may not sum to 100% due to rounding of decimals.

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3.9.3. Resolution of Medication Concerns

- Overall, 84% of respondents concerns about their family member's medication were "usually" (37%) or "always" (47%) resolved. Proportions are similar across all zones.

- 16% of respondents said their concerns about their family member's medication were only "sometimes" or "never" resolved.

Figure 53: Resolution of Medication Concerns

Q55. In the last 6 months, how often were your concerns about your family member's medication resolved? (2010 question only)
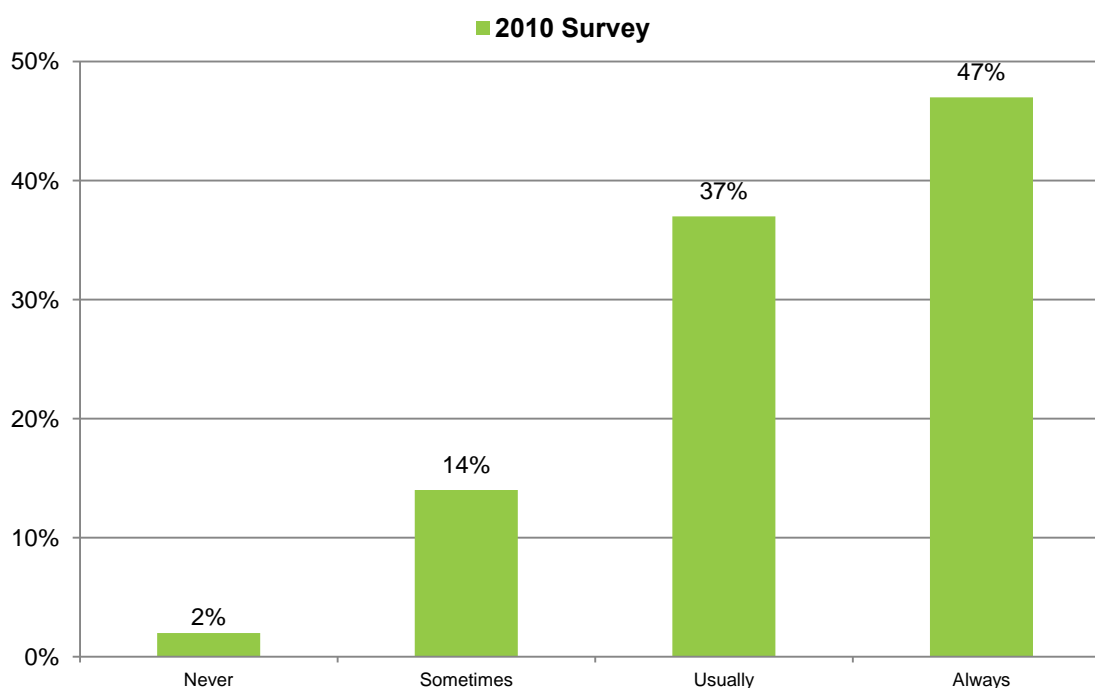
Table 71: Resolution of Medication Concerns

Zone / Resolution of Medication Concerns	Calgary Zone	Edmonton Zone	Central Zone	North Zone	South Zone	Total
	2010	2010	2010	2010	2010	2010
Never	3%	3%	2%	2%	2%	2%
Sometimes	16%	16%	11%	14%	10%	14%
Usually	35%	38%	37%	40%	37%	37%
Always	47%	44%	51%	45%	51%	47%
Grand Total	100%	100%	100%	100%	100%	100%
Number of Respondents	1151	962	537	292	198	3140

Note: Individual proportions may not sum to 100% due to rounding of decimals.

3.10. Overall Care Rating – Quartile Analysis

3.10.1. Facility Groupings by Quartile

When estimating the average overall care rating by facility, the critical threshold number for calculating the margin of error based on the Normal distribution is 30 respondents. Below 30 respondents, the Student distribution is used but the confidence interval for an estimate grows tremendously as the sample size is reduced and the variability around the mean increases. However, in practice, the threshold of 25 respondents is deemed acceptable. The same method was used in 2007.

For this reason, facility level overall average care ratings (Q46) were analyzed in terms of 104 facilities with so called "reliable" sample sizes. The overall average care ratings of the remaining facilities with small sample sizes were also normalized using the normal distribution parameters calculated for the 104 facilities with reliable sample sizes (see **Section 3.10.7)**.

A total of 104 facilities with reliable sample sizes were selected and the following calculations were done:

- Average global ratings of care for each of the 104 facilities.

- Average global ratings of care were then normalized.

- A 95% confidence interval was calculated for each facility's average global rating of care and converted into a "quartile" confidence interval.

Key Findings for the 104 facilities with reliable sample sizes

- The average care rating for all 104 facilities is 8.17 on a 0 to 10 rating scale.

- As in 2007, the higher the quartile, the higher the average care rating and the lower the number of beds. Therefore, facilities with fewer beds are more likely to obtain higher care ratings.

- There are only 9 facilities for which the calculated average score remains within its quartile with 95% certainty.

The facilities belonging to the upper (75%-100%) average care rating quartile with 95% certainty are operating with slightly less than three times fewer beds (66 versus 177 beds) on average than the facilities belonging to the lower (0-25%) quartile. The statistically significant differences between the upper 5 facilities in the upper (75%-100%) quartile and the 4 lowest facilities in the lower (0-25%) quartile are examined in **Section 3.10.6**

Table 72: Statistics for 104 Facilities with Reliable Samples Sizes

Quartile	Number of Facilities	Total Respon-dents	Avg. # of Respon-dents by Facility	Average Care Rating (0-10)	95%Confidence Interval in Terms of Number of Quartiles ("Q")	Average Number of Beds
Upper	26	1173	45	8.89	5 facilities overlap no other quartile 15 facilities overall 1 other quartile 6 facilities overlap 2 other quartiles	66
Middle (+)	26	1562	60	8.52	2 facilities overlap 1 other quartile 24 facilities overlap 2+ other quartiles	90
Middle (-)	26	1918	74	8.18	10 facilities overlap 1 other quartile 16 facilities overlap 2+ other quartiles	115
Lower	26	2737	105	7.62	4 facilities overlap no other quartile 22 facilities overlap 1 other quartile	177
All	104	7390	71	8.17	9 in same quartile @ 95% certainty	113

Upper 5	5	214	43	9.23	5 highest performing facilities in upper quartile with 95% certainty	60
Lower 4	4	628	157	7.48	4 lowest performing facilities in lower quartile with 95% certainty	272

3.10.2. Upper Quartile Facilities

Key Findings:

- The overall average care rating for this quartile is 8.89.

- The average care ratings for the facilities in this quartile range from 8.67 to 9.70.

- 5 facilities of the 26 belong to the upper quartile with 95% certainty.

- 15 facilities' care ratings' 95% confidence interval overlap two quartiles (i.e. care ratings could be in the upper quartile or in the middle plus quartile with 95% certainty).

- The 95% confidence interval of six (6) facilities overlaps 3 quartiles, from the middle (-) to the upper quartile.

3.10.3. Middle (+) Quartile Facilities

Key Findings:

- The overall average care rating for this quartile is 8.52.

- The average care ratings for the facilities in this quartile range from 8.37 to 8.66.

- 2 facilities' care ratings' 95% confidence interval overlaps two quartiles.

- 24 facilities' care ratings' 95% confidence interval overlaps three or more quartiles.

3.10.4. Middle (-) Quartile Facilities

Key Findings:

- The overall average care rating for this quartile is 8.18.
- The average care ratings for facilities in this quartile range from 7.89 to 8.36.
- 10 facility's care ratings 95% confidence interval overlaps two quartiles.
- 16 facility's care ratings 95% confidence interval overlaps three or more quartiles.

3.10.5. Lower Quartile Facilities

Key Findings:

- The overall average care rating for this quartile is 7.62.
- The average care ratings for facilities in this quartile range from 7.31 to 7.84.
- 4 facilities' care ratings 95% confidence intervals remain in the lower quartile.
- 22 facilities' care ratings 95% confidence intervals overlap two quartiles.

3.10.6. Reliable Sample Size Facilities - Upper / Lower Quartile Comparison

The following section examines in more detail the significant differences between results for the upper and lower quartile nursing homes. Statistically significant differences between nursing homes in the upper (75%-100%) quartile and the lower (0-25%) quartile with 95% certainty were compiled and analyzed globally by composite variable.

Please note that comparisons between facilities are often very useful, but readers should be very cautious about judging whether differences represent strong or poor performance. They may be neither, and it is challenging to make appropriate comparisons between facilities. Facility results may be significantly impacted by *confounding variables* such as respondent and resident characteristics and facility characteristics such as the number of beds, type of ownership model (public, private or voluntary), or community size. Statistically significant difference does not say anything about the magnitude of the difference or whether the difference is "clinically" important. Facility benchmarking (i.e. achieving the "average" or even a higher benchmark score) is not the objective; improving the quality of care is the objective. In this context, comparing facilities becomes an issue of what should be focused on, what should be strived for, and which facilities can be learned from.

Care ratings were compiled for each facility belonging to a short list of **104** nursing homes with reliable sample sizes (greater than 25 respondents per facility and 95% confidence interval ranges). The total number of respondents for the 104 facilities was 7,390 compared to 8,179 for all 157 facilities or 90.4% of all eligible respondents that provided a global care rating (Q46). Facilities with small sample sizes were excluded because the 95% confidence interval becomes very large as the number of respondents decreases and the variability among ratings increases, leading to confidence intervals overlapping too many quartiles.

Five nursing homes belonging to the upper quartile and four from the lower quartile with 95% certainty are compared. Please note that a predictive model based on composite variables was also developed and results are reported in **Section 3.12**.

As shown in **Table 73**, the gap between upper and lower quartile facilities average care rating is +1.75. There are 214 respondents in the five upper quartile facilities compared to 628 in the lower

quartile facilities. The difference in the propensity to recommend the facility between upper and lower quartiles is +16.5%. This is further analyzed in **Section 3.12**.

Table 73: Upper vs. Lower Quartile Facilities - Care Rating / Propensity to Recommend

Survey Questions	Upper Quartile 5 Facilities 214 respondents	Lower Quartile 4 Facilities 628 respondents	Significant Differences with 95% Confidence
Using any number from 0 to 10 where 0 is the worst care possible and 10 is the best care possible, what number would you use to **rate the care** at the nursing home?	9.23 (Average Care Rating)	7.48 (Average Care Rating)	**+1.75**
If someone needed nursing home care, **would you recommend** this nursing home to them?	79.3% "Definitely yes" 20.2% "Probably yes" **99.5%** (Total)	36.4% "Definitely yes" 46.6% "Probably yes" **83%** (Total)	+42.9% -26.4% **+16.5%** (Total)

In the following analysis, respondent results have been grouped under the 4 composite variables and are listed in order of strength of relationship to the overall care rating. In addition, the mean composite score is reported.

(1) Nursing home staffing, care of belongings and environment

The mean scores (0-100) for the *Nursing home staffing and environment*[3] composite variable are 66.8 / 100 for the lower quartile, and 85.6 / 100 for the upper quartile facility respondents, a significant difference of 18.8 out of 100, $(t = (822)\ 13.45\ ,p = <.001\ )$ showing a considerable range of performance between facilities. Note: this score is a result of all items in the composite.

As illustrated in **Table 74** the following is a summary of differences between upper and lower quartile facility respondents:

- Upper quartile facility respondents felt there were *always* or *usually* enough nurses and aides in the nursing home to a greater extent compared to lower quartile facilities (85% upper and 54% lower), and they were more likely to find a nurse or aide when they wanted one (97% upper and 80% lower).

- The resident's clothes of upper quartile respondents were damaged or lost to a lesser extent than for lower quartile respondents (34% upper and 66% lower).

- Respondents reported the resident's room *always* or *usually* looked and smelled clean more often for upper quartile facilities compared to lower quartile facilities (99% upper and 86% lower).

- Respondents reported the public areas *always* or *usually* look and smell clean more often compared to lower quartile facilities (99% upper and 86% lower).

- A smaller proportion of upper quartile facility respondents reported the resident's medical belongings (e.g., hearing aids, eye-glasses, and dentures) were damaged or lost (18% upper and 42% lower).

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[3] The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.12.1.

- Upper quartile facility respondents reported the resident *always* or *usually* looked and smelled clean more often compared to lower quartile respondents (95% upper and 83% lower).

- Upper quartile facility respondents are more likely to report that the noise level around the resident's room was *always* or *usually* acceptable to them (96% upper and 87% lower).

- Upper quartile facility respondents are more likely to *always* or *usually* find places to talk to the resident in private (99% upper and 90% lower).

Table 74: Summary of Differences for Nursing Home Staffing, Care of Belongings and Environment

Composite variable attributes	104 facilities (with reliable sample sizes)	Upper Quartile	Lower Quartile	Upper Less Lower
How often there are enough nurses or aides (Q48) Percentage of respondents that felt that there was *always* or *usually* enough nurses and aides in the nursing home.	64% (N=6987)	85% (N=201)	54% (N=595)	31%
Resident's clothes lost (Q37) Percentage of respondents that reported the resident's clothes were damaged or lost at least once when they used the laundry service in the last 6 months.	59% (N=4728)	34% (N=160)	66% (N=389)	-32%
Can find a nurse or aide (Q11) Percentage of respondents that were *always* or *usually* able to find a nurse or aide when they wanted one.	86% (N=6078)	97% (N=151)	80% (N=539)	17%
Resident's room looks and smells clean (Q30) Percentage of respondents that reported the resident's room *always* or *usually* looked and smelled clean.	91% (N=7117)	99% (N=208)	86% (N=611)	13%
Resident's medical belongings lost (Q35) Percentage of respondents that reported the resident's medical belongings were damaged or lost.	36% (N=6982)	18% (N=206)	42% (N=595)	-24%
Resident looks and smells clean (Q22) Percentage of respondents that reported the resident *always* or *usually* looks and smells clean.	90% (N=7086	95% (N=208)	83% (N=607)	12%
Public areas look and smell clean (Q33) Percentage of respondents that reported the public areas of the nursing home *always* or *usually* look and smell clean.	95% (N=7111)	99% (N=206)	86% (N=611)	13%
Additional related items not included in the composite				
Acceptable noise level around resident room (Q31) The noise level around the resident's room was *always* or *usually* acceptable to respondents.	91% (N=7107)	96% (N=207)	87% (N=612)	9%
Able to find a place to talk in private (Q32) Respondents were *always* or *usually* able to find places to talk to the resident in private.	93% (N=7063)	99% (N=206)	90% (N=604)	9%

(2) Kindness and Respect

The mean scores (0-100) for the *Kindness and Respect*[4] composite variable are 78.4 / 100 for lower quartile, and 91.4 / 100 for upper quartile facility respondents, a significant difference of 13.0 out of 100 between upper and lower quartiles (t(822) 7.81, p < .001).

As illustrated in **Table 75** the following is a summary of differences between upper and lower quartile facility respondents:

- Upper quartile facility respondents reported that nurses and aides *always* or *usually* really cared about the resident more often than lower quartile respondents (95% upper and 79% lower) and always or *usually* treated the resident with courtesy and respect more often than lower quartile respondents (98% upper and 92% lower).

- A greater proportion of upper quartile facility respondents never saw any nurses or aides be rude to their resident or any other resident (92% upper and 81% lower); a greater proportion of respondents from the upper quartile facilities felt the nurses and aides *always* or *usually* handled difficult residents in a way that was appropriate (100% upper and 86% lower).

- Upper quartile respondents *always* or *usually* saw the nurses and aides treat the resident with kindness more often than lower quartile respondents (99% upper and 89% lower).

- Finally, there is a greater proportion of lower quartile respondents that saw nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area (2% upper and 9% lower).

Table 75: Summary of Differences for Kindness and Respect

Composite variable attributes	104 facilities (with reliable sample sizes)	Upper Quartile	Lower Quartile	Upper Less Lower
Nurses and aides really cared about the resident (Q14) Percentage of respondents that *always* or *usually* feel the nurses and aides really cared about the resident.	88% (N=7117)	95% (N=207)	79% (N=609)	16%
Nurses and aides treated resident with courtesy and respect (Q12) Percentage of respondents that *always* or *usually* saw the nurses and aides treat the resident with courtesy and respect.	95% (N=7147)	98% (N=208)	92% (N=612)	6%
Nurses and aides were rude to residents (Q15) Percentage of respondents that *never* saw nurses or aides being rude to the resident or any other resident.	86% (N=7076	92% (N=207)	81% (N=609)	11%
Nurses and aides were appropriate with difficult residents (Q24) Percentage of respondents that felt the nurses and aides *always* or *usually* were appropriate with difficult residents.	92% (N=2432)	100% (N=61)	86% (N=224)	14%
Nurses and aides treated resident with kindness (Q13) Percentage of respondents that believe nurses and aides *always* or *usually* treated the resident with kindness.	93% (N=7138)	99% (N=208)	89% (N=612)	10%

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4 The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.12.1.

Additional related items not included in the composite				
Protection of resident's physical privacy (Q34) Percentage of respondents that saw nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area.	6% (N=7004)	2% (N=203)	9% (N=598)	-7%

(3) Providing information and encouraging family involvement

The mean scores (0-100) for the *Providing Information and encouraging family involvement*[5] composite variable are 69.8 / 100 for lower quartile, and 77.5 / 100 for upper quartile facility respondents, a significant difference of 7.7 out of 100 between upper and lower quartiles (t(822) 5.70, p < .001).

As illustrated in **Table 76** the following is a summary of differences between upper and lower quartile facility respondents:

- The proportion of respondents who felt they *always* or *usually* get information about the resident from a nurse or aide as soon as they wanted was significantly higher for upper quartile facilities compared to lower quartile faculties (95% upper and 76% lower).

- The proportion of respondents that reported the nurses and aides did not try to discourage them from asking questions about the resident is slightly higher for upper quartile faculties (99% upper and 95% lower).

- The proportion of respondents that reported they stopped themselves from complaining to any nursing home staff because they thought they would take it out on the resident is slightly higher for upper quartile faculties compared to lower quartile facilities (33% upper and 29% lower).

- The proportion of upper quartile respondents that reported nurses and aides are more likely to *always* or *usually* explain things in a way that was easy to understand is significantly higher than lower quartile facilities (97% upper and 88% lower).

- The respondents from upper quartile facilities were more likely to report they were *always* or *usually* involved as much as they wanted to be in the decisions about the resident's care compared to lower quartile facility respondents (96% upper and 85% lower).

- The proportion of respondents that *always* or *usually* get all the information they wanted about payments or expenses is slightly higher for upper quartile faculties (95% upper and 91% lower).

- Upper quartile facility respondents were far less likely to be unhappy with the care the resident received than lower quartile facility respondents (14% upper and 43% lower).

- Upper quartile respondents were *always* or *usually* satisfied with the way the nursing home staff handled concerns to a greater extent than lower quartile respondents (62% upper and 56% lower).

- The same proportion of respondents (78%) from upper and lower quartile facilities participle in a care conference.

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[5] The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.12.1.

Table 76: Summary of Differences for Providing Information and Encouraging Family Involvement

Composite variable attributes	104 facilities (with reliable sample sizes)	Upper Quartile	Lower Quartile	Upper Less Lower
Nurses and aides give respondent information about resident (Q27) Percentage of respondents that *always* or *usually* get information about the resident from a nurse or an aide as soon as they wanted.	88% (N=6182)	95% (N=168)	76% (N=542)	19%
Nurses and aides explain things in understandable way (Q28) Percentage of respondents that reported the nurses and aides *always* or *usually* explain things in a way that was easy to understand.	93% (N=7050)	97% (N=206)	88% (N=603)	9%
Nurses and aides discourage respondent questions (Q29) Percentage of respondents that reported the nurses and aides did <u>not</u> try to discourage them asking questions about the resident.	97% (N=7073)	99% (N=207)	95% (N=607)	4%
Respondent stops self from complaining (Q41) Percentage of respondents that stopped themselves from complaining to any nursing home staff about their concerns because they thought they would take it out on the resident.	32% (N=2134)	33% (N=27)	29% (N=250)	4%
Respondent involved in decisions about care (Q43) Percentage of respondents that were *always* or *usually* involved as much as they wanted to be in the decisions about the resident's care.	90% (N=5690)	96% (N=153)	85% (N=491)	11%
Got all the information requested about payments or expenses (Q57) Percentage of respondents that *always* or *usually* got all the information they wanted about payments or expenses.	92% (N=1819)	95% (N=56)	91% (N=171)	4%
Additional related items not included in the composite				
Participation in a care conference (Q44) Percentage of respondents that participated in a care conference.	79% (N=6987)	78% (N=201)	78% (N=601)	-
Unhappy with care at some time in past 6 months (Q38) Percentage of respondents that were ever unhappy with the care the resident received at the nursing home.	31% (N=7045)	14% (N=208)	43% (N=604)	-29%
Satisfied with the way concerns were handled (Q40) Percentage of respondents that were *always* or *usually* satisfied with the way the nursing home staff handled concerns.	56% (N=1952)	62% (N=26)	56% (N=239)	6%

(4) Meeting Basic Needs

The mean scores (0-100) for the *Meeting basic needs*[6] composite variable are 63.3 / 100 for lower quartile, and 86.6 / 100 for upper quartile facility respondents, a significant difference of 23.3 out of 100 between upper and lower quartiles (t(462) 4.77, p < .001).

As illustrated in **Table 77** the following is a summary of differences between upper and lower quartile facility respondents:

- Upper quartile facility respondents believe that nurses and aides did not help or made the resident wait too long to a lesser extent than lower quartile respondents for:
  - Toileting (35% upper and 64% lower)
  - Drinking (11% upper and 29% lower)
  - Eating (8% upper and 27% lower)
- Upper quartile facility respondents are less likely to feel that nursing home staff expect them to help with the care of the resident when they visit than lower quartile respondents (7% upper and 22% lower).

Table 77: Summary of Differences for Meeting Basic Needs

Composite variable attributes	104 facilities (with reliable sample sizes)	Upper Quartile	Lower Quartile	Upper Less Lower
Helped because staff did not help or waited too long for help with toileting (Q21) Percentage of respondents that believe staff did not help or made the resident wait too long for toileting	50% (N=1595)	35% (N=26)	64% (N=173)	- 29%
Helped because staff did not help or waited too long for help with drinking (Q19) Percentage of respondents that believe staff did not help or made the resident wait too long for drinking	23% (N=2950)	11% (N=65)	29% (N=261)	- 18%
Helped because staff did not help or waited too long for help with eating (Q17) Percentage of respondents that believe staff didn't help or made the resident wait too long for eating.	21% (N=3053)	8% (N=73)	27% (N=288)	- 19%
Additional related items not included in the composite				
Nursing home staff expect family member to help (Q50) Feel that nursing home staff expect them to help with the care of the resident when they visit.	16% (N=6955)	7% (N=203)	22% (N=596)	- 15%

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[6] The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.12.1.

3.10.7. Small Sample Size Facilities – Lower, Middle, Upper Quartiles

Overall average care ratings were also calculated for the remaining 53 facilities with small samples (with 2 to 25 respondents). The 53 small sample facilities obtained better care ratings than the 104 facilities with reliable sample sizes and 27 of the 53 facilities belong to the upper (75%-100%) quartile of the reliable sample facilities.

As shown in **Table 78** below, the reliable sample facilities (> 25 respondents) obtained lower average global care ratings than small sample facilities (8.17 on a 0 to 10 scale compared to 8.62) and were operating 4 times more beds on average than small sample facilities (112 versus 27).

Table 78: Reliable Sample Facilities versus Small Sample Size Facilities

Facility Sample Size	Number of Facilities	Total Respondents	Avg # of Respondents by Facility	Average Care Rating	Average Number of Beds
>25	104	7390	71	8.17	112
<=25	53	789	15	8.62	27
All	**157**	**8179**	**52**	**8.21**	**83**

Key findings on the 53 facilities with small sample sizes are as follows:

- The average care rating of all 53 facilities on a 0 to 10 scale is 8.62, this is significantly higher than the 8.17 score obtained by the 104 reliable sample facilities ($t(7762) = 7.37$, $p < .0001$).

- The average number of beds operated by facilities with small samples is substantially less than for the 104 facilities with reliable samples.

- Note that confidence intervals are not calculated, given the small sample size.

Table 79: Statistics on 53 Facilities with Small Samples

Quartile	Number of Facilities	Total Respondents	Avg # of Respondents by Facility	Average Care Rating	Average Number of Beds
Upper	27	378	14	9.14	**24**
Middle (+)	11	171	16	8.50	**27**
Middle (-)	7	124	18	8.19	**31**
Lower	8	116	15	7.49	**32**
All	**53**	**789**	**15**	**8.62**	**27**

3.11. Facility-level Effects

3.11.1. Overall Care Ratings versus Facility Size

The results demonstrate that a facility operating fewer beds is more likely to obtain a higher overall care rating from respondents. **Figure 54** shows the distribution of number of beds by facility quartile. Clearly, the average number of beds declines as we move towards the higher care rating quartiles. Facilities belonging to the upper quartile were operating nearly three times fewer number of beds (e.g. 66 versus 177 beds) on average than the facilities in the lower quartile. This is also confirmed by statistical tests comparing means from different quartiles.

Figure 54: Number of Beds by Quartile (Reliable Samples)
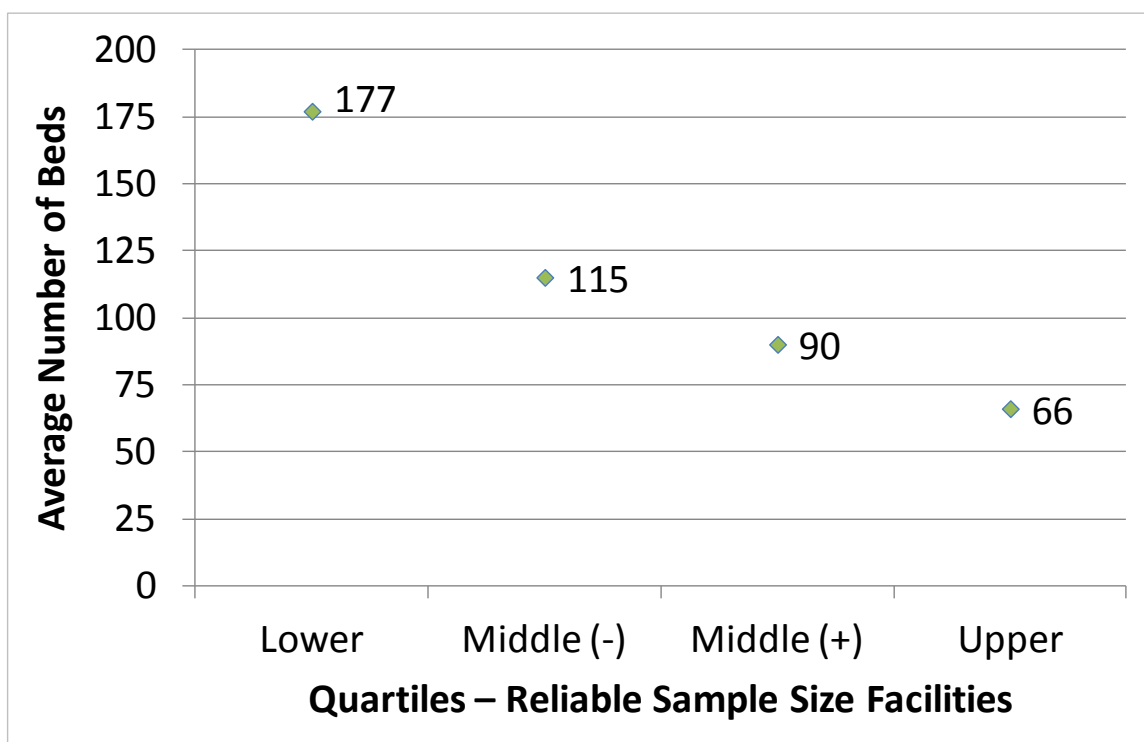
Figure 55 is similar to the previous figure but for facilities with small sample sizes (total 53 facilities). Most of the facilities fall in the upper care rating quartile (27 out of 53 facilities) and the average number of beds per quartile varies from 24 (upper) to 32 (lower).

Figure 55: Number of Beds by Quartile (Small Samples)

Both graphs suggest that facilities with fewer beds are pre-disposed to more positive ratings. Said another way, larger nursing homes and particularly those in an urban setting will be challenged to perform as well as small nursing homes in smaller communities. The reasons for this are likely complex. While we could have compared large facilities with large and small with small, we did not want to mask this important finding. While large nursing homes should aspire to the highest performance standards, this data suggests that a transition to smaller facilities is desirable at least from the perspective of the respondents.

3.11.2. Facility Ownership

Three facility ownership models are represented by the 157 facilities that were surveyed. These models were analysed to see if facility ownership has any impact on the family's experience of the care and services provided at the nursing home. The three models that provide publicly funded long term care services in Alberta are: (1) Public – operated by or wholly owned subsidiary of Alberta Health Services, (2) Voluntary – operated by a not-for-profit or faith-based organization, and (3) Private – operated by a private corporation. Category of facility was identified using Alberta Health and Wellness facility data as of 2007. The composites were calculated using the weighted mean score (M) of each underlying question, therefore the most appropriate analysis to evaluate differences between ownership groups is the analysis of variance (ANOVA). For presentation purposes and ease of interpretation, proportions are also included in the tables below.

(1) Nursing home staffing, care of belongings and environment

Table 80: Facility Ownership - Significant Differences for Nursing Home Staffing, Care of Belongings and Environment

Composite variable attributes	Public	Private (Priv)	Voluntary (Vol)	Significant differences
How often there are enough nurses or aides (Q48) Percentage of respondents that felt that there was *always* or *usually* enough nurses and aides in the nursing home.	64% M = 56.4 (N=3386)	67% M = 57.5 (N=2469)	60% M =53.2 (N=1866)	Vol < Public and Priv
Resident's clothes lost (Q37) Percentage of respondents that reported the resident's clothes were damaged or lost at least once when they used the laundry service in the last 6 months.	84% M = 63.8 (N=2207)	82% M = 61.2 (N=1735)	83% M =62.2 (N=1278)	Not significant
Can find a nurse or aide (Q11) Percentage of respondents that were *always* or *usually* able to find a nurse or aide when they wanted one.	87% M = 77.0 (N=2858)	86% M = 76.4 (N=2165)	85% M =74.3 (N=1661)	Vol < Public and Priv
Resident's room looks and smells clean (Q30) Percentage of respondents for which the resident's room *always* or *usually* looked and smelled clean.	94% M = 83.7 (N=3456)	89% M = 77.3 (N=2514)	91% M =79.1 (N=1892)	Public >Priv and Vol Vol > Priv
Resident's medical belongings damaged or lost (Q35) Percentage of respondents that reported the resident's medical belongings were damaged or lost.	32% M = 21.8 (N=3394)	37% M = 27.1 (N=2478)	37% M =25.9 (N=1845)	Public < Priv and Vol
Resident looks and smells clean (Q22) Percentage of respondents that reported the resident *always* or *usually* looked and smelled clean.	91% M = 77.1 (N=3440)	89% M = 75.3 (N=2508)	89% M = 74.3 (N=1880)	Public > Priv and Vol
Public areas look and smell clean (Q33) Percentage of respondents that reported the public areas of the nursing home *always* or *usually* look and smell clean.	97% M = 87.6 (N=3450)	93% M = 81.5 (N=2512)	94% M =83.1 (N=1892)	Public > Priv and Vol Vol > Priv
Additional related items not included in the composite				
Acceptable noise level around resident room (Q31) The noise level around the resident's room was *always* or *usually* acceptable to respondents.	93% M = 83.5 (N=3449)	90% M = 78.7 (N=2510)	90% M =79.4 (N=1893)	Public > Priv and Vol
Able to find a place to talk in private (Q32) Respondents were *always* or *usually* able to find places to talk to the resident in private.	64% M = 89.0 (N=3422)	67% M = 84.2 (N=2503)	60% M =87.6 (N=1875)	Priv > Public and Vol

- Significant differences were found for eight of the questions.

- For questions 48 (Enough nurses and aides) and 11 (Finding nurses and aides), Voluntary facilities obtained significantly lower results than Private and Public facilities.

- For question 35 (Medical belongings lost), Public facilities obtained a significantly better result than Private and Voluntary facilities.

- For questions 30 (Room's cleanliness), 33 (Public areas' cleanliness) and 22 (Residents' cleanliness), Public facilities obtained significantly higher results than Private and Voluntary facilities. For questions 30 and 33, Voluntary obtained significantly higher results than Private facilities.

- For question 31 (Noise level acceptable), Public facilities obtained significantly higher results than Private and Voluntary facilities.

- For question 32 (Privacy), Private facilities obtained significantly higher results than Public and Voluntary facilities.

(2) Kindness and respect

Table 81: Facility Ownership - Significant Differences for Kindness and Respect

Composite variable attributes	Public	Private (Priv)	Voluntary (Vol)	Significant differences
Nurses and aides really cared about resident (Q14) Percentage of respondents that *always* or *usually* feel that the nurses and aides really cared about the resident.	90% M = 80.8 (N=3451)	87% M = 77.6 (N=2522)	86% M = 77.1 (N=1896)	Public > Priv and Vol
Nurses and aides treated resident with courtesy and respect (Q12) Percentage of respondents that *always* or *usually* see the nurses and aides treat the resident with courtesy and respect.	96% M = 88.5 (N=3469)	95% M = 87.3 (N=2525)	94% M =85.9 (N=1903)	Public > Vol
Nurses and aides were rude to residents (Q15) Percentage of respondents that <u>never</u> saw any nurses or aides being rude to the resident or any other resident.	86% M = 86.4 (N=3433)	86% M = 85.9 (N=2502)	86% M =85.5 (N=1879)	Not significant
Nurses and aides were appropriate with difficult resident (Q24) Percentage of respondents that felt the nurses and aides *always* or *usually* handled difficult residents in a way that was appropriate.	92% M = 82.4 (N=1069)	93% M = 82.1 (N=924)	91% M =80.1 (N=665)	Not significant
Nurses and aides treated resident with kindness (Q13) Percentage of respondents that believe the nurses and aides *always* or *usually* treated the resident with kindness.	95% M = 87.0 (N=3466)	93% M = 84.5 (N=2521)	93% M = 83.9 (N=1903)	Public > Priv and Vol
Additional related items not included in the composite				
Protection of residents' physical privacy (Q34) Percentage of respondents that saw the nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area.	6% M = 94.4 (N=3404)	6% M = 94.3 (N=2481)	6% M =94.4 (N=1858)	Not significant

Nurses and aides treat respondent with **courtesy and respect** (Q25) Percentage of respondents that believe the nurses and aides *always* or *usually* treated them with courtesy and respect.	98% M = 91.7 (N=3451)	98% M = 91.3 (N=2521)	97% M =90.0 (N=1894)	Vol < Public and Priv

- Significant differences were found for four of the questions.

- For questions 14 (Nurses cared about the resident) and 13 (Kindness), Public facilities obtained significantly higher results than Private and Voluntary facilities.

- For question 12 (Courtesy and respect), Public facilities obtained significantly higher results than Voluntary facilities.

- For question 25 (Respondent treated with courtesy and respect) Voluntary obtained significantly lower results than Public and Private.

(3) Providing information and encouraging family involvement

Table 82: Facility Ownership - Significant Differences for Providing Information and Encouraging Family Involvement

Composite variable attributes	Public	Private (Priv)	Voluntary (Vol)	Significant differences
Nurses and aides give respondent information about resident (Q27) Percentage of respondents that *always* or *usually* get information about the resident from a nurse or an aide as soon as they wanted.	89% M = 79.1 (N=2906)	88% M = 78.3 (N=2239)	87% M =76.5 (N=1676)	Not significant
Nurses and aides explain things in understandable way (Q28) Percentage of respondents that reported the nurses and aides *always* or *usually* explain things in a way that was easy to understand.	94% M = 86.2 (N=3412)	92% M = 84.8 (N=2508)	93% M =84.1 (N=1872)	Not significant
Nurses and aides discourage respondent questions (Q29) Percentage of respondents that reported the nurses and aides did <u>not</u> try to discourage them asking questions about the resident.	97% M = 97.3 (N=3433)	97% M = 97.2 (N=2497)	97% M =96.6 (N=1866)	Not significant
Respondent stops self from complaining (Q41) Percentage of respondents that stopped themselves from talking to any nursing home staff about their concerns because they thought staff would take it out on the resident.	34% M = 66.2 (N=908)	33% M = 67.1 (N=791)	31% M =69.4 (N=608)	Not significant
Respondent involved in decisions about care (Q43) Percentage of respondents that were *always* or *usually* involved as much as they wanted to be in the decisions about the resident's care.	91% M = 82.2 (N=2680)	91% M = 82.4 (N=2104)	90% M =81.8 (N=1528)	Not significant
Got all the information requested about payments or expenses (Q57) Percentage of respondents that *always* or *usually* got all the information they wanted about payments or expenses.	94% M = 85.0 (N=3366)	93% M = 83.9 (N=2474)	94% M =83.4 (N=1868)	Not significant
Additional related items not included in the composite				
Unhappy with care at some time in past 6 months (Q38) Percentage of respondents that were ever unhappy with the care the resident received at the nursing home.	28% M = 27.8 (N=3412)	33% M = 32.5 (N=2500)	34% M =33.7 (N=1873)	Public < Priv and Vol
Satisfied with the way these concerns were handled (Q40) Percentage of respondents that were *always* or *usually* satisfied with the way the nursing home staff handled these concerns.	56% M = 53.0 (N=798)	56% M = 53.2 (N=736)	58% M =54.8 (N=566)	Not significant

- Significant differences were found for only one of the questions.

- For question 38 (Unhappy with care), Public facilities obtained significantly better results than Private and Voluntary facilities.

(4) Meeting basic needs

Table 83: Facility Ownership - Significant Differences for Meeting Basic Needs

Composite variable attributes	Public	Private (Priv)	Voluntary (Vol)	Significant differences
Helped because staff didn't help or resident waited too long for help with toileting (Q21) Percentage of respondents that believe staff either didn't help or made the resident wait too long for toileting.	58% M = 58.4 (N=722)	48% M = 48.2 (N=554)	43% M =42.9 (N=466)	Public > Priv and Vol
Helped because staff didn't help or resident waited too long for help with drinking (Q19) Percentage of respondents that believe staff either didn't help or made the resident wait too long for drinking.	79% M = 79.3 (N=1432)	76% M = 75.5 (N=970)	76% M =75.9 (N=831)	Not significant
Helped because staff didn't help or resident waited too long for help with eating (Q17) Percentage of respondents that believe staff either didn't help or made the resident wait too long for eating.	81% M = 80.5 (N=1470)	79% M = 78.6 (N=983)	78% M =78.0 (N=905)	Not significant
Additional related items not included in the composite				
Nursing home staff expect family member to help (Q50) Percentage of respondents that feel nursing home staff expect them to help with the care of the resident when they visit.	86% M = 86.0 (N=3369)	85% M = 85.1 (N=2463)	82% M =82.4 (N=1853)	Vol < Public and Priv

- Significant differences were found for two of the four questions.

- For question 21 (Toileting), Public facilities obtained results that were significantly higher than for Private and Voluntary facilities (reverse scoring).

- For question 50 (Expectations to help), fewer respondents perceived they were expected to help in Voluntary facilities than in Private or Public facilities (reverse scoring).

(5) Participation in care conferences

Table 84: Facility Ownership - Care Conference Participation

Care Conference Participation	Public	Private (Priv)	Voluntary (Vol)	Significant differences
Participated in a care conference (Q44)	74% M =73.9 (N=3369)	83% M = 82.6 (N=2477)	81% M =81.3 (N=1868)	Public < Priv and Vol
Opportunity to participate in a care conference (Q45)	46% M = 46.1 (N=2763)	57% M = 57.1 (N=2203)	48% M =48.4 (N=1636)	Public < Priv

- Significant differences were found for both questions.

- For question 44 (Participation in a conference), Public facilities obtained results that were significantly lower than Private and Voluntary facilities.

- For question 45 (Opportunity to participate), Public facilities obtained results that were significantly lower than Private facilities.

(6) Overall care rating

Table 85: Overall Care Rating

Overall care rating	Public	Private (Priv)	Voluntary (Vol)	Significant differences
Mean score (Q46)	M = 83.9 (N=3406)	M = 80.3 (N=2493)	M =81.2 (N=1885)	Public > Priv and Vol

- The overall care rating (Q46) showed significant differences between facility types. Public facilities obtained significantly higher results than Private and Voluntary facilities.

- Based on methods refined for other CAHPS surveys as well as the NH-CAHPS survey, the 0 to 10 global rating scale is generally collapsed into 3 score categories for reporting purposes. The following are the proportions for the 3 facility ownership types:

  - 0 – 6 rating - 10% Public, 15% Private; 13% Voluntary.

  - 7 – 8 rating - 39% Public, 43% Private; 43% Voluntary.

  - 9 – 10 rating - 51% Public, 43% Private; 44% Voluntary.

3.12. Global Overall Care Rating Forecasting Model

3.12.1. Model Description – Composite Variables

To simplify the interpretation of the data and enhance the reliability of the results, results from questions that measure similar topics are computed (averaged) into single variables, called **composites**. In reducing the complexity of data, such composites facilitate the development of a forecasting model for the global rating of care. Such a model explores the strength of correlation between more specific quality variables (the composites in this case) with the outcome variable (the global rating of care).

The composite variables are essentially the weighted average score of all variables within the factor. They provide a summary record for the common attribute of care represented by the scale. Given that they are shown to be valid, composite variables are often better performance measures than the individual question items they represent.

In this section, a forecasting model was developed to identify those composites with the strongest relationship to the overall rating of care. Assuming it is desirable to maximize the overall rating of care in the nursing home, understanding what factors impact that overall rating can provide useful information for quality improvement activities.

The CAHPS® Nursing Home Family Survey collects respondents' ratings of a large number of dimensions of health care services. Forecasting nursing home overall care rating based on all the individual 66 CAHPS survey measured attributes is a very complex task.

The 21 variables used to compute the 4 composite dimensions are identified below. Variable naming convention refers to the survey question number that can be found in **Appendix A**. For example, "Q17" means question number 17.

(1) Meeting basic needs

Q17	Helped because staff didn't help or resident waited too long for help with eating (reverse scoring)
Q19	Helped because staff didn't help or resident waited too long for help with drinking (reverse scoring)
Q21	Helped because staff didn't help or resident waited too long for help with toileting (reverse scoring)

(2) Kindness and respect

Q12	Nurses and aides treat resident with respect
Q13	Nurses and aides treat resident with kindness
Q14	Nurses and aides really cared about resident
Q15	Nurses and aides were rude to resident (reverse scoring)
Q24	Nurses and aides were appropriate with difficult resident

(3) Providing information and encouraging family involvement

     Q27   Nurses and aides give respondent information about resident

     Q28   Nurses and aides explain things in understandable way

     Q29   Nurses and aides discourage respondent questions (reverse scoring)

     Q41   Respondent stops self from complaining (reverse scoring)

     Q43   Respondent involved in decisions about care

     Q56   Respondent given info about payments and expenses (Q51 in 2007)

(4) Nursing home staffing, care of belongings and environment

     Q11   Can find a nurse or aide

     Q48   How often there are enough nurses or aides

     Q30   Resident's room looks and smells clean

     Q22   Resident looks and smells clean

     Q33   Public areas look and smell clean

     Q35   Resident's medical belongings lost (reverse scoring)

     Q37   Resident's clothes lost (reverse scoring)

The composite variables for <u>each one of the 8,179 respondents (7,528 in 2007)</u> were computed as follows:

- For all respondents, each response was converted into a numerical value based on a 0 to 100 common standardized scale (e.g. typical yes/no answers were converted into 0/100 numerical values while the typical never/sometimes/usually/always answers were converted into 0/33.33/66.67/100 numerical values). Global care ratings were not recoded, to maintain higher response variability; however, the 0-10 rating scale was converted to a 0-100 scale.

- Composite variables are the weighted sum of the answers to the related questions, where weights are based on the relative importance of questions in terms of missing data (which varies between questions because of screening items and other factors).

- For each respondent, a composite score was calculated only if at least one answer was provided to one of the questions used for calculating the composite variable; a missing answer for any given question used in a composite variable was replaced by the average value of all other respondents for the same given question and facility.

3.12.2. Forecasting Models

A base forecasting model was used to identify those factors with the strongest relationship with the overall rating of care. The base model was calculated from 8,179 respondents of 157 different facilities and explains **59.3%** of the variance in the overall care rating score (The 2007 model was calculated from 7,528 respondents of 173 different facilities and explained 59.8% of the variance in the overall care rating score).

Several other models were explored and can be found in **Appendix B**. Reported forecasting models are essentially the base model where the following confounding variables were included: respondent gender, resident facility ownership (public, private, voluntary), respondent age group, number of beds in facility, frequency of visits, expected permanency of resident in the nursing home, resident's capability of making decisions and sharing a room or not. The selection of confounding variables was based on 2007 analyses of significant differences in global care ratings for respondents grouped by confounding variable values ranges.

The most reliable forecasting model is summarized in **Table 86** . Our goal was to enhance substantially the predictability of the base forecasting model. Therefore, we concentrated our attention on the respondents whose resident was from a nursing home that either belongs to an upper or a lower care rating quartile facility with 95% certainty. The idea was to learn as much as possible from the perceptions of respondents from the best and the worst performing facilities. The predictability of the base model (R-Square) increased from 59.3% to 66.4%.

In conclusion, the retained regression model offers strong evidence that the respondent's scores for the four composites are a very strong predictor of the overall global care rating. The first three composite variables have the most impact on overall care ratings.

Table 86: Summary of Forecasting Models

Forecasting Model Components, Composite coefficients Comments	MODEL No. 1 BASE MODEL = 4 composites variables only		MODEL No. 2 =BASE MODEL + Confounding Variables		MODEL No. 3 = BASE MODEL + Confounding & Limited to Respondents from Upper or Lower Quartiles Facilities with 95% Certainty	
	2007	2010	2007	2010	2007	2010
Composite 1: Nursing home staffing, care of belongings and environment	0.297	0.278	0.305	0.268	.276	0.379
Composite 2: Kindness and respect	0.238	0.217	0.232	0.212	.208	0.156
Composite 3: Providing information and encouraging family involvement	0.106	0.125	0.104	0.127	.170	0.145
Composite 4: Meeting basic needs	0.067	0.077	0.066	0.077	.065	0.088
Constant	30.385	31.372	31.456	32.502	28.219	23.811
R-Square (Adjusted)	0.598 (.598)	0.593 (.593)	0.603 (.601)	0.600 (.598)	0.696 (.681)	0.664 (.655)

Comments

Model	Comments	Comparison
Model 1 - 2007	Base model with 60% variance explanation (N=7,528)	**Mostly identical results**
Model 1 - 2010	Base model with 59% variance explanation (N=8,179)	
Model 2 - 2007	Confounding variables improved slightly base model. Resident capability of making decisions, expected resident permanency in the nursing home, respondent's age have a relationship with results (N=7,528)	**Explained variance is quite similar between surveys. Confounding variable had a very small effect in the predicting model, mainly because the composites already explained most of the variance. In 2010, significant confounding variable were different.**
Model 2 - 2010	Confounding variables improved slightly base model. expected resident permanency in the nursing home, has a relationship with results (N=8,179)	
Model 3 - 2007	Best model to quantify the care rating potential increases by improving scores of the composite variables (N=859)	**Mostly identical results**
Model 3 - 2010	Best model to quantify the care rating potential increases by improving scores of the composite variables (N=842)	

As shown in **Table 87** the *Nursing home staffing, care of belonging and environment* composite variable is the most important to the overall rating of care, with a coefficient of 0.379. Given standardized scores from 0 to 100, this predicts that a unit (1.0) increase in this composite variable will yield an increase in the global rating of care of 0.379. For example, if this composite improves from 50 to 70 out of 100 (e.g. +20%), an initial overall care rating of 8.0 for a given facility is predicted to increase to approximately 8.8.

Table 87: Global Rating of Care Forecasting Model

Care Rating Forecasting Model	Coefficients / constant
1) **Nursing home staffing, care of belongings and environment** (7 items)	0.379 (significant)
2) **Kindness and respect** (5 items)	0.156 (significant)
3) **Providing information and encouraging family involvement** (6 items)	0.145 (significant)
4) **Meeting basic needs** (3 items)	0.088 (significant)
5) Confounding variable - Respondent **gender** (1= female, 2 =male)	Not significant
6) Confounding variable – Facility **ownership** (1= privately-owned; 2 = voluntary owner; 3 = publicly-owned)	Not significant
7) Confounding variable – Respondent's **age** group (18-24; 25-34;35-44;45-54;55-64;65+)	Not significant
8) Confounding variable - Number of **beds** in facility (1= over 300 beds; 2= < 300 beds; 3= < 100 beds; 4= < 25 beds)	Not significant
9) Confounding variable – (Q5) Expected resident **permanency** in the nursing home (1= Yes; 2= No; 3= do not know)	Not significant
10) Confounding variable – (Q06) Resident in a **shared** room (1= yes; 2= no)	Not significant
11) Confounding variable – Respondent is **most experienced person** with resident's care (1= yes; 2= no; 3= do not know)	Not significant
12) Constant	23.811
Strength of the linear relationship (R-Square = 66.4% of variability in the nursing home overall care rating is explained by the independent composite and confounding variables)	.664
Notes	1. Only respondents from Upper + Lower quartile facilities with 95% certainty are included (N= 842) 2. This model explains 66% of overall care ratings by those respondents. 3. Care ratings were converted from a 0-10 scale to a 0-100 scale. Composite variables are based on a 0-100 scale.

3.13. Comments Analysis

3.13.1. Number of Comments by Dimension

The questionnaire included one open-ended question (Q66): *"Do you have any suggestions how care and services at this nursing home could be improved? If so, please explain."* Respondent comments were classified into one of the following four dimensions: (1) Nursing home staffing, care of belongings and environment, (2) Kindness and respect, (3) Providing information and encouraging family involvement, and (4) Meeting basic needs. The sentiment of each comment was further classified as being either positive, needing improvement or neutral. Please note that some comments, due to their nature, were not classifiable in any of the above-mentioned dimensions.

Comments categorized as positive were those where respondents clearly expressed a high level of satisfaction with the care the resident is receiving. These included accolades relating to the quality of care, services, the nursing home environment and staff. Comments were labelled recommendations for improvement where respondents felt that there was room for improvement in a specific area. For example, comments about the lack or availability of staff were generally considered negative as staffing issues often impact the quality of care. Finally, comments were labelled as neutral when the respondent made a general statement which could not be qualified as either positive or as a recommendation for improvement.

Overall, 60% of respondents provided qualitative feedback representing a total of 4,885 comments. Individual respondent comments that touched upon multiple themes and subject matters were dissected into their respective parts and categorized according to each individual thematic statement. All told, 9,734 statements were identified representing an average of .5 thematic statements per respondent. A summary of comments by dimension can be found in **Table 88** below.

Table 88: Number of Comments by Dimension and by Sentiment

Summary of Comments by Dimension	Positive		Neutral		Recommendations for Improvement		TOTAL	
	n	%	n	%	n	%	n	%
Nursing home staffing, care of belongings and environment	513	31.9	11	8.3	3625	45.3	4149	42.6
Kindness and respect	233	14.5	0	0.0	672	8.4	905	9.3
Providing information and encouraging family involvement	38	2.4	2	1.5	480	6.0	520	5.3
Meeting basic needs	773	48.1	73	54.9	2144	26.8	2990	30.7
Other	50	3.1	47	35.3	1073	13.4	1170	12.0
GRAND TOTAL	**1607**	**100%**	**133**	**100%**	**7994**	**100%**	**9734**	**100%**

3.13.2. Top 10 Most Positive Comments

Positive comments about the general quality of care, which fell under the dimension Meeting Basic Needs, were most frequently made. Comments about the quality of staff, under the dimension Nursing Home Staffing, Care of Belongings and Environment, were the second most frequently occurring comment.

Figure 56: Top 10 Most Positive Comments
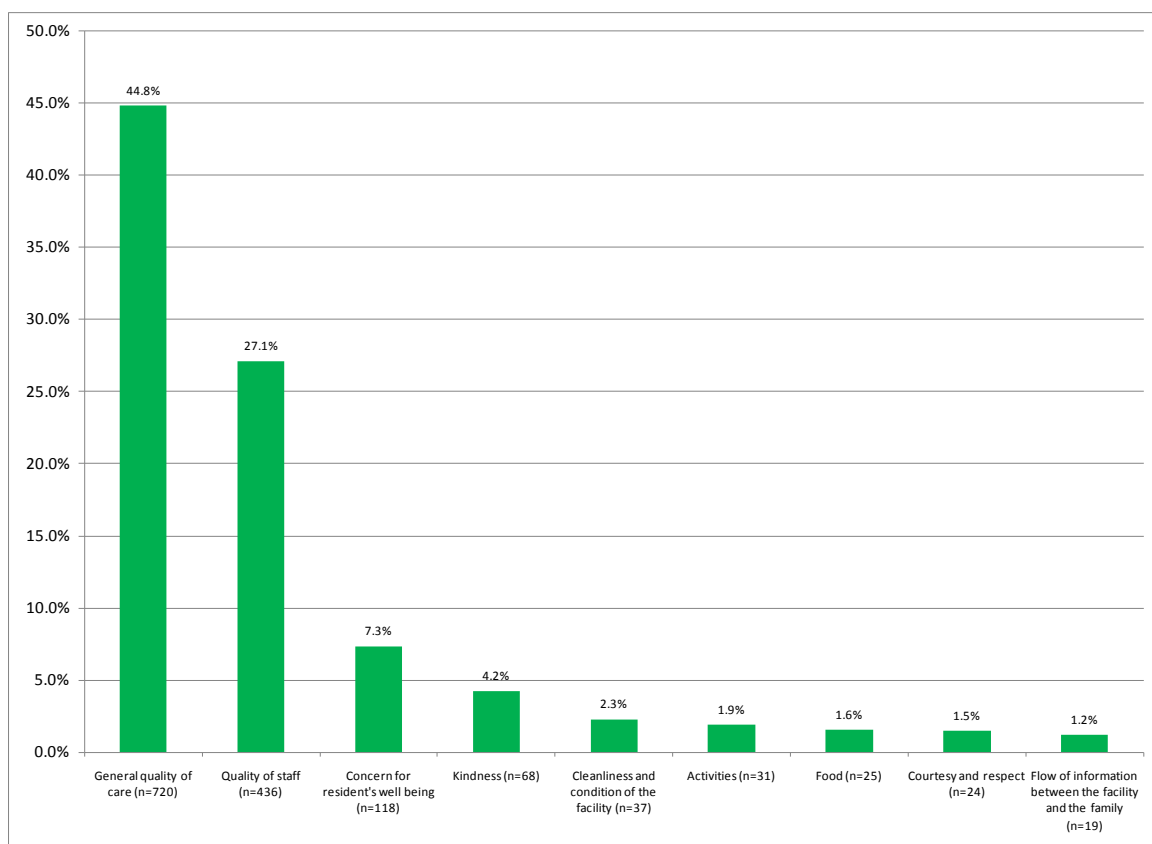
3.13.3. Top 10 Recommendations for Improvement

Staffing levels were most frequently cited as requiring improvement. This was followed by comments about the need to improve the food and the need for more activities for nursing home residents.

Figure 57: Top 10 Recommendations for Improvement

Promoting and improving patient safety and health service quality across Alberta
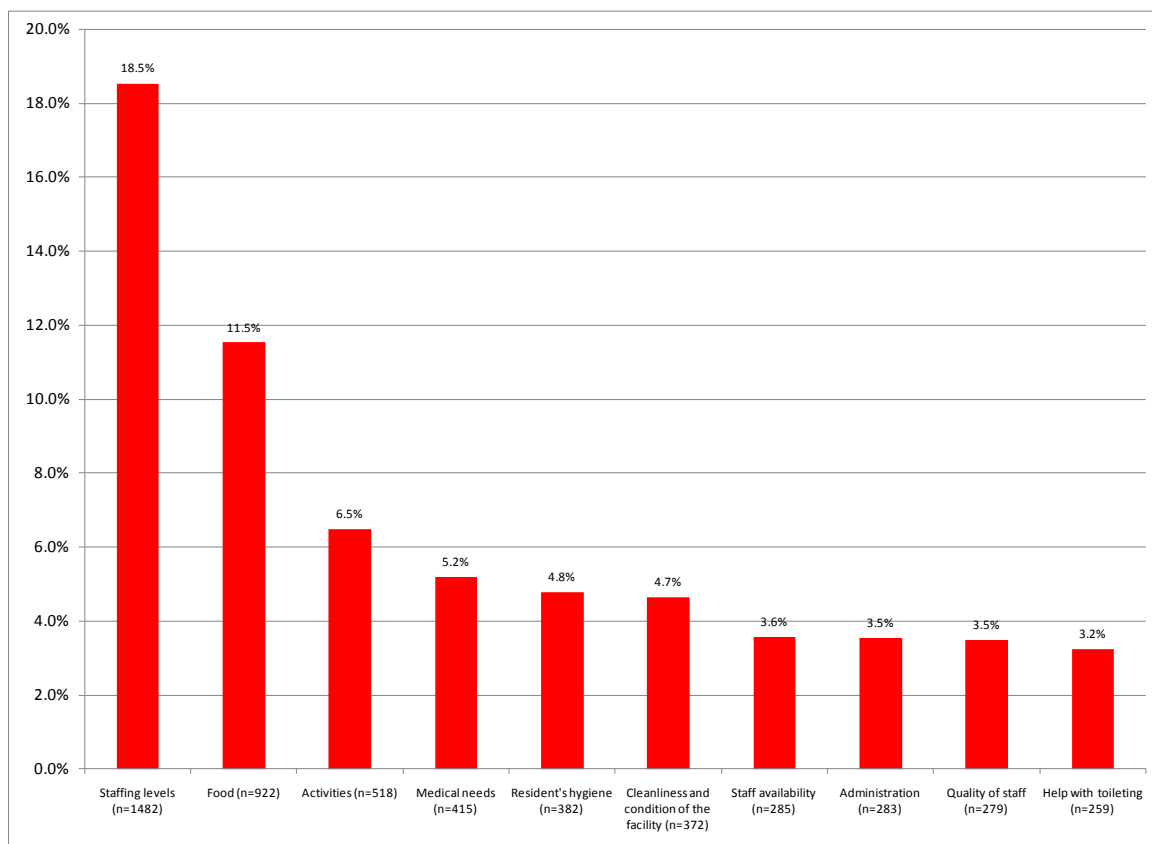
Appendix A
Questionnaire and Survey Materials Used
1st Stage - NH-CAHPS® Questionnaire & Cover Letter
2nd - Stage Reminder Postcard
3rd - Stage Reminder Letter

HQCA
Health Quality Council of Alberta

Promoting and improving patient safety and health service quality across Alberta

<DATE>

<FAMILY NAME>
<FAMILY ADDRESS>
<FAMILY ADDRESS>
<POSTAL CODE>

Dear <Mr./Ms. Family Name>,

We would like to invite you to take part in a survey about the quality of care and services that **<Name of resident>** receives at **<Name of care centre>**. This confidential survey is intended to obtain feedback from the families of residents about the quality of care and services provided in participating care centres across Alberta. The important information you and others provide will assist the care centres in identifying areas for improvement.
The questionnaire should only take about **15 minutes** to complete. A pre-paid return envelope is enclosed. If you prefer, you may complete the survey on-line via the Internet at **http://survey.hqca.ca** using the following survey access code: **[access code]**.

The survey is being conducted by the Health Quality Council of Alberta with the cooperation of <name of care centre>, Alberta Health Services and Alberta Health and Wellness. The Health Quality Council of Alberta (HQCA) is an independent organization legislated under the Regional Health Authorities Act. The HQCA monitors and reports on the quality, safety and performance of the health system and helps health care providers to improve the quality of the care and services they provide. The HQCA conducted this survey in 2007, and one goal of this year's survey will be to compare 2010 results with those of 2007 to see if there has been any change.

Your participation is entirely voluntary and you need not answer all of the questions. We hope you will participate and provide as much information as possible. We want to give you every opportunity to participate in this study. If we don't receive anything from you within 10 days, we will follow up with a reminder notice.

Your answers will be kept strictly confidential and will be combined with those of others in the final report. Individual survey answers will not be shared with anyone.

To manage the survey process and to ensure confidentiality, we have engaged the services of Agility Metrics Inc. Agility Metrics is an independent, national research firm who is under contract to the HQCA to follow the Alberta health information privacy legislation.

If you would like more information about the survey or have questions on how to complete the questionnaire please do not hesitate to call Agility Metrics (toll free) at **1-877-904-2542**.

Thank you in advance for your participation!

Sincerely,

John Cowell

John Cowell, MD
Chief Executive Officer
Health Quality Council of Alberta

CAHPS® Nursing Home Family Survey Alberta

Completing the questionnaire

- In completing this survey, we ask you to consider the care received by the nursing home resident mentioned in the cover letter, at the specified nursing home. This survey is about <u>your own</u> opinions and experience with this nursing home.

- For each question, please place a check mark ☑ clearly inside one box using a black or blue pen.

- Sometimes you will find the box you have checked has an instruction to go to another question. By following the instructions carefully you can skip questions that do not apply to you.

- Don't worry if you make a mistake; simply cross out the mistake and place a check mark in the correct box.

- Please make sure the adult in this household who most often visits the resident completes this survey.

- Once you complete the survey, please return it in the postage-paid envelope.

- If you prefer, you may complete the survey on-line via the Internet at **http://survey.hqca.ca** using the following survey access code: **[access code]**

If you have any questions regarding this survey, please contact Agility Metrics (toll free) at **1-877-904-2542**.

Thank you.

ABC123 2

[ID]

THE RESIDENT

1. Who is the person named on the cover letter?

 1☐ My Spouse/Partner
 2☐ My Parent
 3☐ My Mother-in-law/Father-in-law
 4☐ My Grandparent
 5☐ My Aunt/Uncle
 6☐ My Sister/Brother
 7☐ My Child
 8☐ My Friend
 9☐ Other (Please print.)

2. For this survey, the phrase "family member" refers to the person named in the cover letter.

Is your family member now living in the nursing home listed in the cover letter?

 1☐ Yes ➜ **If Yes, Go to Question 4**
 2☐ No

3. Was your family member discharged from this facility or did he or she die?

 1☐ Discharged ➜ If Discharged, please stop and return this survey in the postage-paid envelope.

 2☐ Deceased ➜ If your family member is deceased, we understand that you may not want to fill out a survey at this time. Please check the box indicating that your family member is deceased and return the survey in the enclosed envelope.

 If you would like to do the rest of the survey, we would be very grateful for your feedback. Please answer the questions about your family member's last six months at the nursing home. Thank you for your help.

4. In total, about how long has your family member lived in this nursing home?

 1☐ Less than 1 month
 2☐ 1 month to almost 3 months
 3☐ 3 months to almost 6 months
 4☐ 6 months to almost 12 months
 5☐ 12 months or longer

5. Do you expect your family member to live in this or any other nursing home permanently?

 1☐ Yes
 2☐ No
 3☐ Don't Know

6. In the last 6 months, has your family member ever shared a room with another person at this nursing home?

 1☐ Yes
 2☐ No

7. Does your family member have serious memory problems because of Alzheimer's disease, dementia, stroke, accident, or something else?

 1☐ Yes
 2☐ No

8. In the last 6 months, how often was your family member capable of making decisions about his or her own daily life, such as when to get up, what clothes to wear, and which activities to do?

 1☐ Never
 2☐ Sometimes
 3☐ Usually
 4☐ Always

YOUR VISITS

> Please answer the following questions for only yourself. Do not include the experiences of other family members.

9. **In the last 6 months, about how many times did you visit your family member in the nursing home?**

₁☐ 0 – 1 times in last 6 months ➔ **Go to Question 58 on Page 8**
₂☐ 2 – 5 times in the last 6 months
₃☐ 6 – 10 times in the last 6 months
₄☐ 11 – 20 times in the last 6 months
₅☐ More than 20 times in the last 6 months

10. **In the last 6 months, during any of your visits, did you try to find a nurse or aide for any reason?**

₁☐ Yes
₂☐ No ➔ **If No, Go to Question 12**

11. **In the last 6 months, how often were you able to find a nurse or aide when you wanted one?**

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

12. **In the last 6 months, how often did you see the nurses and aides treat your family member with courtesy and respect?**

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

13. **In the last 6 months, how often did you see the nurses and aides treat your family member with kindness?**

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

14. **In the last 6 months, how often did you feel that the nurses and aides really cared about your family member?**

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

15. **In the last 6 months, did you ever see any nurses or aides be rude to your family member or any other resident?**

₁☐ Yes
₂☐ No

16. **In the last 6 months, during any of your visits, did you help your family member with _eating_?**

₁☐ Yes
₂☐ No ➔ **If No, Go to Question 18**

17. **Was it because the nurses or aides either didn't help or made him or her wait too long?**

₁☐ Yes
₂☐ No

18. **In the last 6 months, during any of your visits, did you help your family member with _drinking_?**

₁☐ Yes
₂☐ No ➔ **If No, Go to Question 20 on page 4**

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[ID]

19. **Was it because the nurses or aides either didn't help or made him or her wait too long?**

   ₁☐ Yes
   ₂☐ No

20. **"Help toileting" means helping someone get on and off the toilet, or helping to change disposable briefs or pads.**

   In the last 6 months, during any of your visits to the nursing home, did you help your family member with <u>toileting</u>?

   ₁☐ Yes
   ₂☐ No → **If No, Go to Question 22**

21. **Was it because the nurses or aides either didn't help or made him or her wait too long?**

   ₁☐ Yes
   ₂☐ No

22. **In the last 6 months, how often did your family member look and smell clean?**

   ₁☐ Never
   ₂☐ Sometimes
   ₃☐ Usually
   ₄☐ Always

23. **Sometimes residents make it hard for nurses and aides to provide care by doing things like yelling, pushing, or hitting. In the last 6 months, did you see any resident, including your family member, behave in a way that made it hard for nurses or aides to provide care?**

   ₁☐ Yes
   ₂☐ No → **If No, Go to Question 25**

24. **In the last 6 months, how often did the nurses and aides handle this situation in a way that you felt was appropriate?**

   ₁☐ Never
   ₂☐ Sometimes
   ₃☐ Usually
   ₄☐ Always

YOUR EXPERIENCE WITH NURSES AND AIDES

25. **In the last 6 months, how often did the nurses and aides treat you with courtesy and respect?**

   ₁☐ Never
   ₂☐ Sometimes
   ₃☐ Usually
   ₄☐ Always

26. **In the last 6 months, did you want to get information about your family member from a nurse or an aide?**

   ₁☐ Yes
   ₂☐ No → **If No, Go to Question 28**

27. **In the last 6 months, how often did you get this information as soon as you wanted?**

   ₁☐ Never
   ₂☐ Sometimes
   ₃☐ Usually
   ₄☐ Always

28. **In the last 6 months, how often did the nurses and aides explain things in a way that was easy for you to understand?**

   ₁☐ Never
   ₂☐ Sometimes
   ₃☐ Usually
   ₄☐ Always

29. In the last 6 months, did the nurses and aides ever try to discourage you from asking questions about your family member?

₁☐ Yes
₂☐ No

THE NURSING HOME

30. In the last 6 months, how often did your family member's room look and smell clean?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

31. In the last 6 months, how often was the noise level around your family member's room acceptable to you?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

32. In the last 6 months, how often were you able to find places to talk to your family member in private?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

33. In the last 6 months, how often did the public areas of the nursing home look and smell clean?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

34. In the last 6 months, did you ever see the nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area?

₁☐ Yes
₂☐ No

35. Personal medical belongings are things like hearing aids, eye-glasses, and dentures. In the last 6 months, how often were your family member's personal medical belongings damaged or lost?

₁☐ Never
₂☐ Once
₃☐ Two or more times

36. In the last 6 months, did your family member use the nursing home's laundry service for his or her clothes?

₁☐ Yes
₂☐ No ➔ **If No, Go to Question 38**

37. In the last 6 months, when your family member used the laundry service, how often were clothes damaged or lost?

₁☐ Never
₂☐ Once or twice
₃☐ Three times or more

38. At any time in the last 6 months, were you ever unhappy with the care your family member received at the nursing home?

₁☐ Yes
₂☐ No ➔ **If No, Go to Question 42 on page 6**

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[ID]

39. In the last 6 months, did you talk to any nursing home staff about this concern?

₁☐ Yes
₂☐ No → **If No, Go to Question 41**

40. In the last 6 months, how often were you satisfied with the way the nursing home staff handled these problems?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

41. In the last 6 months, did you ever stop yourself from talking to any nursing home staff about your concerns because you thought they would take it out on your family member?

₁☐ Yes
₂☐ No

CARE OF YOUR FAMILY MEMBER

42. In the last 6 months, have you been involved in decisions about your family member's care?

₁☐ Yes
₂☐ No → **If No, Go to Question 44**

43. In the last 6 months, how often were you involved as much as you wanted to be in the decisions about your family member's care?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

44. A care conference is a formal meeting about care planning and health progress between a care team and a resident and his or her family.

In the last 12 months, have you been part of a care conference, either in person or by phone?

₁☐ Yes → **If Yes, Go to Question 46**
₂☐ No

45. Were you given the opportunity to be part of a care conference in the last 12 months either in person or by phone?

₁☐ Yes
₂☐ No

OVERALL RATINGS

46. Using any number from 0 to 10 where 0 is the worst care possible and 10 is the best care possible, what number would you use to rate the care at the nursing home?

☐ **0 Worst care possible**
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ **10 Best care possible**

47. If someone needed nursing home care, would you recommend this nursing home to them?

₁☐ Definitely no
₂☐ Probably no
₃☐ Probably yes
₄☐ Definitely yes

48. In the last 6 months, how often did you feel that there were enough nurses and aides in the nursing home?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

OTHER ISSUES

Please remember the questions in this survey are about your experiences. Do not include the experiences of other family members.

49. In the last 6 months, did you help with the care of your family member when you visited?

₁☐ Yes
₂☐ No

50. Do you feel that nursing home staff expect you to help with the care of your family member when you visit?

₁☐ Yes
₂☐ No

51. Using any number from 0 to 10 where 0 is the worst food possible and 10 is the best food possible, what number would you use to rate the food at this nursing home?

☐ **0 Worst food possible**
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ **10 Best food possible**

52. In the last 6 months, how often did your family member receive all of the medical services and treatments they needed?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

53. In the last 6 months, how often did you have concerns about your family member's medication?

₁☐ Never ➔ **If Never, Go to Question 56**
₂☐ Sometimes
₃☐ Usually
₄☐ Always

54. Did you talk with any nursing home staff about these medication concerns?

₁☐ Yes
₂☐ No➔ **If No, Go to Question 56**

55. In the last 6 months, how often were your concerns about your family member's medication resolved?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

56. In the last 6 months, did you ask the nursing home for information about payments or expenses?

₁☐ Yes
₂☐ No ➔ **If No, Go to Question 58**

57. In the last 6 months, how often did you get all the information you wanted about payments or expenses?

₁☐ Never
₂☐ Sometimes
₃☐ Usually
₄☐ Always

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[ID]

YOU AND YOUR ROLE

58. What is your age?

- 1☐ 18 to 24
- 2☐ 25 to 34
- 3☐ 35 to 44
- 4☐ 45 to 54
- 5☐ 55 to 64
- 6☐ 65 to 74
- 7☐ 75 or older

59. Are you male or female?

- 1☐ Male
- 2☐ Female

60. What is the highest grade or level of school that you have completed?

- 1☐ Grade school or some high school
- 2☐ Completed high school
- 3☐ Post-secondary technical school
- 4☐ Some university or college
- 5☐ Completed college diploma
- 6☐ Completed university degree
- 7☐ Postgrad degree (Master's or Ph.D.)

61. Would you say you are…
Please check all that apply.

- 1☐ White / Caucasian
- 2☐ Other ➔ [   ]
  (Please print.)

62. What language do you mainly speak at home?

- 1☐ English
- 2☐ French
- 3☐ Other ➔ [   ]
  (Please print.)

63. Did someone help you complete this survey?

- 1☐ Yes
- 2☐ No ➔ **Go to Question 65**

64. How did that person help you?
Check all that apply.

- 1☐ Read the questions to me
- 2☐ Wrote down the answers I gave
- 3☐ Answered the questions for me
- 4☐ Translated the questions into my language

65. Considering all of the people who visit your family member in the nursing home, are you the person who has the most experience with his/her care?

- 1☐ Yes
- 2☐ No
- 3☐ Don't Know

66. Do you have any suggestions how care and services at this nursing home could be improved? If so, please explain.

[   ]

Please return the completed survey in the postage-paid envelope.

Thank you for completing this survey. Your opinions are important to us.

HQCA
Health Quality Council of Alberta

PO Box 2315 Station M, Calgary AB T2P 2M6

<FAMILY NAME>
<FAMILY ADDRESS>
<FAMILY ADDRESS>
<POSTAL CODE>

About 2 weeks ago, the **Health Quality Council of Alberta** sent you a questionnaire. If you have already completed and returned it to us, please accept our sincere thanks. If not, please do so at your earliest convenience.

The survey was sent to selected individuals so it is extremely important that you complete this survey. The information collected from this study will assist long term care centres in Alberta identify areas for improvement.

If by some chance you did not receive the questionnaire or it was misplaced, please call Agility Metrics, the research firm we engaged for this survey, at (toll free) **1-877-904-2542** and another package will be sent to you. If you prefer, you may complete the survey on-line via the Internet at **http://survey.hqca.ca** using the following survey access code: **ABC123**

Sincerely,

John Cowell

John Cowell, MD
Chief Executive Officer
Health Quality Council of Alberta

<DATE>

<FAMILY NAME>
<FAMILY ADDRESS>
<FAMILY ADDRESS>
<POSTAL CODE>

Dear «Family_First_Name» «Family_Last_Name»,

We recently sent you a survey regarding the quality of care and services that **«Resident_First_Name» «Resident_Last_Name»** receives at **«Facility»**.

Your views are very important and as we have not received your response, we have provided you with a second copy of the questionnaire. The questionnaire should only take about **15 minutes** to complete. If you have already replied, please ignore this letter and accept our thanks for your participation.

A pre-paid return envelope is enclosed. If you prefer, you may complete the survey on-line via the Internet at **http://survey.hqca.ca** using the following survey access code: **[access code]**.

While your participation in the survey is entirely voluntary and you need not answer all the questions, we hope you will participate and provide as much information as possible. We want to ensure you have the opportunity to participate in this study. If we don't receive anything from you within two weeks, a representative from our contracted research firm, (Agility Metrics Inc.), may follow up with a phone call to determine your interest and to confirm that you received the survey.

Your answers will be kept in strict confidence and will be combined with those of others in the final report. Individual survey answers will not be shared with anyone.

If you would like more information about the survey, or if you have any questions about completing the questionnaire, please call Agility Metrics (toll free) at **1-877-904-2542**.

Sincerely,

John Cowell, MD
Chief Executive Officer
Health Quality Council of Alberta

Appendix B
Regression Outputs for Forecasting Models

Forecasting Models

This appendix includes the SPSS outputs that were used for <u>Section 3.12</u>.

Model 1

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING PAIRWISE
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT Q46w
 /METHOD=ENTER mbn_s kar_s pifi_s nhs_s.
```

Descriptive Statistics

	Mean	Std. Deviation	N
Q46. Weighted	82.09	16.368	7784
Meeting Basic Needs Composite - Standardized and Weighted	72.5787	28.33356	4579
Kindness and Respect Composite - Standardized and Weighted	78.7058	24.48434	7928
Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	78.4998	17.77218	7935
Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	65.6393	20.40558	7940

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.771[a]	.593	.593	10.441

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	715062.191	4	178765.548	1639.756	.000[a]
	Residual	489933.967	4494	109.020		
	Total	1204996.158	4498			

a. Predictors: (Constant), Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and weighted, Meeting Basic Needs Composite - Standardized and weighted, Providing Information and Encouraging Family Involvement Composite - Standardized and weighted, Kindness and Respect Composite - Standardized and weighted

b. Dependent Variable: Q46. Weighted

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.372	.733		42.802	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.006	.133	11.941	.000
	Kindness and Respect Composite - Standardized and Weighted	.217	.009	.324	24.358	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.125	.011	.136	11.307	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.278	.010	.347	27.350	.000

a. Dependent Variable: Q46. Weighted

Model 2

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING PAIRWISE
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT Q46w
 /METHOD=ENTER mbn_s kar_s pifi_s nhs_s
 /METHOD=ENTER d_sex1
 /METHOD=ENTER d_own1 d_own2
 /METHOD=ENTER d_age1 d_age2 d_age3 d_age4 d_age5 d_age6
 /METHOD=ENTER d_bed1 d_bed2 d_bed3
 /METHOD=ENTER d_perm1 d_perm2
 /METHOD=ENTER d_share1
 /METHOD=ENTER d_exp1 d_exp2.
```

Descriptive Statistics

	Mean	Std. Deviation	N
Q46. Weighted	82.09	16.368	7784
Meeting Basic Needs Composite - Standardized and Weighted	72.5787	28.33356	4579
Kindness and Respect Composite - Standardized and Weighted	78.7058	24.48434	7928
Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	78.4998	17.77218	7935
Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	65.6393	20.40558	7940
Dummy variable - Gender	.69	.464	7703
Dummy variable - Owner1	.32	.467	8179
Dummy variable - Owner2	.24	.427	8179
Dummy variable - Age1	.00	.019	8012
Dummy variable - Age2	.01	.084	8012
Dummy variable - Age3	.04	.190	8012
Dummy variable - Age4	.19	.394	8012
Dummy variable - Age5	.23	.421	8012
Dummy variable - Age6	.17	.377	8012
Dummy variable - Beds1	.08	.270	8179

Descriptive Statistics

	Mean	Std. Deviation	N
Dummy variable - Beds2	.35	.476	8179
Dummy variable - Beds3	.03	.181	8179
Dummy variable - Permanent1 (q5)	.03	.177	7855
Dummy variable - Permanent2 (q5)	.03	.183	7855
Dummy variable - Share1 (Q6)	.51	.500	7973
Dummy variable - Exp1 (q65)	.09	.281	7993
Dummy variable - Exp2 (q65)	.03	.178	7993

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.770[a]	.593	.593	10.441
2	.771[b]	.594	.594	10.434
3	.772[c]	.596	.595	10.417
4	.773[d]	.597	.596	10.405
5	.774[e]	.598	.597	10.391
6	.774[f]	.600	.598	10.377
7	.774[g]	.600	.598	10.377
8	.775[h]	.600	.598	10.378

ANOVA[i]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	685970.066	4	171492.516	1572.984	.000[a]
	Residual	470001.126	4311	109.024		
	Total	1155971.192	4315			
2	Regression	686716.884	5	137343.377	1261.469	.000[b]
	Residual	469254.307	4310	108.876		
	Total	1155971.192	4315			
3	Regression	688516.248	7	98359.464	906.467	.000[c]
	Residual	467454.944	4308	108.509		
	Total	1155971.192	4315			
4	Regression	690217.707	13	53093.670	490.407	.000[d]
	Residual	465753.484	4302	108.264		
	Total	1155971.192	4315			
5	Regression	691808.747	16	43238.047	400.464	.000[e]
	Residual	464162.444	4299	107.970		
	Total	1155971.192	4315			
6	Regression	693259.889	18	38514.438	357.667	.000[f]
	Residual	462711.303	4297	107.682		
	Total	1155971.192	4315			
7	Regression	693378.749	19	36493.618	338.909	.000[g]
	Residual	462592.443	4296	107.680		
	Total	1155971.192	4315			
8	Regression	693472.570	21	33022.503	306.593	.000[h]
	Residual	462498.622	4294	107.708		
	Total	1155971.192	4315			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.372	.748		41.921	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.133	11.696	.000
	Kindness and Respect Composite - Standardized and Weighted	.217	.009	.324	23.857	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.125	.011	.136	11.075	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.278	.010	.347	26.787	.000
2	(Constant)	31.976	.783		40.860	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.134	11.732	.000
	Kindness and Respect Composite - Standardized and Weighted	.216	.009	.323	23.755	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.126	.011	.136	11.137	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.278	.010	.347	26.832	.000
	Dummy variable - Gender	-.898	.343	-.025	-2.619	.009
3	(Constant)	32.460	.808		40.169	.000

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.132	11.634	.000
	Kindness and Respect Composite - Standardized and Weighted	.216	.009	.324	23.862	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.127	.011	.137	11.224	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.276	.010	.344	26.550	.000
	Dummy variable - Gender	-.800	.343	-.023	-2.331	.020
	Dummy variable - Owner1	-1.408	.371	-.040	-3.793	.000
	Dummy variable - Owner2	-.052	.405	-.001	-.129	.897
4	(Constant)	32.562	.840		38.764	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.078	.007	.135	11.835	.000
	Kindness and Respect Composite - Standardized and Weighted	.215	.009	.321	23.669	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.126	.011	.137	11.206	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.272	.010	.340	26.128	.000

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Gender	-.647	.348	-.018	-1.862	.063
	Dummy variable - Owner1	-1.413	.371	-.040	-3.810	.000
	Dummy variable - Owner2	-.055	.405	-.001	-.137	.891
	Dummy variable - Age1	-10.572	8.192	-.012	-1.291	.197
	Dummy variable - Age2	-.439	1.899	-.002	-.231	.817
	Dummy variable - Age3	-.695	.863	-.008	-.806	.420
	Dummy variable - Age4	-.830	.448	-.020	-1.854	.064
	Dummy variable - Age5	.298	.424	.008	.703	.482
	Dummy variable - Age6	1.069	.473	.025	2.263	.024
5	(Constant)	32.257	.859		37.564	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.134	11.774	.000
	Kindness and Respect Composite - Standardized and Weighted	.214	.009	.320	23.625	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.128	.011	.139	11.353	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.268	.010	.334	25.569	.000
	Dummy variable - Gender	-.633	.347	-.018	-1.822	.069
	Dummy variable - Owner1	-1.132	.395	-.032	-2.868	.004
	Dummy variable - Owner2	.283	.415	.007	.682	.495
	Dummy variable - Age1	-10.594	8.181	-.013	-1.295	.195
	Dummy variable - Age2	-.327	1.897	-.002	-.173	.863
	Dummy variable - Age3	-.703	.862	-.008	-.816	.415

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Age4	-.831	.447	-.020	-1.858	.063
	Dummy variable - Age5	.312	.424	.008	.736	.462
	Dummy variable - Age6	1.111	.472	.026	2.353	.019
	Dummy variable - Beds1	-.553	.624	-.009	-.887	.375
	Dummy variable - Beds2	.911	.359	.026	2.534	.011
	Dummy variable - Beds3	2.552	.917	.028	2.784	.005
6	(Constant)	32.617	.864		37.754	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.134	11.778	.000
	Kindness and Respect Composite - Standardized and Weighted	.213	.009	.318	23.450	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.127	.011	.137	11.231	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.268	.010	.334	25.589	.000
	Dummy variable - Gender	-.666	.347	-.019	-1.918	.055
	Dummy variable - Owner1	-1.115	.394	-.032	-2.827	.005
	Dummy variable - Owner2	.305	.415	.008	.735	.462
	Dummy variable - Age1	-10.675	8.170	-.013	-1.307	.191
	Dummy variable - Age2	-.211	1.895	-.001	-.111	.912
	Dummy variable - Age3	-.666	.861	-.008	-.773	.439
	Dummy variable - Age4	-.796	.447	-.019	-1.782	.075
	Dummy variable - Age5	.348	.423	.009	.823	.411
	Dummy variable - Age6	1.248	.473	.029	2.638	.008

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Beds1	-.493	.623	-.008	-.792	.428
	Dummy variable - Beds2	.907	.359	.026	2.525	.012
	Dummy variable - Beds3	2.585	.916	.029	2.823	.005
	Dummy variable - Permanent1 (q5)	-.996	.897	-.011	-1.110	.267
	Dummy variable - Permanent2 (q5)	-3.088	.872	-.035	-3.540	.000
7	(Constant)	32.467	.876		37.080	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.134	11.745	.000
	Kindness and Respect Composite - Standardized and Weighted	.212	.009	.318	23.404	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.127	.011	.138	11.271	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.268	.010	.334	25.589	.000
	Dummy variable - Gender	-.683	.347	-.019	-1.966	.049
	Dummy variable - Owner1	-1.158	.396	-.033	-2.922	.003
	Dummy variable - Owner2	.302	.415	.008	.729	.466
	Dummy variable - Age1	-10.733	8.170	-.013	-1.314	.189
	Dummy variable - Age2	-.224	1.895	-.001	-.118	.906
	Dummy variable - Age3	-.679	.861	-.008	-.789	.430
	Dummy variable - Age4	-.804	.447	-.019	-1.800	.072
	Dummy variable - Age5	.341	.423	.009	.805	.421
	Dummy variable - Age6	1.255	.473	.029	2.653	.008

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Beds1	-.606	.632	-.010	-.958	.338
	Dummy variable - Beds2	.922	.359	.027	2.566	.010
	Dummy variable - Beds3	2.584	.916	.029	2.822	.005
	Dummy variable - Permanent1 (q5)	-1.028	.898	-.011	-1.146	.252
	Dummy variable - Permanent2 (q5)	-3.112	.873	-.035	-3.566	.000
	Dummy variable - Share1 (Q6)	.341	.325	.010	1.051	.293
8	(Constant)	32.502	.878		37.015	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.077	.007	.134	11.746	.000
	Kindness and Respect Composite - Standardized and Weighted	.212	.009	.317	23.389	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.127	.011	.138	11.258	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.268	.010	.334	25.589	.000
	Dummy variable - Gender	-.687	.348	-.019	-1.977	.048
	Dummy variable - Owner1	-1.163	.397	-.033	-2.932	.003
	Dummy variable - Owner2	.295	.415	.008	.710	.478
	Dummy variable - Age1	-10.479	8.176	-.012	-1.282	.200
	Dummy variable - Age2	-.238	1.896	-.001	-.126	.900
	Dummy variable - Age3	-.668	.861	-.008	-.775	.438
	Dummy variable - Age4	-.806	.447	-.019	-1.803	.072

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Age5	.335	.424	.009	.792	.429
	Dummy variable - Age6	1.251	.473	.029	2.642	.008
	Dummy variable - Beds1	-.595	.632	-.010	-.941	.347
	Dummy variable - Beds2	.923	.359	.027	2.569	.010
	Dummy variable - Beds3	2.584	.916	.029	2.821	.005
	Dummy variable - Permanent1 (q5)	-1.042	.898	-.011	-1.160	.246
	Dummy variable - Permanent2 (q5)	-3.089	.873	-.035	-3.538	.000
	Dummy variable - Share1 (Q6)	.340	.325	.010	1.047	.295
	Dummy variable - Exp1 (q65)	-.023	.565	.000	-.040	.968
	Dummy variable - Exp2 (q65)	-.831	.891	-.009	-.933	.351

a. Dependent Variable: Q46. Weighted

Model 3

```
COMPUTE filter_$=(up_low95 >= 1).
VARIABLE LABEL filter_$ 'up_low95 >= 1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING MEANSUB
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT q46w
 /METHOD=ENTER mbn_s kar_s pifi_s nhs_s
 /METHOD=ENTER d_sex1
 /METHOD=ENTER d_own1 d_own2
 /METHOD=ENTER d_age1 d_age2 d_age3 d_age4 d_age5 d_age6
 /METHOD=ENTER d_bed1 d_bed2 d_bed3
 /METHOD=ENTER d_perm1 d_perm2
 /METHOD=ENTER d_share1
 /METHOD=ENTER d_exp1 d_exp2.
```

Descriptive Statistics

	Mean	Std. Deviation	N
Q46. Weighted	79.21	18.579	842
Meeting Basic Needs Composite - Standardized and Weighted	68.3864	22.11990	842
Kindness and Respect Composite - Standardized and Weighted	75.4197	26.24840	842
Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	75.5999	19.14760	842
Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	62.8826	22.80692	842
Dummy variable - Gender	.62	.486	842
Dummy variable - Owner1	.30	.457	842
Dummy variable - Owner2	.50	.500	842
Dummy variable - Age1	.00	.034	842
Dummy variable - Age2	.01	.108	842
Dummy variable - Age3	.04	.197	842
Dummy variable - Age4	.17	.377	842

Dummy variable - Age5	.24	.425	842
Dummy variable - Age6	.20	.397	842
Dummy variable - Beds1	.31	.464	842
Dummy variable - Beds2	.16	.366	842
Dummy variable - Beds3	.00	.000	842
Dummy variable - Permanent1 (q5)	.03	.176	842
Dummy variable - Permanent2 (q5)	.05	.218	842
Dummy variable - Share1 (Q6)	.64	.474	842
Dummy variable - Exp1 (q65)	.10	.300	842
Dummy variable - Exp2 (q65)	.04	.205	842

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809[a]	.654	.653	10.950
2	.809[b]	.654	.652	10.957
3	.810[c]	.656	.653	10.947
4	.811[d]	.658	.653	10.943
5	.814[e]	.663	.657	10.888
6	.815[f]	.663	.656	10.889
7	.815[g]	.663	.656	10.895
8	.815[h]	.664	.655	10.906

ANOVA[i]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	189934.927	4	47483.732	396.013	.000[a]
	Residual	100360.018	837	119.904		
	Total	290294.945	841			
2	Regression	189935.721	5	37987.144	316.436	.000[b]
	Residual	100359.223	836	120.047		
	Total	290294.945	841			
3	Regression	190346.871	7	27192.410	226.903	.000[c]
	Residual	99948.074	834	119.842		
	Total	290294.945	841			
4	Regression	191135.906	13	14702.762	122.771	.000[d]
	Residual	99159.039	828	119.757		
	Total	290294.945	841			
5	Regression	192366.888	15	12824.459	108.171	.000[e]
	Residual	97928.057	826	118.557		
	Total	290294.945	841			
6	Regression	192585.171	17	11328.539	95.535	.000[f]
	Residual	97709.773	824	118.580		
	Total	290294.945	841			
7	Regression	192599.008	18	10699.945	90.137	.000[g]
	Residual	97695.937	823	118.707		
	Total	290294.945	841			
8	Regression	192636.767	20	9631.838	80.974	.000[h]
	Residual	97658.178	821	118.950		
	Total	290294.945	841			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.314	1.688		14.993	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.082	.019	.098	4.298	.000
	Kindness and Respect Composite - Standardized and Weighted	.156	.021	.220	7.257	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.157	.026	.161	6.067	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.393	.023	.482	16.888	.000
2	(Constant)	25.353	1.758		14.425	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.082	.019	.098	4.295	.000
	Kindness and Respect Composite - Standardized and Weighted	.156	.021	.220	7.249	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.157	.026	.161	6.064	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.393	.023	.482	16.865	.000
	Dummy variable - Gender	-.063	.779	-.002	-.081	.935
3	(Constant)	23.982	1.917		12.512	.000

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Meeting Basic Needs Composite - Standardized and Weighted	.084	.019	.099	4.357	.000
	Kindness and Respect Composite - Standardized and Weighted	.156	.021	.220	7.252	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.151	.026	.156	5.798	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.402	.024	.493	16.890	.000
	Dummy variable - Gender	-.107	.779	-.003	-.138	.890
	Dummy variable - Owner1	.863	1.098	.021	.786	.432
	Dummy variable - Owner2	1.822	1.019	.049	1.788	.074
4	(Constant)	23.411	2.036		11.498	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.089	.019	.106	4.599	.000
	Kindness and Respect Composite - Standardized and Weighted	.155	.021	.219	7.198	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.150	.026	.154	5.727	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.396	.024	.486	16.483	.000

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Gender	.259	.799	.007	.324	.746
	Dummy variable - Owner1	.833	1.104	.020	.754	.451
	Dummy variable - Owner2	1.643	1.024	.044	1.605	.109
	Dummy variable - Age1	-1.858	11.006	-.003	-.169	.866
	Dummy variable - Age2	.243	3.544	.001	.069	.945
	Dummy variable - Age3	.762	2.007	.008	.380	.704
	Dummy variable - Age4	-.661	1.131	-.013	-.584	.559
	Dummy variable - Age5	1.117	1.027	.026	1.088	.277
	Dummy variable - Age6	2.253	1.113	.048	2.024	.043
5	(Constant)	23.335	2.027		11.511	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.088	.019	.104	4.563	.000
	Kindness and Respect Composite - Standardized and Weighted	.157	.021	.221	7.315	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.145	.026	.150	5.573	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.380	.025	.467	15.296	.000
	Dummy variable - Gender	.155	.796	.004	.194	.846
	Dummy variable - Owner1	1.738	1.136	.043	1.530	.126
	Dummy variable - Owner2	1.592	1.230	.043	1.294	.196
	Dummy variable - Age1	-1.817	10.951	-.003	-.166	.868
	Dummy variable - Age2	.232	3.526	.001	.066	.948
	Dummy variable - Age3	.891	1.998	.009	.446	.656

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Age4	-.674	1.126	-.014	-.599	.549
	Dummy variable - Age5	1.107	1.022	.025	1.084	.279
	Dummy variable - Age6	2.240	1.108	.048	2.023	.043
	Dummy variable - Beds1	1.669	1.130	.042	1.477	.140
	Dummy variable - Beds2	3.615	1.176	.071	3.073	.002
6	(Constant)	23.722	2.048		11.581	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.088	.019	.104	4.553	.000
	Kindness and Respect Composite - Standardized and Weighted	.155	.021	.220	7.244	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.146	.026	.150	5.586	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.379	.025	.465	15.193	.000
	Dummy variable - Gender	.075	.798	.002	.094	.925
	Dummy variable - Owner1	1.695	1.141	.042	1.486	.138
	Dummy variable - Owner2	1.519	1.232	.041	1.233	.218
	Dummy variable - Age1	-1.979	10.953	-.004	-.181	.857
	Dummy variable - Age2	.506	3.533	.003	.143	.886
	Dummy variable - Age3	1.125	2.007	.012	.560	.575
	Dummy variable - Age4	-.630	1.126	-.013	-.559	.576
	Dummy variable - Age5	1.182	1.023	.027	1.155	.248
	Dummy variable - Age6	2.349	1.111	.050	2.114	.035
	Dummy variable - Beds1	1.694	1.130	.042	1.499	.134

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Beds2	3.595	1.177	.071	3.055	.002
	Dummy variable - Permanent1 (q5)	-1.526	2.152	-.014	-.709	.478
	Dummy variable - Permanent2 (q5)	-2.097	1.766	-.025	-1.188	.235
7	(Constant)	23.763	2.053		11.575	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.088	.019	.104	4.549	.000
	Kindness and Respect Composite - Standardized and Weighted	.156	.021	.220	7.245	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.146	.026	.150	5.574	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.379	.025	.465	15.188	.000
	Dummy variable - Gender	.095	.801	.002	.118	.906
	Dummy variable - Owner1	1.887	1.272	.046	1.483	.138
	Dummy variable - Owner2	1.661	1.301	.045	1.277	.202
	Dummy variable - Age1	-1.889	10.962	-.004	-.172	.863
	Dummy variable - Age2	.532	3.535	.003	.151	.880
	Dummy variable - Age3	1.147	2.009	.012	.571	.568
	Dummy variable - Age4	-.634	1.127	-.013	-.563	.574
	Dummy variable - Age5	1.189	1.024	.027	1.161	.246
	Dummy variable - Age6	2.347	1.112	.050	2.111	.035
	Dummy variable - Beds1	1.804	1.176	.045	1.534	.125
	Dummy variable - Beds2	3.584	1.178	.071	3.044	.002

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Permanent1 (q5)	-1.523	2.153	-.014	-.708	.479
	Dummy variable - Permanent2 (q5)	-2.079	1.768	-.024	-1.176	.240
	Dummy variable - Share1 (Q6)	-.334	.977	-.009	-.341	.733
8	(Constant)	23.811	2.060		11.561	.000
	Meeting Basic Needs Composite - Standardized and Weighted	.088	.019	.105	4.550	.000
	Kindness and Respect Composite - Standardized and Weighted	.156	.021	.220	7.241	.000
	Providing Information and Encouraging Family Involvement Composite - Standardized and Weighted	.145	.026	.150	5.560	.000
	Nursing Home Staffing, Care of Belongings and Environment Composite - Standardized and Weighted	.379	.025	.465	15.150	.000
	Dummy variable - Gender	.107	.803	.003	.133	.894
	Dummy variable - Owner1	1.871	1.274	.046	1.469	.142
	Dummy variable - Owner2	1.667	1.302	.045	1.280	.201
	Dummy variable - Age1	-1.910	10.974	-.004	-.174	.862
	Dummy variable - Age2	.628	3.543	.004	.177	.859
	Dummy variable - Age3	1.133	2.021	.012	.560	.575
	Dummy variable - Age4	-.636	1.128	-.013	-.564	.573
	Dummy variable - Age5	1.204	1.027	.028	1.173	.241
	Dummy variable - Age6	2.336	1.113	.050	2.098	.036
	Dummy variable - Beds1	1.808	1.177	.045	1.536	.125

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Dummy variable - Beds2	3.585	1.182	.071	3.033	.002
	Dummy variable - Permanent1 (q5)	-1.542	2.157	-.015	-.715	.475
	Dummy variable - Permanent2 (q5)	-2.144	1.779	-.025	-1.205	.228
	Dummy variable - Share1 (Q6)	-.359	.980	-.009	-.367	.714
	Dummy variable - Exp1 (q65)	-.613	1.267	-.010	-.484	.629
	Dummy variable - Exp2 (q65)	.470	1.881	.005	.250	.803

a. Dependent Variable: Q46. Weighted

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