

November 2008

Alberta Long Term Care Family Experience Survey

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

Agili-T Health Solutions Inc.



www.agili-t.com



Table of Contents

1.	EXE	CUTIVE SUMMARY	1
	1.1.	Overview	1
	1.2.	Key Findings	1
	1.3.	In Summary	4
	1.4.	Overview of Report Documents	5
2.	BAC	KGROUND AND METHODOLOGY	6
	2.1.	Background	6
		 2.1.1. Working Group and Instrument Selection	6 7 7 8
	2.2.	Survey Process and Methodology	8
		 2.2.1. Privacy, Confidentiality and Ethics	8 9 9 10 10 12
	2.3.	Analytical Methodology	13
3.	DET	AILED RESULTS	14
	3.1.	Survey Respondent Characteristics	14
		 3.1.1. Respondent Relationship to Resident	15 16 17 18 19 20 21 22 23 24 25 25 26 27
	3.2.	Resident Characteristics	28
		 3.2.1. Discharged or Deceased	29 30 31 32 33 34 35



Table of Contents

3.3.	Forecasting Model for Global Overall Care Ratings		
	3.3.1.	Care Rating Forecasting - Definition of Composite Variables	
3.4.	Nursir	ng Home Staffing, Care of Belongings and Environment	
	3.4.1. 3.4.2. 3.4.3. 3.4.4. 3.4.5. 3.4.6. 3.4.7. 3.4.8. 3.4.9.	Ease of Finding a Nurse or Aide Perception of Staffing Levels Resident's Room Looks and Smells Clean Resident Looks and Smells Clean Public Areas Look and Smell Clean Resident's Medical Belongings Lost Resident's Clothes Lost Noise Level Around Resident's Room Able to Find a Place to Talk in Private	38 39 40 41 42 43 43 44 45 46
3.5.	Kindn	ess and Respect	47
	3.5.1. 3.5.2. 3.5.3. 3.5.4. 3.5.5. 3.5.6. 3.5.7.	Nurses and Aides Treat Resident with Courtesy and Respect Nurses and Aides Treat Resident with Kindness Nurses and Aides Really Cared about Resident Nurses and Aides Were Rude to Resident Nurses and Aides Were Appropriate with Difficult Residents Protection of Resident's Physical Privacy Respondent Treated with Courtesy & Respect by Nurses and Aides	48 50 51 52 53 54
3.6.	Provid	ling Information and Encouraging Family Involvement	55
	3.6.1. 3.6.2. 3.6.3. 3.6.4. 3.6.5. 3.6.6. 3.6.7. 3.6.8. 3.6.9.	Nurses and Aides Give Respondent Information about Resident Nurses and Aides Explain Things in Understandable Way Nurses and Aides Discourage Respondent Questions Respondents Stopped Themselves from Complaining Respondent Involvement in Decisions about Care Respondent Given Info about Payments or Expenses Participated in Care Conference in last 12 Months Unhappy with Care at the Nursing Home Satisfied with the Way Care Concerns Were Handled	56 57 58 59 60 61 62 64 65
3.7.	Meetir	ng Basic Needs	66
	3.7.1. 3.7.2. 3.7.3. 3.7.4.	Nursing Home Staff Expect Family Member to Help Helped with Drinking Helped with Eating Helped with Toileting	67 68 69 70
3.8.	Key Fi	ndings - Global Overall Ratings	71
3.9.	Overa	II Care Rating – Quartile Analysis	72
	3.9.1. 3.9.2. 3.9.3. 3.9.4. 3.9.5. 3.9.6. 3.9.7.	Facility Groupings by Quartile Upper Quartile Facilities Middle (+) Quartile Facilities Middle (-) Quartile Facilities Lower Quartile Facilities Reliable Sample Size Facilities - Upper/ Lower Quartile Comparison Small Sample Size Facilities – Lower, Middle, Upper Quartiles	72 75 76 76 76 77 84
3.10.	Facilit	y-level Effects	
	3.10.1	Overall Care Ratings versus Facility Size	



Table of Contents

3.11.	Global Overall Care Rating Forecasting Model	
	 3.11.1. Model Description – Composite Variables 3.11.2. Forecasting Models	88 90 92
3.12.	Comments Analysis	94
	3.12.1. Number of Comments by Dimension3.12.2. Number of Comments by Type of Respondent	94 95

List of Appendices

Appendix A: Questionnaire and Survey Materials Used Appendix B: Comment Coding by Composite Variable Appendix C: Regression Outputs for Forecasting Models Appendix D: Working Group Credits

List of Tables and Figures

Table 1: Survey Mailing Protocol	9
Table 2: Response Rate	.10
Table 3: Statistics by RHA	.11
Table 4: Sample Sizes	11
Figure 1: Respondent Relationship with Resident	15
Table 5: Respondent Relationship with Resident	15
Figure 2: Frequency of Visits	16
Table 6: Frequency of Visits	.16
Figure 3: Proportion of Respondents with Power of Attorney	17
Table 7: Proportion of Respondents with Power of Attorney	17
Figure 4: Respondents Legally Appointed Guardian/Agent	.18
Table 8: Respondents Legally Appointed Guardian/Agent	.18
Figure 5: Someone Else Legally Appointed Guardian/Agent	19
Table 9: Someone Else Legally Appointed Guardian/Agent	.19
Figure 6: Respondent Helped the Resident with Managing Finances	20
Table 10: Respondent Helped the Resident with Managing Finances	20
Figure 7: Most Experienced Person with Resident Care	21
Table 11: Most Experienced Person with Resident Care	21
Figure 8: Respondent Age Distribution	22
Table 12: Respondent Age Distribution	22
Figure 9: Respondent Gender	23
Table 13: Respondent Gender	23
Figure 10: Respondent Education	24
Table 14: Respondent Education	24
Table 15: Respondent Ethnicity	25
Table 16: Respondent Language	25
Figure 11: Respondent Needed Assistance to Complete the Survey	26
Table 17: Respondent Needed Assistance to Complete the Survey	26
Figure 12: Type of Assistance Provided for Completing the Survey	.27
Table 18: Type of Assistance Provided for Completing the Survey	.27
Figure 13: Discharged or Deceased	29
Table 19: Discharged or Deceased	29
Figure 14: Time Lived in the Nursing Home	30
Table 20: Time Lived in the Nursing Home	.30



List of Tables and Figures

Figure 15: Permanency in Nursing Home	.31
Table 21: Permanency in Nursing Home	.31
Table 22: Shared Room and Noise Level Acceptability	.32
Figure 16: Resident in Shared Room	.32
Table 23: Resident in Shared Room	.32
Figure 17: Resident with Serious Memory Problem	.33
Table 24: Resident with Serious Memory Problem	.33
Figure 18: Resident Autonomy	.34
Table 25: Resident Autonomy	.34
Figure 19: Resident Gender	.35
Table 26: Resident Gender	.35
Table 27: Respondents Who Tried to Find a Nurse or Aide in Last Six Months	.38
Figure 20: Ease of Finding Nurse or Aide	.38
Table 28: Ease of Finding Nurse or Aide	. 38
Figure 21: Perception of Staffing Levels	.39
Table 29: Perceptions of Staffing Levels in Nursing Homes	.39
Figure 22: Resident's Room Looks and Smells Clean	.40
Table 30: Resident's Room Looks and Smells Clean	.40
Figure 23: Resident Looks and Smells Clean	.41
Table 31: Resident Looks and Smells Clean	.41
Figure 24: Public Areas Look and Smell Clean	.42
Table 32: Public Areas Look and Smell Clean	.42
Figure 25: Resident's Medical Belongings Lost	43
Table 33: Resident's Medical Belongings Lost	.43
Table 34 [.] Use of Nursing Home Laundry Service	44
Figure 26: Resident's Clothes Lost	44
Table 35: Resident's Clothes Lost	.44
Figure 27: Noise Level Around Resident's Room	.45
Table 36. Noise Level Around Resident's Room	45
Figure 28: Able to Find a Place to Talk in Private	.46
Table 37 ⁻ Able to Find a Place to Talk in Private	46
Figure 29: Nurses and Aides Treat Resident with Courtesv and Respect	48
Table 38: Nurses and Aides Treat Resident with Courtesy and Respect	48
Figure 30: Nurses and Aides Treat Resident with Kindness	49
Table 39: Nurses and Aides Treat Resident with Kindness	49
Figure 31: Nurses and Aides Really Cared about Resident	50
Table 40: Nurses and Aides Really Cared about Resident	50
Figure 32: Nurses and Aides Were Rude to Resident	51
Table 41: Nurses and Aides Were Rude to Resident	51
Table 42: Saw Residents Behave in a Way That Made it Hard for Nurses or Aides	52
Figure 33: Nurses and Aides Were Appropriate with Difficult Residents	52
Table 13: Nurses and Aides Were Appropriate with Difficult Residents	52
Figure 43: Protection of Residents' Physical Privacy	53
Table 11: Nurses and Aides Failed to Protect Resident's Privacy	53
Figure 34: Respondent Treated with Courtesy & Respect by Nurses and Aides	54
Table 15: Respondent Treated with Courtesy & Respect by Nurses and Aides	5/
Table 46: Seeking Information about Resident	56
Figure 35: Nurses and Aides Responsiveness in Providing Information	56
Table 47: Nurses and Aides Responsiveness in Providing Information	56
Figure 36: Nurses and Aides Explain Things in Linderstandable Way	57
Table 48: Nurses and Aides Explain Things in Understandable Way	57
Figure 37: Nurses and Aides Discourage Respondent Questions	52
Table 49: Nurses and Aides Discourage Respondent Questions	50 58
Tuble te. Haisee and Aldee Discourage Respondent Questions	



List of Tables and Figures

Figure 38: Respondents Stopped Themselves from Complaining	59
Table 50: Respondents Stopped Themselves from Complaining	59
Table 51: Respondent Involvement in Decisions about Care	60
Figure 39: Respondent Involvement in Decisions about Care	60
Table 52: Respondent Involvement in Decisions about Care	60
Table 53: Respondent Asking about Payments or Expenses	61
Figure 40: Respondent Given Info about Payments or Expenses	61
Table 54: Respondent Given Info about Payments or Expenses	61
Figure 41: Participated in Care Conference in last 12 Months	62
Table 55: Participated in Care Conference in last 12 Months	62
Figure 42: Were Asked But Chose Not to Participate in a Care Conference	63
Table 56: Were Asked But Chose Not to Participate in a Care Conference	63
Table 57: Care Conference Participation Summary	63
Table 58: Unhappy with Care at the Nursing Home	64
Figure 43: Respondent Informing Staff about Concerns	64
Table 59: Respondent Informing Staff about Concerns	64
Figure 44: Satisfied with the Way Care Concerns Were Handled	65
Table 60: Satisfied with the Way Care Concerns Were Handled	65
Table 61: Helped With Care in Last 6 Months	67
Figure 45: Nursing Home Staff Expect Family Member to Help	67
Table 62: Nursing Home Staff Expect Family Member to Help	67
Table 63: Helped with Drinking	. 68
Figure 46: Helped with Drinking because Staff did not Help or Resident Waited too Long	. 68
Table 64: Helped with Drinking because Staff did not Help or Resident Waited too Long	68
Table 65: Helped with Eating	. 69
Figure 47: Helped with Eating because Staff did not Help or Resident Waited too Long	69
Table 66: Helped with Eating because Staff did not Help or Resident Waited too Long	69
Table 67: Helped with Toileting	70
Figure 48: Helped with Toileting because Staff did not Help or Resident Waited too Long	70
Table 68: Helped with Toileting because Staff did not Help or Resident Waited too Long	70
Figure 49: Global Rating of Care at the Nursing Home	71
Figure 50: Overall Care Rating	72
Figure 51: Nonparametric Test for Normality of Care Ratings for 99 Facilities	73
Figure 52: Normalized Care Ratings for the 99 Facilities	73
Table 69: Statistics for 99 Nursing Homes with Reliable Samples Sizes	74
Figure 53: Collapsed Distribution of Global Rating of Care Presented by Quartile	75
Table 70: Upper vs. Lower Quartile Facilities - Care Rating / Propensity to Recommend	77
Table 71: Significant differences for Nursing home staffing, care of belongings and environment	79
Table 72: Significant differences for Kindness and respect	. 80
Table 73: Significant differences for Providing information and encouraging family involvement	. 82
Table 74: Significant differences for Meeting basic needs	83
Figure 54: Normalisation of Care Ratings of Remaining 73 Small Sample Facilities	84
Table 75: Reliable Sample Facilities versus Small Sample Size Facilities	84
Table 76: Statistics on 73 Nursing Homes with Small Samples	. 85
Figure 55: Distribution of Number of Beds by Facility Care Ratings (Reliable Samples)	. 86
Figure 56: Distribution of Number of Beds by Facility Care Ratings (Small Samples)	. 87
Table 77: Summary of Forecasting Models	. 90
Table 78: Global Rating of Care Forecasting Model	. 91
Figure 57: Propensity to Recommend a Nursing Home	92
Figure 58: Respondent Willingness to Recommend the Nursing Home	93
Table 79: Number of Comments by Dimension	.94
Table 80: Number of Comments by Type of Respondent	. 95



Appendix B: Comment Coding by Composite Variable

Table 81: Comment Coding by Composite Variable......1

Appendix C: Regression Outputs for Forecasting Models

Table 82: ANOVA for Model No.1	. 1
Table 83: Coefficients for Model No.1	. 1
Table 84: Composite Effect on Overall Rating of Care for base Model No.1	.2
Table 85: R-square Improvements for Regression Model No.2	.3
Table 86: R-square Improvements for Regression Model No.3	4
Table 87: R-square Improvements for Regression Model No.4	.5



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 2003 and 2004, the HQCA did a survey called *Satisfaction with Health Care Services: A Survey of Albertans*. The results showed Albertans are concerned about long term care (also called nursing homes) services in the province. And while many Alberta long term care providers and some health regions have done family and resident surveys in the past, this is the first family experience survey of its kind 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 nursing home residents.

The survey sought to:

- Identify areas of excellence and opportunities for improvement in the long term care sector.
- Get standardized and comparable information from across the province, health regions and service providers.
- Provide a beginning point or baseline for measuring long term care quality improvement initiatives.

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. Prior to conducting the survey, the HQCA did validation studies and a pilot test to ensure the survey would collect valid and reliable information about families' experiences with nursing home 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.

A total of 11,311 surveys were mailed to the family member or most involved person for residents living in 173 long term care facilities across Alberta in October 2007. Overall, 7,943 surveys were completed for a response rate of 70.2%. This high response resulted in a low margin of error for the province of ±1.1%.

1.2. Key Findings

Overall, 45% of those family members surveyed rated the care at the nursing home as 9 or 10 out of 10 indicating excellent care; 41% rated the care as 7 or 8 out of 10 indicating average care and 14% rated the care as 0 to 6 out of 10 indicating poor care. Approximately one-third (33%) of survey respondents reported they were unhappy with the care the resident received sometime in the last six months. Ninety-two per cent (92%) said they would definitely or probably recommend the nursing home where their family member resided to someone else.

In addition, the survey found family members rated smaller nursing homes (those with fewer beds) more positively than large facilities. More significant, however, was the difference in performance when individual facilities were compared. This suggests that quality of care issues specific to a facility are what most influences the family experience.

The survey was constructed to gather the family member's observations or experience with the care and services provided at the nursing home. The scale most often used (always, usually, sometimes, never) was intended to measure the frequency with which family members perceived something did or did not



occur. The extent to which the scale represents "good" or "bad" performance varies according to the individual issues the questions address.

To simplify data interpretation, survey questions were grouped into sets of items that relate to a specific theme. Results show that what had the strongest relationship to family member's overall care rating was the theme that addressed items related to nursing home staffing levels, care of residents' belongings and the nursing home environment.

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

- 40% of respondents said they were always able to find a nurse/aide when they wanted one while 44% said this was usually the case.
- 13% of those surveyed said there were always enough nurses or aides in the nursing home while 41% said there were usually enough and 19% said there were never enough.
- 38% of respondents reported the resident always looked and smelled clean while 51% reported this was usually the situation.
- 49% of family members surveyed said the resident's room always looked and smelled clean while 42% said this was usually the case.
- 59% reported public areas of the nursing home always looked and smelled clean while 36% said this was usually the case.
- 92% of those surveyed said the noise level around the resident's room was always or usually acceptable and 94% said they were always or usually able to find places to talk privately with the resident in the last 6 months.

The remaining composites and related questions are listed in order of their strength of relationship to the overall rating of care.

Kindness and respect

- 67% of respondents believed nurses/aides always treated residents with courtesy and respect in the last 6 months while 28% believed this was usually the case.
- 62% of surveyed family members always saw nurses/aides treat the resident with kindness in the last 6 months while 31% reported this was usually the practice.
- 47% always felt nurses/aides really cared about the resident while 40% reported this was usually the practice.
- 87% reported they did **not** see nurses/aides be rude to any resident (including their family member).
- 32% 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. 50% felt nurses/aides always handled situations with difficult residents appropriately while 39% reported this was usually the practice.
- 95% said they did **not** see nurses/aides fail to protect any resident's privacy while the resident was dressing, bathing or toileting.
- 76% of respondents reported they were always treated with courtesy and respect by nurses and aides.

Providing information; encouraging family involvement

- 87% of respondents who had sought information about the resident from a nurse/aide reported they always or usually received it as soon as they wanted.
- 92% of respondents that asked about payments and expenses always or usually received all the information they wanted.
- 64% said nurses/aides always explained things in a way that was easy for them to understand while 29% said this usually occurred.
- 97% reported nurses/aides did **not** try to discourage them from asking questions about the resident.
- 33% of those surveyed said they were unhappy with the care the resident received at some time in the last 6 months. Of those who were unhappy, 31% said they stopped themselves from talking to staff about their concerns. Of those who reported their concern, 10% were always satisfied and 44% were usually satisfied with the way staff handled these problems.



- 71% of respondents reported being part of a care conference in the last 12 months. Of the 30% who did **not** participate in a care conference, 37% said they were given an opportunity to participate.
- 80% reported being involved in decisions about the resident's care in the last 6 months. Of those, 90% said they were always or usually involved as much as they wanted to be.

Meeting basic needs

- 70% of respondents reported they helped care for the resident when they visited in the past 6 months
- Only 17% of all respondents felt nursing home staff expected them to help, while 24% of those who actually helped felt nursing home staff expected them to help
- 43% helped the resident with drinking or eating (44%) at least once in the last 6 months; slightly more than 20% helped because they felt staff didn't help or made the resident wait too long.
- 24% of those surveyed helped the resident with toileting at least once in the last 6 months; 48% helped because they felt staff didn't help or made the resident wait too long.

Upper and lower quartile facilities

A major aspect of our study explored differences between facilities that achieved higher than average overall care ratings and those with lower ratings. Upper quartile facilities received an overall care rating of 9.1 out of 10 from respondents compared to 7.1 for the lower quartile facilities. 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.

(Note: the following results reflect significant 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/aides (73% compared with 41% for lower quartile facility respondents). They were also more likely to find a nurse/aide when they wanted one (96% upper versus 70% lower).
- Residents' clothing was damaged or lost to a lesser extent in upper quartile facilities (46%) than in lower quartile facilities (67%).
- Residents' rooms in upper quartile facilities were more likely to always or usually look and smell clean compared to lower quartile facilities (97% upper versus 77% lower).
- Upper quartile facility respondents reported that nurses/aides really care about their resident to a greater extent compared with lower quartile facilities (98% upper versus 75% lower).
- Lower quartile facility respondents believed nurses/ aides either didn't help or made residents wait too long for toileting (63% lower versus 19% upper), drinking (36% lower versus 9% upper) and eating (30% lower versus 8% upper) to a greater extent than upper quartile facility respondents.
- Lower quartile facility respondents are more likely to report they were unhappy with the care the resident received in the past 6 months compared with upper quartile facility respondents (51% lower versus 15% upper).

An important finding from this analysis was that facilities in the upper quartile were operating more than two times **fewer** beds (e.g., 100 versus 238) on average 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.



1.3. In Summary

The survey highlights areas of excellence and several quality of care issues as areas for focus and improvement in Alberta's long term care facilities.

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 as perceived by family members.
- Care of residents' belongings.
- Nursing home environment.

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

- Improving the number and availability of long term care staff.
- Ensuring the cleanliness of residents, residents' personal space and public areas in the nursing home.
- Ensuring the care and security of residents' personal belongings.
- Creating environments 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 in particular 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 con	tains the following appendices:	
	<u>Appendix A</u>	CAHPS [®] Nursing Home Survey: Family Member Instrument used for this study, with cover letter and reminder materials.	
	Appendix B	Comment coding by composite variable.	
	Appendix C	Details of the analytical and statistical techniques used for predictive modeling.	
	Appendix D	Working group members who contributed to this initiative.	

Facility Reports	Facility-Level Report:	Detailed descriptive results for each facility with comparisons to provincial and regional health authority averages in which they are located.
	Quartile Report:	Detailed descriptive results for each facility showing comparisons by quartile group.
	Comment Analysis:	Open-ended comments for each facility categorized by comment type and dimension.



2. BACKGROUND AND METHODOLOGY

2.1. Background

2.1.1. Working Group and Instrument Selection

A survey of nursing home residents and their families was identified as a priority by the HQCA's Health Quality Network in 2006. To undertake this initiative the HQCA formed a working group comprised of HQCA staff, long term care managers and clinicians, and measurement experts from across the province. This group was selected to be representative of different health regions, professions, and disciplines. Following a literature review, the working group assessed currently available material and survey instruments from various provincial, national and international organizations. From this assessment two survey instruments were considered: (1) the Smaller Worlds instrument developed originally by Sunnybrook nursing homes in Ontario;¹ and (2) the CAHPS Nursing Home Survey: Family Member and Resident Instruments, developed and tested by the Agency for Healthcare Research and Quality (AHRQ).²

The working group selected the CAHPS Nursing Home Survey instruments for the following reasons:

- The CAHPS Nursing Home Survey instruments and other CAHPS instruments are designed to focus on issues that the respondent has direct experience with and where the respondent is the best source for the information.
- Family and resident areas of experience are different; therefore the two instruments are designed to collect complementary information from the best source depending on the area being assessed.
- Both CAHPS instruments were intended to be complimentary with the inter*RAI* dataset and related quality measures⁴. Alberta and other jurisdictions across Canada have implemented or are currently in the process of implementing the inter*RAI* Long Term Care Resident Assessment Instrument.
- The CAHPS instruments incorporated a number of items from the important work on quality of life in nursing homes undertaken by Dr. Rosalie Kane for the Centers for Medicare and Medicaid Services (CMS)⁵.
- The CAHPS survey development process is well resourced, scientifically rigorous and comprised of researchers from the following world class research organizations RAND, Harvard Medical School, American Institutes for Research (AIR), and WestStat.
- The development and validation process took place over 5 years and included formative research with focus groups, cognitive tests with family members of nursing home residents, a technical expert panel review (e.g. representatives from the nursing home industry, regulators, quality improvement organizations, consumers, providers, and long term care researchers) and field testing in nursing homes from east Texas and Alberta.
- These questionnaires will be placed in the public domain with limited restriction on use by stakeholders or other parties as AHRQ intends the tools for broad use.
- There is opportunity for national and international level benchmarks and comparison.
- Using this instrument provided an opportunity to partner with AHRQ to pilot test the instrument and data collection process in Alberta nursing homes before the full project implementation.

¹ P.G. Norton, et al, "Satisfaction of Residents and Families in Long-Term Care: I Construction and Application of an Instrument", Quality Management in Health Care 4, no 3 (1996)38-46.

² Frentzel, Evensen, Keller and Garfinkel; American Institutes for Research. "CAHPS Survey for Family Members of Nursing Home Residents: Final Report", AHRQ (2007).

³ Cosenza, Fowler (Center for Survey Research, University of Massachusetts); Buchannan, Cleary (Harvard Medical School), "Nursing Home CAHPS Field Test Report", AHRQ (2006).

⁴ The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) program has set an international standard in developing a set of valid and reliable surveys that ask consumers and patients to report on and evaluate their experiences with health care. Detailed information available at the following web site: <u>https://www.cahps.ahrq.gov/default.asp</u>.

⁵ Kane, Rosalie A et al., "Measures, Indicators, and Improvement of Quality of Life in Nursing Homes: Final Report; Volume 1: Methods and Results", Centers for Medicare and Medicaid Services (2004).



2.1.2. Alberta Pilot Study

An Alberta pilot study was undertaken by the HQCA in partnership with AHRQ in the fall of 2006. The objectives of the pilot study were to test: (1) the survey protocol, (2) the survey instrument and, (3) survey items unique to the Alberta nursing home environment. The pilot study also provided an opportunity to contribute to AHRQ's field testing and validation process; and to assess acceptability and usefulness to participating facilities. In all, 14 Alberta long term care facilities of diverse size, community type, and from 6 of 9 health regions participated in the pilot study on a voluntary basis.

Two variations of the survey protocol were tested, one with a notification letter and one without, achieving a combined response rate of 81%. These results suggested it was not necessary to include a pre-survey notification letter; therefore the protocol for the full 2007 survey did not include this initial letter.

Detailed data analysis including assessment of psychometric properties confirmed the CAHPS Nursing Home Family Instrument performs well in the Canadian long term care environment. In addition, Canadian and U.S. data was very similar, permitting joint analysis of psychometric properties.⁶ This provides an opportunity for potential comparison between Canadian and U.S. facilities for common benchmarks. Further information about the validation study is available upon request.

Pilot survey results were shared with each participating facility and were evaluated for usefulness to these sites. With limited exception feedback was positive and facilities confirmed that the information was useful and relevant.

2.1.3. Final Questionnaire - 2007 Provincial Survey

Minor adjustments to the final instrument were made on the basis of the U.S. and Canadian field test results and analysis of item performance and psychometric properties. The CAHPS Nursing Home Family Instrument used in the HQCA 2007 survey is comprised of 64 questions plus 1 open-ended comment, and is used with the permission of the AHRQ (the survey instrument was not yet been released into the public domain).⁷

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.

⁶ Analysis of combined data was undertaken by AIR in the context of the American field test. Canadian results while supporting US results are not emphasized in the AIR report as this was targeted to American stakeholders.
⁷ The Canadian instrument differs from the final US instrument in the following ways: a) Demographic items have been

^{&#}x27; The Canadian instrument differs from the final US instrument in the following ways: a) Demographic items have been modified to reflect the Canadian context, b) several unique questions were added to capture additional information, and c) the final US instrument has several minor changes relative to the 2007 version used in Alberta.



The 21 individual questions from the survey in <u>Appendix A</u> 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 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 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 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.

2.1.4. The 2007 Survey

In 2007, the HQCA sent out a request for proposal (RFP) to conduct a survey among Albertans who had a family member currently residing in a nursing home in Alberta. The contract was awarded to Agili-T Health Solutions Inc. (Agili-T). A comprehensive questionnaire was mailed to 11,311 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 7,943 respondents completed the survey resulting in a response rate of 70.2%. This family survey was done in conjunction with a separate survey of the nursing home residents. Only the results of the family survey are reported here.

2.2. Survey Process and Methodology

2.2.1. 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 specifically for the Long Term Care Resident and Family Experience surveys. As a provincial custodian under 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 or regional health authority via secure means. 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 Agili-T to conduct the survey. Agili-T is required under contract to HQCA to adhere to all of the HQCA's obligations under HIA to protect this data.

Advance notification materials were distributed to health regions and nursing home facilities that provided detailed communication material for family members and residents about the survey. 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.

The overall HQCA surveys initiative was reviewed and approved by the Calgary Conjoint Ethics Board, and is defined as a quality improvement activity as opposed to a research study.



2.2.2. 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 respondent 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 1 month. Residency of less than one month would have excluded them from participation.

A final list of potential respondents was provided to Agili-T for the purpose of mailing the selfadministered survey questionnaire packages. A 3-stage mailing protocol was used to ensure maximum participation rates:

Step 1	October 15, 2007	Mailing of questionnaire package to all respondents in final sample	
Step 2	November 8, 2007	Mailing of postcard reminders to all non- respondents	
Step 3	November 19, 2007	Mailing of questionnaire package with modified cover letter to all non-respondents	

Table 1: Survey Mailing Protocol

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 October 15th, 2007 to January 4th, 2008.

2.2.3. Data Collection

Completed paper questionnaires were returned to Agili-T for data processing. A *double data entry* protocol was used to minimize data entry errors; the 7,457 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.



2.2.4. Response Rate

A potential limitation in all survey work is the degree to which non-responders might have different results than those who respond. It is usually not feasible to assess differences between these two groups, and survey researchers often make the assumption that "responders" are representative of the broader group or that their self-selection is random and unrelated to the issues being investigated.

To reduce the potential for "non-response bias", it is desirable to achieve a high response rate. The raw response rate for this survey was 70.2% which is considered excellent by health care research standards. **Table 2** below shows overall response rate by completion method.

Table 2: Response Rate	
------------------------	--

Description	Count	Response Rate
Total sample	11,311	100%
Completed paper surveys	7,457	65.9%
On-line Web responses	486	4.3%
Total Response	7,943	70.2%

2.2.5. Population Sample & Margin of Error

The population 18 years or older for the 9 surveyed Regional Health Authorities (RHA) was 2.4 million. The total number of beds for the 173 surveyed nursing homes was 14,230 and the returned questionnaires represent 56% of the total capacity. As shown in **Table 3** below, the margin of error when considering all responses for a given RHA range from 2% to 6.4%. Northern Lights RHA results are indicative only because of its small sample size relative to the total number of beds.

Margin of error for individual sites varies considerably between 4% and 42% depending on the facility size. Small facilities often have a large margin of error and as a consequence it is more difficult to show statistical significance in comparative results for small facilities. Statistical significance does not describe the "magnitude" of a difference between two results; a difference between two large samples can be very small (clinically meaningless) and still achieve statistical significance. Likewise, non-significance (statistical) does not negate the result, especially when the result is the product of a census and represents a high proportion of eligible respondents for a small site. It is merely a recognition that confidence intervals for the compared results overlap.⁸

⁸ In addition, confidence intervals and statistical tests used in this report assume an "infinite population"; in other words the "finite population correction" was not used to adjust for respondent samples which are a large proportion of the individual nursing home population. This means that our tests are likely conservative and will tend to under-estimate significance for finite populations.



RHA ID	Regional Heath Authorities (RHA)	Total RHA Population (18+ /Dec.05)	Number of Beds (Surveyed Facilities)	Returned Surveys (Surveyed Facilities)	Margin of Error (+/-)
R1	Chinook	115,007	785	416	4.8%
R2	Palliser	76,021	536	372	5.1%
R3	Calgary	894,853	4,383	2,533	2.0%
R4	David Thompson	218,947	1,376	832	3.4%
R5	East Central	83,615	1,005	573	4.1%
R6	Capital	771,085	4,793	2,435	2.0%
R7	Aspen	127,320	742	516	4.3%
R8	Peace Country	97,533	422	237	6.4%
R9	Northern Lights	50,795	76	29	N/A
	TOTAL	2,435,176	14,118	7,943	1.1%

Table 3: Statistics by RHA

Sample size is critical for determining the margin of error on population average and ratio estimates. As shown in **Table 4**, only 99 facilities had 26 respondents or more, while only 13 facilities exceeded 100 respondents.

When estimating an average, 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, sample sizes over 25 respondents are considered as reliable. For this reason, facility level results were mainly analyzed in terms of 99 facilities with so called "reliable" sample sizes.

When estimating a proportion, the critical threshold number for calculating the margin of error based on the Normal distribution is 100 respondents (central limit theorem). Below 30 respondents, the exact hypothesis testing procedure for the population proportion requires the construction of the decision rule on the binomial distribution. This is rather unfortunate, because using the test requires having access to extensive binomial tables for many different sample sizes.⁹

RHA ID	Regional Heath Authorities (RHA)	Number of Facilities	Facilities with more than 25 Respondents	Facilities with more than 100 Respondents
R1	Chinook	11	4	-
R2	Palliser	9	5	-
R3	Calgary	37	30	9
R4	David Thompson	25	12	-
R5	East Central	18	9	-
R6	Capital	36	30	4
R7	Aspen	19	7	-
R8	Peace Country	14	2	-
R9	Northern Lights	4	-	-
	TOTAL	173	99	13

Table 4: Sample Sizes

⁹ Source: Statistical Methods for business and economics, R.C. Pfaffenberger, J.H. Patterson, Richard D. IRWIN, INC. 1977 ISBN 0-256-01797-1, page 320.



2.2.6. Interpretation of Tables and Identification of Significant Differences

Where applicable, statistical tests are computed For example, the number of respondents for Peace Country (551) is shown by arrow (A). Because the sample size is > 100 respondents, the sample proportion is approximately normally distributed and a two-tail Z statistic based on the calculated normal distribution is calculated to test whether the Peace Country proportion is different than that of the entire set of respondents.

The proportion of respondents in the "45 to 74" age group was 16% for Peace Country (arrow B) as compared to 21% for all regions combined (arrow C). The "Z-Test" is ABS [(16%-21%)/SQRT(16%*(1-16%)/551)] and the hypothesis that the Peace Country 16% proportion could be equal to the Total 21% population ratio is rejected with 95% certainty because 2.889>1.96 (arrow D). In other words, the confidence interval of these two scores does not overlap and we can conclude their difference is statistically significant as shown by the Z-Test.

In the report, statistically significant differences are indicated by yellow shaded values (16% as shown by arrow B); Z-Test scores are included here only for example and are not reported along with result tables.

In the report, statistically significant differences are indicated by yellow shaded values (16% as shown by arrow B); Z-Test scores are included here only for example and are not reported along with result tables.

							(B)		(A)		
							\		/		
RHA / Respondents Age Distribution	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Centra (R5)	I Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Nothern L (R9)	Total	
								\			(C
a) 18 to 24	0%	0%	0%	0%	0%	0%	0%	0%	0%	0 %	
b) 25 to 34	1%	0%	1%	0%	1%	1%	1%	1%	1%	1%	/
c) 35 to 44	5%	4%	4%	4%	3%	6%	6%	5%	2%	4%	′
d) 45 to 54	24%	22%	21%	21%	20%	20%	20%	16%	19%	21%	
e) 55 to 64	35%	33%	33%	35%	36%	34%	33%	37%	35%	34%	
f) 65 to 74	21%	25%	22%	22%	20%	23%	21%	22%	26%	22%	
g) 75+	15%	15%	19%	18%	21%	16%	19%	20%	18%	18%	
Grand Total	100%	100 %	100%	100%	100%	100 %	100%	100%	100 %	100%	
Number of respondents	575	447	1970	1,230	638	1,241	803	551	274	7,729	
Z-Test @95% (>1.96) for:											
a) 18 to 24	0.863	1.871	0.283	0.324	0.909	0.311	1.020	0.340	0.596		
b) 25 to 34	0.573	1.249	1.787	1.315	0.291	0.332	802.0	0.004	0.011		
c) 35 to 44	0.657	0.689	1.110	0.560	1.256	1.846	1.545	0.893	1.831		
d) 45 to 54	1.922	0.817	0.361	0.480	0.228	0.102	0.200	2.889	0.807		
e) 55 to 64	0.505	0.456	1.349	0.372	0.772	0.146	0.526	1.342	0.189		
f) 65 to 74	0.725	1.607	0.171	0.284	1.541	0.645	0.651	0.298	1.656		
q) 75+	2.017	1.569	1.281	0.097	1.784	1.725	0.530	1.198	0.134		

(D)



2.3. Analytical Methodology

- Global statistics: Descriptive statistics based on all 7,943 respondents were analyzed to provide a provincial level set of data.
- Grouping of facilities into quartiles¹⁰: Nursing homes (99) with reliable sample sizes were grouped into four quartiles based on their average global care rating. The remaining 74 nursing homes with small sample sizes were classified into the four quartiles defined by the reliable sample size nursing homes.
- 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.
- 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.
- Additional analyses: Additional analyses were conducted for various facility-level effects (i.e. impact of the number of beds on the overall care rating).

¹⁰ 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
- Respondent with power of attorney
- Respondent appointed legal guardian/agent
- Someone else appointed legal guardian/agent
- Respondent helping the resident with managing finances
- 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 for completing the survey
- Type of assistance to respondents for completing the survey

Detailed results for each attribute are reported in the following pages. The information provided is for the entire survey sample and is presented by the nine (9) regional health authorities existing in Alberta at the time of the survey.



3.1.1. Respondent Relationship to Resident

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

- Spouses/partners and friends account for 19% and 3% respectively while the remaining 79% of survey respondents are family relatives.
- Results are similar across all RHAs; three statistically significant differences to overall averages are highlighted in **Table 5** below.

Figure 1: Respondent Relationship with Resident



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

ALBERTA (N=7822)

Table 5: Respondent Relationship with Resident

-			-							
RHA / Respondent Relationship with Resident	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Parent	60%	56%	54%	58%	56%	58%	58%	59%	60%	57%
Spouse	17%	17%	21%	17%	21%	17%	20%	18%	17%	19%
Sister/Brother	5%	5%	7%	6%	7%	7%	5%	6%	6%	6%
Other	3%	6%	5%	6%	4%	5%	4%	5%	3%	5%
Aunt/Uncle	4%	5%	4%	4%	5%	3%	6%	5%	5%	4%
Child	3%	3%	4%	2%	3%	3%	3%	3%	2%	3%
Friend	3%	4%	3%	3%	2%	2%	3%	2%	3%	3%
In-laws	4%	4%	3%	3%	3%	3%	2%	3%	3%	3%
Grand Parent	1%	1%	1%	2%	1%	1%	1%	1%	2%	1%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	584	455	1,999	1,248	649	1,248	813	552	274	7,822



3.1.2. Frequency of Visits

- > Most respondents visited the resident more than 20 times in the last 6 months.
- > The frequency of visits is very similar across all RHAs; no significant differences noted.

Figure 2: Frequency of Visits



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

ALBERTA (N=7755)

Table 6: Frequency of Visits

RHA / Frequency of Visits	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) 0-1 times	2%	1%	2%	2%	2%	2%	2%	3%	3%	2%
b) 2-5 times	8%	7%	7%	7%	7%	7%	7%	7%	9%	7%
c) 6-10 times	6%	9%	7%	7%	8%	8%	8%	8%	6%	8%
d) 11-20 times	11%	12%	11%	12%	12%	13%	10%	11%	14%	12%
e) 20+ times	73%	71%	73%	71%	70%	70%	72%	72%	69%	72%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	581	455	1,975	1,237	644	1,241	800	550	272	7,755

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

Note: respondents that visited 0-1 times in the last 6 months were instructed to skip to question 51 in the questionnaire.



3.1.3. Proportion of Respondents with Power of Attorney

- Overall, approximately 8 of 10 (78%) respondents stated they have the power of attorney for the resident living in the nursing home.
- The frequency of power of attorney varies across RHAs. Chinook and Northern Lights Health Regions tend to have more respondents with power of attorney than the overall average while Calgary and Capital Health Regions tend to have less.

Figure 3: Proportion of Respondents with Power of Attorney



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

ALBERTA (N=7623)

Table 7: Proportion of Respondents with Power of Attorney

RHA / Proportion of Respondents With Power of Attorney	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Centra (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L (R9)	Total
No	16%	20%	23%	18%	21%	23%	18%	21%	12%	20%
Yes	83%	79%	76%	80%	78%	75%	80%	76%	85%	78%
Don't Know	1%	2%	2%	2%	1%	2%	2%	3%	2%	2%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	564	438	1,953	1,215	634	1,224	792	536	267	7,623



3.1.4. Respondents Legally Appointed Guardian/Agent

Overall, 74% of respondents are legally appointed guardian or agent of the resident. The distribution of respondents who are the legally appointed guardian/agent are very similar across all RHAs. Only Peace Country seems to have slightly less respondents as the legally appointed guardian/agent (70% compared to 74% for the overall total).

Figure 4: Respondents Legally Appointed Guardian/Agent



55. Are you your family member's legally appointed guardian or agent? (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.)

Table 8: Respondents Legally Appointed Guardian/Agent

RHA / Respondents Legally Appointed Guardian/Agent	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	22%	24%	23%	22%	22%	22%	20%	26%	21%	22%
Yes	75%	72%	74%	73%	75%	75%	76%	70%	75%	74%
Don't Know	4%	4%	4%	4%	3%	4%	4%	4%	4%	4%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	561	432	1,926	1,192	625	1,223	788	536	260	7,543



3.1.5. Someone Else Legally Appointed Guardian/Agent

- Of those respondents who reported they were not personally the legally appointed guardian or agent, 29% said that someone else was appointed guardian or agent.
- The frequency of someone else being appointed the legal guardian/agent is very similar across all RHAs.

Figure 5: Someone Else Legally Appointed Guardian/Agent



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

■ ALBERTA (N=1944)

Table 9: Someone Else Legally Appointed Guardian/Agent

RHA / Someone Else Legally Appointed Guardian/Agent	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	64%	63%	64%	66%	62%	59%	62%	62%	62%	63%
Yes	29%	28%	29%	23%	32%	34%	29%	32%	27%	29%
Don't Know	8%	9%	8%	11%	6%	7%	9%	6%	11%	8%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	143	122	500	312	154	302	189	159	63	1,944



3.1.6. Respondent Helped the Resident with Managing Finances

Most respondents (80%) helped the resident manage their finances. Chinook and David Thompson Health Region respondents were more likely to help their family member with finances; where compared to the overall, Calgary Health Region saw fewer respondents who reported helping their family member with managing finances.

Figure 6: Respondent Helped the Resident with Managing Finances



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

■ ALBERTA (N=7597)

Table 10: Respondent Helped the Resident with Managing Finances

RHA / Helped their Family Member with Managing Finances	Chinook ; (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	16%	22%	22%	17%	21%	19%	20%	22%	21%	20%
Yes	84%	78%	78%	83%	79%	81%	80%	78%	79%	80%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	566	440	1,939	1,212	626	1,222	782	542	268	7,597



3.1.7. Most Experienced Person with Resident Care

The majority of respondents (87%) were the person with the most experience with resident care. Results are similar for most RHAs, except Chinook Health Region where slightly fewer respondents consider themselves the person who has the most experience with the care of the resident.

Figure 7: Most Experienced Person with Resident Care

64. 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?



ALBERTA (N=7682)

Table 11: Most Experienced Person with Resident Care

RHA / Most experienced Person with Resident Care	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	13%	11%	10%	10%	11%	9%	10%	9%	11%	10%
Yes	86%	85%	87%	87%	85%	87%	87%	89%	85%	87%
Don't Know	1%	3%	3%	3%	3%	3%	3%	3%	4%	3%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	572	446	1,968	1,219	640	1,223	798	545	271	7,682



3.1.8. Respondent Age Distribution

Approximately 60% of respondents are less than 65 years old while 40% are 65 years old and over. Results are similar across all RHAs.

Figure 8: Respondent Age Distribution



57. What is your age?

ALBERTA (N=7729)

Table 12: Respondent Age Distribution

RHA / Respondents Age Distribution	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) 18 to 24	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
b) 25 to 34	1%	0%	1%	0%	1%	1%	1%	1%	1%	1%
c) 35 to 44	5%	4%	4%	4%	3%	6%	6%	5%	2%	4%
d) 45 to 54	24%	22%	21%	21%	20%	20%	20%	16%	19%	21%
e) 55 to 64	35%	33%	33%	35%	36%	34%	33%	37%	35%	34%
f) 65 to 74	21%	25%	22%	22%	20%	23%	21%	22%	26%	22%
g) 75+	15%	15%	19%	18%	21%	16%	19%	20%	18%	18%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	575	447	1,970	1,230	638	1,241	803	551	274	7,729

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

The distribution of respondent age is a very important factor that can affect the results of health care surveys. It is well known that older people tend to give better ratings. For example, relative differences in the proportion of older respondents for an individual nursing home could introduce some positive bias in the results.



3.1.9. Respondent Gender

Overall, 64% of respondents were female and 36% were male. The proportions of female versus male are very similar across all RHAs.

Figure 9: Respondent Gender





■ ALBERTA (N=7727)

Table 13: Respondent Gender

RHA / Respondent Gender	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Female	66%	65%	64%	63%	64%	64%	63%	65%	63%	64%
Male	34%	35%	36%	37%	36%	36%	37%	35%	37%	36%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	575	444	1,972	1,230	642	1,237	801	551	275	7,727



3.1.10. Respondent Education

- 24% of respondents reported completing high school; 20% obtained university level of education or greater; while 17% obtained grade or some high school education.
- Respondents' education varies slightly by region. Chinook respondents tend to have more university degrees than the average respondent while Capital and Peace Country respondents are more likely to hold grade or some high school.

Figure 10: Respondent Education



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

ALBERTA (N=7479)		ALBERTA	(N=7479)
------------------	--	---------	----------

RHA / Respondent Education	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
High school	23%	23%	24%	23%	24%	26%	24%	26%	28%	24%
Grade, some high school	14%	12%	16%	16%	20%	20%	16%	21%	20%	17%
University degree	18%	16%	15%	16%	14%	13%	15%	11%	11%	15%
Some university, college	13%	14%	13%	15%	14%	12%	12%	14%	14%	14%
College diploma	15%	14%	14%	12%	12%	12%	12%	12%	8%	13%
Post-secondary, Tech.	12%	14%	12%	11%	12%	13%	14%	12%	16%	13%
Master's Ph.D.	5%	6%	6%	5%	5%	4%	7%	2%	3%	5%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	564	430	1,904	1,192	618	1,196	785	524	266	7,479

Table 14: Respondent Education



3.1.11. Respondent Ethnicity

- > Approximately 96% of respondents are White / Caucasian.
- The proportions of ethnicity other than White / Caucasian are slightly different across RHAs as shown in Table 15.

Table 15: Respondent Ethnicity

RHA / Respondent Ethnicity	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Other	3%	2%	5%	5%	2%	3%	3%	2%	4%	4%
White / Caucasian	97%	98%	95%	95%	98%	97%	97%	98%	96%	96%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	574	443	1,943	1,213	632	1,214	794	535	271	7,619

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

3.1.12. Respondent Language

- Approximately 93% of respondents reported speaking mainly English at home. Chinook and Palliser RHAs have more English speaking respondents while Calgary RHA has a greater proportion of respondents speaking other languages at home.
- Twenty-two (22) facilities have at least 15% of their respondents who speak a language other than English at home; this accounts for 2% of the total number of respondents for the survey. These 22 facilities range from 15% to 83% of respondents who speak a language other than English at home, with an average of 22%.

Table 16: Respondent Language

RHA / Respondent Language	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
English	96%	96%	92%	94%	94%	93%	93%	92%	93%	93%
0 ther	4%	4%	8%	6%	6%	7%	7%	8%	7%	7%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Numberofrespondents	581	453	1,994	1,246	647	1,243	810	554	275	7,803



3.1.13. Respondent Needed Assistance to Complete the Survey

- > Approximately 4% of respondents needed assistance to complete the survey.
- > Results are very similar across all RHAs.

Figure 11: Respondent Needed Assistance to Complete the Survey



62. Did someone help you complete this survey?

ALBERTA (N=7748)

Table 17: Respondent Needed Assistance to Complete the Survey

RHA / Respondent Needed Assistance to Complete the Survey	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	96%	95%	97%	100%	95%	96%	94%	96%	89%	96%
Yes	4%	5%	3%	5%	5%	4%	6%	4%	11%	4%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	405	361	2,480	799	563	2,382	504	226	28	7,748



3.1.14. Type of Assistance Provided for Completing the Survey

Of those respondents who needed assistance to complete the survey, 63% had someone read the questions to them; 59% reported needing assistance in writing their answers; 23% had another person answer the questions for them, and 7% translated the questions into my language.

Figure 12: Type of Assistance Provided for Completing the Survey



63. How did that person help you?

ALBERTA (N=268)

Table 18: Type of Assistance Provided for Completing the Survey

RHA / Type of Assistance Provided for Completing the Survey (Check all that apply)	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Centra (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Read the questions to me	60%	67%	58%	76%	73%	57%	78%	50%	0%	63%
Wrote down the answers I gave	40%	60%	56%	58%	69%	60%	63%	80%	0%	59%
Answered the questions for me	40%	27%	22%	27%	15%	25%	11%	20%	100%	23%
Translated the questions	0%	0%	14%	0%	8%	8%	4%	20%	0%	7%
Grand Total	>100%	>100%	>100%	>100%	>100%	>100%	>100%	>100%	>100%	>100%
Number of respondents	21	23	96	53	43	115	42	17	1	268

Note: Each response category represents number of responses, not number of respondents as respondents were allowed to choose multiple answers.



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

- Respondents whose resident had been discharged (7%) were instructed not to complete the survey, however respondents who's resident had passed away (1%) were given the option of completing the survey.
- Care ratings for respondents whose residents were either deceased or discharged were examined. The average care rating scores from all respondents was 8.01 versus 8.16 for deceased residents and 8.08 for discharged. Discharged respondents' care ratings were not significantly different from other respondents; therefore, it was decided not to exclude them.



Figure 13: Discharged or Deceased

■ ALBERTA(N=581)

Table 19: Discharged or Deceased

RHA / Discharged or Deceased	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Desseed	0.49/	05%	070/	950/	020/	960/	000/	010/	05%	070/
Deceased	94%	95%	01 %	00%	03%	00%	00%	01%	95%	8/%
Discharged	6%	5%	13%	15%	17%	14%	12%	19%	5%	13%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	47	37	146	110	36	80	66	37	22	581



3.2.2. Time Lived in the Nursing Home

- Approximately 95% of respondents reported the resident had lived at least 6 months in the nursing home.
- Care ratings for respondents with a resident residing in the facility for at least 6 months were compared with respondents for shorter stay residents. The average care rating scores for shorter stays was 8.0 versus 8.1 for stays of 6 months or longer. This was not significantly different and RHA variations were minor, except for Northern Lights where there were a greater proportion of respondents who had a resident that had lived in the nursing home for at least 12 months.

Figure 14: Time Lived in the Nursing Home



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

ALBERTA (N=7698)

Table 20: Time Lived in the Nursing Home

RHA / Time Lived in the Nursing Home	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) <1 month	-	-	-	-	-	-	-	-	-	0%
b) 1-3 months	1%	-	1%	-	-	1%	1%	-	1%	1%
c) 3-6 months	4%	3%	4%	6%	6%	5%	6%	4%	4%	5%
d) 6-12 months	16%	17%	16%	17%	17%	14%	14%	18%	8%	16%
e) 12+ months	79%	79%	79%	76%	77%	80%	79%	77%	87%	79%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	573	446	1,975	1,223	638	1,231	796	542	274	7,698



3.2.3. Permanency in Nursing Home

- Approximately 93% of respondents stated they expected the resident would live permanently in the current nursing home.
- Care ratings by respondents whose residents were expected to live and not to live permanently in the current nursing home, were examined. The average care rating scores from residents that were expected to live permanently in the facility was 80.1% versus 82.0% for other residents. This was not significantly different and RHA variations were minor. Therefore, no case mix adjustments were made.



Figure 15: Permanency in Nursing Home

ALBERTA (N=7560)

Table 21: Permanency in Nursing Home

RHA /Permanency in Nursing Home	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Centra (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L (R9)	Total
No	3%	3%	4%	5%	3%	3%	3%	3%	4%	4%
Yes	95%	93%	92%	92%	94%	93%	94%	94%	94%	93%
Don't Know	3%	4%	4%	4%	3%	3%	3%	3%	2%	4%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	558	440	1,937	1,198	636	1,213	781	532	265	7,560



3.2.4. Resident in Shared Room

- Overall, 48% of respondents stated the resident shared a room with another person at the nursing home. This proportion varies significantly from one RHA to another (**Table 23** below).
- Respondent care ratings were compared by shared versus private rooms. The average global rating of care scores for shared rooms was 8.12 compared to 8.11 for private rooms.
- Residents in a shared room or not and noise level acceptability are associated beyond what is expected by chance alone (Chi-Square test = 57.37). Therefore, the level of acceptability of the noise level around the resident's room is related to whether the room is shared or not.

In the last 6 months, how often was the noise level around the resident's room acceptable to you (Q31)	Resident Shared a Room (N=3576)	Resident Not in a Shared Room (N=3911)
Never	1.8%	1.3%
Sometimes	8.1%	5.3%
Usually	40.6%	35.9%
Always	49.5%	57.4%

Table 22: Shared Room and Noise Level Acceptability

Figure 16: Resident in Shared Room



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

ALBERTA (N=7689)

Table 23: Resident in Shared Room

RHA / Resident in Shared Room	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	61%	46%	50%	39%	53%	65%	51%	60%	51%	52%
Yes	39%	54%	50%	61%	47%	35%	49%	40%	49%	48%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	571	448	1,975	1,222	637	1,229	794	541	272	7,689



3.2.5. Resident with Serious Memory Problem

- Overall, 65% of respondents reported the resident had serious memory problems. Results across most RHAs are not significantly different from the overall total ratios, except for Aspen Health where there was a greater proportion of respondents reporting that the resident had serious memory problems (71% compared to 65% overall).
- Care ratings for respondents with residents with serious memory problems were compared with those who did not and there were no differences between the two groups.

Figure 17: Resident with Serious Memory Problem



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

ALBERTA (N=7570)

Table 24: Resident with Serious Memory Problem

RHA / Resident with Serious Memory Problem	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	36%	36%	33%	37%	34%	34%	29%	38%	37%	35%
Yes	64%	64%	67%	63%	66%	66%	71%	62%	63%	65%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	567	445	1,946	1,195	633	1,207	780	530	267	7,570



3.2.6. Resident Autonomy

Overall, 39% of respondents reported the resident was capable of usually or always making decisions about their own daily life. Results across most RHAs are not significantly different from the overall total, except for Palliser where there was a greater proportion of respondents reporting that the resident was capable of making decisions about their own daily life (45% compared to 39% overall) and, Aspen where the result was below the overall total (31% compared to 39% overall).

Figure 18: Resident Autonomy



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?

ALBERTA (N=7551)

RHA / Resident Autonomy	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	33%	28%	35%	32%	33%	31%	38%	32%	37%	33%
b) Sometimes	28%	27%	27%	31%	27%	30%	32%	28%	23%	29%
c) Usually	21%	25%	21%	22%	22%	23%	20%	21%	20%	22%
d) Always	18%	20%	17%	15%	18%	16%	11%	19%	20%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	560	440	1,935	1,201	632	1,206	777	530	270	7,551

Table 25: Resident Autonomy



3.2.7. Resident Gender

Overall, 68% of residents are known to be female. Results across most RHAs are not significantly different from the overall total, except for Chinook, Calgary and East Central where there are a few significant differences as highlighted in **Table 26** below.

Figure 19: Resident Gender



Resident Known Gender

ALBERTA (N=7917)

Table 26: Resident Gender

RHA / Resident Gender	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Female	72%	71%	65%	69%	61%	69%	69%	68%	69%	68%
Male	28%	29%	35%	31%	39%	31%	31%	32%	31%	32%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents-residents	592	464	2,008	1,271	655	1,268	820	562	277	7,917



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 issue. Having demonstrated that these questions are sufficiently related to belong to a common scale, 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 3.11**. 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 at the nursing home and other outcome variables.

The 21 individual questions from the survey in <u>Appendix A</u> 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.



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 question are reported in this section. The information provided is for the entire survey sample and the nine (9) regional health authorities.



3.4.1. Ease of Finding a Nurse or Aide

- 86% of respondents tried to find a nurse or aide for some reason during any of their visits in the last 6 months.
- Similar results were found for most RHAs except for Chinook where a slightly greater proportion of respondents reported they tried to find a nurse or aide.

Table 27: Respondents Who Tried to Find a Nurse or Aide in Last Six Months

RHA / Respondents Who Tried To Find a Nurse or Aide in the Six Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	11%	12%	14%	14%	15%	15%	14%	16%	17%	14%
Yes	89%	88%	86%	86%	85%	85%	86%	84%	83%	86%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	570	443	1,914	1,198	618	1,198	775	531	261	7,508

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

40% of those respondents who tried to find a nurse or aide in the last six months were "always" able to find a nurse or aide when they wanted one; 44% said this was usually the situation. Similar results were obtained for all RHAs except for Calgary and Capital where statistically significant minor differences exist and are highlighted in **Table 28**.

Figure 20: Ease of Finding Nurse or Aide



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

ALBERTA (N=6366)

Table 28: Ease of Finding Nurse or Aide

RHA / Able to Find a Nurse or Aide	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	-	1%	-	-	-	-	-	-	1%	0%
b) Sometimes	18%	14%	17%	15%	15%	13%	15%	14%	19%	16%
c) Usually	40%	48%	46%	42%	42%	43%	45%	45%	45%	44%
d) Always	41%	37%	36%	42%	42%	43%	40%	41%	35%	40%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	503	385	1,617	1,027	518	1,004	656	445	211	6,366



3.4.2. Perception of Staffing Levels

- 13% of respondents "always" felt there were enough nurses and aides in the nursing home; 41% felt this was "usually" the situation. Similar results were obtained across all RHAs.
- Perhaps more importantly, 19% of respondents felt there were "never" enough nurses and aides in the facility.

Figure 21: Perception of Staffing Levels



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

ALBERTA (N=7369)

Table 29: Perceptions of Staffing Levels in Nursing Homes

RHA / Enough nurses and aides in nursing home	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	18%	17%	20%	17%	20%	18%	22%	17%	21%	19%
b) Sometimes	28%	28%	29%	26%	27%	26%	26%	26%	31%	27%
c) Usually	40%	45%	39%	43%	42%	42%	40%	45%	34%	41%
d) Always	14%	11%	11%	14%	11%	14%	12%	11%	14%	13%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	551	433	1,879	1,175	610	1,178	764	521	258	7,369



3.4.3. Resident's Room Looks and Smells Clean

- Overall, 49% of respondents reported that the resident's room "always" looked and smelled clean; 42% felt this was "usually" the situation.
- Similar results were obtained across most RHAs except for (**Table 30**):
 - Chinook and Palliser where less favourable results were reported, and
 - Northern Lights where 59% of respondents reported that the resident's room "always" looked and smelled clean compared to 49% for all facilities.

Figure 22: Resident's Room Looks and Smells Clean



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

■ ALBERTA (N=7528)

Table 30: Resident's Room Looks and Smells Clean

RHA / Resident's Room Looks And Smells Clean	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	2%	2%	1%	1%	2%	2%	1%	1%	0%	1%
b) Sometimes	13%	13%	7%	6%	7%	8%	8%	10%	5%	8%
c) Usually	39%	46%	44%	44%	42%	39%	41%	38%	35%	42%
d) Always	46%	39%	47%	49%	49%	51%	51%	52%	59%	49%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	567	447	1,920	1,200	623	1,199	778	530	264	7,528



3.4.4. Resident Looks and Smells Clean

38% of respondents reported that the resident "always" looked and smelled clean; 51% reported this was "usually" the situation. Very similar results were obtained across all RHAs.

Figure 23: Resident Looks and Smells Clean



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

■ ALBERTA (N=7485)

Table 31: Resident Looks and Smells Clean

RHA / Residents Looks and Smells Clean	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	0%	1%	1%	2%	1%	1%	2%	1%	1%
b) Sometimes	12%	10%	11%	9%	10%	10%	9%	10%	5%	10%
c) Usually	48%	52%	52%	52%	50%	49%	52%	46%	52%	51%
d) Always	38%	37%	36%	37%	39%	40%	38%	43%	41%	38%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	564	443	1,907	1,192	620	1,193	771	530	265	7,485



3.4.5. Public Areas Look and Smell Clean

- ➢ 59% of respondents reported that the public areas of the nursing home "always" looked and smelled clean; 36% reported this was "usually" the situation.
- Similar results were obtained across most RHAs, except for Northern Lights where respondents reported that facilities look and smell cleaner and Palliser where respondents reported facilities look and smell less clean (see **Table 32** below).

Figure 24: Public Areas Look and Smell Clean



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

■ ALBERTA (N=7538)

Table 32: Public Areas Look and Smell Clean

RHA / Public Areas Look and Smell Clean	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Centra (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	1%	1%	0%	2%	1%	1%	0%	0%	1%
b) Sometimes	6%	8%	5%	5%	5%	4%	5%	4%	3%	5%
c) Usually	37%	43%	37%	37%	31%	33%	36%	36%	30%	36%
d) Always	56%	48%	58%	57%	63%	63%	58%	60%	66%	59%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	570	448	1,917	1,201	623	1,203	778	533	265	7,538



3.4.6. Resident's Medical Belongings Lost

Approximately one in three respondents (33%) stated that the resident's personal medical belongings were "once" (20%) or "two or more times" (13%) damaged or lost in the last 6 months. Similar results were obtained across all RHAs.

Figure 25: Resident's Medical Belongings Lost

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?



■ ALBERTA(N=7391)

Table 33: Resident's Medical Belongings Lost

RHA / Resident's Medical Belongings Lost	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Never	65%	64%	67%	67%	68%	67%	68%	68%	64%	67%
Once	20%	21%	20%	19%	20%	20%	18%	20%	22%	20%
Two or more	15%	15%	13%	13%	13%	13%	14%	12%	14%	13%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	557	442	1,880	1,182	608	1,185	761	519	257	7,391



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. The results vary by RHA as follows (see Table 34):
 - Chinook, Palliser and East Central respondents reported the laundry service was used more frequently, and
 - Calgary and Peace Country where respondents reported the laundry service was used less frequently.

Table 34: Use of Nursing Home Laundry Service

RHA / Use of Nursing Home Laundry Service	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	26%	24%	33%	29%	22%	30%	32%	38%	29%	30%
Yes	74%	76%	67%	71%	78%	70%	68%	62%	71%	70%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	569	447	1,907	1,188	620	1,195	775	527	262	7,490
Note: Individual proportions may not su	m to 100% d	ue to roundi	ing of decim	als.						

Overall, 59% of respondents that used the nursing home's laundry service for his or her clothes in the last 6 months, stated the resident's clothes were "once or twice" (42%) or "three or more times" (17%) damaged or lost. Similar results were found across most RHAs except (**Table 35**):

- Palliser where respondents reported that clothes were damaged or lost more frequently, and
- Chinook, Capital and Northern Lights where respondents reported that clothes were damaged or lost less frequently.

Figure 26: Resident's Clothes Lost

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



Table 35: Resident's Clothes Lost

RHA / Resident's Clothes Lost	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	45%	34%	38%	37%	44%	45%	45%	44%	48%	41%
b) Once/Twice	46%	47%	42%	44%	41%	40%	40%	35%	43%	42%
c) 3+ times	10%	19%	20%	19%	15%	15%	15%	21%	9%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	394	325	1,182	782	454	792	499	306	176	4,910
Note: Individual proportions may not sum to	o 100% due to	o rounding of	decimals.							



3.4.8. Noise Level Around Resident's Room

92% of respondents reported that the noise level around the resident's room was "always" (54%) or "usually" (38%) acceptable to them. Similar results were found across most RHAs except for Capital, East Central and Northern Lights where respondents reported the noise level was more acceptable more often compared to the overall total.

Figure 27: Noise Level Around Resident's Room

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



ALBERTA(N=7528)

Table 36: Noise Level Around Resident's Room

RHA / Noise Level Around Resident's Room	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	1%	2%	2%	1%	1%	2%	1%	2%	2%
b) Sometimes	8%	6%	8%	8%	5%	5%	6%	7%	2%	7%
c) Usually	40%	39%	40%	39%	36%	36%	39%	38%	30%	38%
d) Always	50%	54%	50%	52%	58%	57%	54%	53%	66%	54%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	570	447	1,919	1,200	623	1,199	778	528	264	7,528



3.4.9. Able to Find a Place to Talk in Private

- ➢ 94% of respondents reported they were able to "always" (72%) or "usually" (22%) find places to talk to the resident in private in the last 6 months.
- Similar results were found across most RHAs except for East Central and Capital where respondents reported that finding a place to talk in private was easier and DHTR where respondents reported it was more difficult compared to the overall total (see **Table 37**).

Figure 28: Able to Find a Place to Talk in Private



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

■ ALBERTA(N=7459)

Table 37: Able to Find a Place to Talk in Private

RHA / Places to talk in private with resident	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	1%	2%	3%	0%	1%	1%	2%	1%	1%
b) Sometimes	4%	6%	4%	6%	3%	3%	5%	6%	3%	4%
c) Usually	25%	21%	22%	25%	19%	20%	21%	20%	20%	22%
d) Always	70%	71%	73%	67%	77%	77%	72%	72%	76%	72%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	567	442	1,902	1,183	616	1,191	772	523	263	7,459



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 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 nine (9) regional health authorities.



3.5.1. Nurses and Aides Treat Resident with Courtesy and Respect

- Overall, 67% of respondents reported they "always" saw nurses and aides treat residents with courtesy and respect over the last 6 months, while 28% reported this was "usually" what they observed.
- Results across most RHAs are not significantly different from the overall total, except for a few significant differences in the Palliser, East Central and Capital health regions that are highlighted in Table 38.

Figure 29: Nurses and Aides Treat Resident with Courtesy and Respect



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

ALBERTA (N=7548)

Table 38: Nurses and Aides Treat Resident with Courtesy and Respect

RHA / Nurses and Aides Treat Resident with Courtesy and Respect	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	-	1%	-	1%	-	-	-	-	-	0%
b) Sometimes	4%	4%	5%	5%	4%	4%	4%	5%	5%	5%
c) Usually	30%	26%	29%	29%	24%	26%	29%	30%	23%	28%
d) Always	66%	68%	65%	65%	72%	70%	67%	65%	71%	67%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	569	449	1,929	1,206	621	1,201	777	532	264	7,548



3.5.2. Nurses and Aides Treat Resident with Kindness

- Overall, 62% 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.
- Results across most RHAs are not significantly different from the overall total, except for Northern Lights where a greater proportion of respondents "always" saw nurses and aides treat the resident with kindness (69% compared to 62% overall). East Central and Capital regions also reported results slightly higher than the overall total.

Figure 30: Nurses and Aides Treat Resident with Kindness



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

■ ALBERTA(N=7550)

Table 39: Nurses and Aides Treat Resident with Kindness

RHA / Nurses and Aides Treat Resident with Kindness	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	-	1%	1%	-	-	-	1%	-	-	1%
b) Sometimes	6%	7%	7%	7%	6%	6%	5%	8%	5%	7%
c) Usually	33%	30%	33%	31%	28%	28%	31%	28%	26%	31%
d) Always	60%	62%	60%	61%	66%	66%	62%	63%	69%	62%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	569	448	1,928	1,205	625	1,202	778	532	263	7,550



3.5.3. Nurses and Aides Really Cared about Resident

- Overall, 47% of respondents "always" felt that nurses and aides really cared about the resident over the last 6 months, while 40% reported this was "usually" what they observed.
- Results across most RHAs are not significantly different from the overall total except for a few significant differences in the Chinook, Capital, and Northern Lights health regions highlighted in **Table 40**.

Figure 31: Nurses and Aides Really Cared about Resident



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

■ ALBERTA (N=7528)

Table 40: Nurses and Aides Really Cared about Resident

RHA / Nurses and Aides Realy Cared about Resident	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	2%	1%	1%	1%	1%	1%	1%	1%	0%	1%
b) Sometimes	13%	11%	13%	14%	11%	9%	11%	12%	9%	12%
c) Usually	44%	44%	41%	39%	40%	39%	41%	39%	36%	40%
d) Always	41%	44%	45%	46%	49%	51%	48%	49%	56%	47%
Grand Total	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Number of respondents	568	446	1,922	1,202	621	1,199	774	533	263	7,528



3.5.4. Nurses and Aides Were Rude to Resident

- Overall, 13% of respondents saw nurses and aides being rude to their family member or any other resident over the last 6 months.
- Results across most RHAs are not significantly different from the overall total except for Northern Lights and Palliser respondents who were less likely to report seeing nurses and aides being rude to their family member or any other resident.

Figure 32: Nurses and Aides Were Rude to Resident



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

ALBERTA (N=7488)

Table 41: Nurses and Aides Were Rude to Resident

RHA / Nurses and Aides Were Rude to Resident	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	85%	90%	86%	87%	89%	86%	85%	88%	92%	87%
Yes	15%	10%	14%	13%	11%	14%	15%	12%	8%	13%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	559	446	1,907	1,200	620	1,198	769	527	262	7,488



3.5.5. Nurses and Aides Were Appropriate with Difficult Residents

- Overall, 32% of respondents saw residents, including their family member behave in a way that made it hard for nurses or aides.
- Northern Lights and Palliser health region respondents witnessed these situations in lower proportions; Calgary Health Region respondents reported a slightly higher incidence. Chinook and Aspen also obtained higher results but they are not statistically different from the overall total.

Table 42: Saw Residents Behave in a Way That Made it Hard for Nurses or Aides

RHA / Saw Residents Behave In a Way That Made it Hard for Nurses or Aides	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	66%	75%	66%	68%	69%	70%	66%	73%	77%	68%
Yes	34%	25%	34%	32%	31%	30%	34%	27%	23%	32%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	565	438	1,895	1,182	619	1,188	771	530	261	7,449

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

- Overall, 89% 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 handled these situations "always" or "usually" appropriately.
- Results across all RHAs are not significantly different from the overall total except for Peace Country where respondents were more likely to report that nurses and aides always handled these situations appropriately.

Figure 33: Nurses and Aides Were Appropriate with Difficult Residents



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

Table 43: Nurses and Aides Were Appropriate with Difficult Residents

RHA / Nurses and Aides Were Appropriate with Difficult Residents	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	2%	1%	2%	1%	2%	1%	0%	2%	1%
b) Sometimes	12%	7%	11%	9%	6%	8%	7%	7%	13%	9%
c) Usually	40%	35%	40%	39%	35%	44%	39%	33%	38%	39%
d) Always	47%	56%	48%	51%	58%	46%	53%	60%	47%	50%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	191	107	636	373	186	354	260	144	60	2,311
Note: Individual proportions may not su	m to 100% d	ue to roundi	ng of decim	als.						



3.5.6. Protection of Resident's Physical Privacy

- Overall, 5% 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.
- DTHR and Aspen respondents reported seeing nurses and aides fail to protect resident's privacy more often than the overall average.

Figure 43: Protection of Residents' Physical Privacy



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?

■ ALBERTA(N=7448)

Table 44: Nurses and Aides Failed to Protect Resident's Privacy

RHA / Nurses and Aides Failed to Protect Resident's Privacy	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	94%	94%	94%	93%	95%	97%	93%	97%	96%	95%
Yes	6%	6%	6%	7%	5%	3%	7%	3%	4%	5%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	564	445	1.898	1.188	618	1.187	767	520	261	7.448



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

Most respondents (76%) reported they were "always" treated with courtesy and respect by nurses and aides. Results are similar across most RHAs except for Capital and East Central health regions where a slightly greater proportion of respondents reported they are always treated with courtesy and respect.

Figure 34: Respondent Treated with Courtesy & Respect by Nurses and Aides

- 100% 90% %9 80% 70% 60% 50% 40% 30% 22% 20% 10% 3% %0 0% Never Sometimes Usually Always
- 25. In the last 6 months, how often did the nurses and aides treat you with courtesy and respect?

ALBERTA (N=7523)

Table 45: Respondent Treated with Courtesy & Respect by Nurses and Aides

RHA / Treated with Courtesy & Respect by Nurses and Aides	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	-	1%	-	-	-	-	-	-	-	0%
b) Sometimes	2%	2%	3%	2%	2%	2%	4%	3%	1%	3%
c) Usually	23%	21%	23%	23%	18%	18%	21%	23%	22%	22%
d) Always	74%	76%	74%	74%	79%	80%	75%	74%	77%	76%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	569	449	1,917	1,202	617	1,198	774	533	264	7,523



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. Satisfied with the way these concerns were handled.
- 11. 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 nine (9) regional health authorities.



3.6.1. Nurses and Aides Give Respondent Information about Resident

- Approximately 88% of respondents sought information about the resident from a nurse or aide.
- Results across most RHAs are not significantly different from the overall total except for Chinook where slightly more respondents sought information about the resident (91% compared to 88% overall). Northern Lights is also above the overall average but not statistically significant.

RHA /Seeking Information about Resident	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	9%	11%	12%	12%	15%	12%	12%	13%	10%	12%
Yes	91%	89%	88%	88%	85%	88%	88%	87%	90%	88%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	566	444	1,905	1,195	619	1,193	772	524	264	7,482

Table 46: Seeking Information about Resident

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

47% 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. Slightly more respondents felt that nurses and aides were more responsive in Capital Region while it was the opposite in the Calgary Health Region (see Table 47).

Figure 35: Nurses and Aides Responsiveness in Providing Information



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

ALBERTA(N=6491)

Table 47: Nurses and Aides Responsiveness in Providing Information

RHA / Nurses and Aides Responsiveness in Providing Information	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	3%	3%	1%	2%	1%	1%	2%	2%	0%	1%
b) Sometimes	11%	11%	13%	13%	11%	9%	9%	9%	10%	11%
c) Usually	40%	41%	41%	38%	40%	38%	44%	40%	42%	40%
d) Always	46%	46%	44%	47%	48%	52%	45%	49%	48%	47%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	506	388	1,648	1,046	525	1,033	666	448	231	6,491



3.6.2. Nurses and Aides Explain Things in Understandable Way

- 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.
- Results across all RHAs are not significantly different from the overall total except for small differences noted in Table 48.

Figure 36: Nurses and Aides Explain Things in Understandable Way



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?

ALBERTA (N=7426)

 Table 48: Nurses and Aides Explain Things in Understandable Way

RHA / Nurses and Aides Explair Things in Understandable Way	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	2%	2%	2%	1%	1%	2%	1%	1%	2%
b) Sometimes	5%	5%	7%	7%	5%	4%	6%	5%	7%	6%
c) Usually	32%	30%	29%	29%	27%	28%	25%	30%	29%	29%
d) Always	61%	64%	62%	62%	67%	66%	67%	64%	63%	64%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	560	443	1,893	1,188	609	1,186	760	523	264	7,426



3.6.3. Nurses and Aides Discourage Respondent Questions

- 3% of respondents reported that nurses and aides discouraged them from asking questions about the resident.
- > Similar results were found across all RHAs.

Figure 37: Nurses and Aides Discourage Respondent Questions



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

ALBERTA (N=7478)

Table 49: Nurses and Aides Discourage Respondent Questions

				<u> </u>						
RHA / Nurses and Aides Discourage Respondent Questions	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	97%	98%	96%	96%	97%	98%	97%	96%	95%	97%
Yes	3%	2%	4%	4%	3%	2%	3%	4%	5%	3%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	561	442	1,905	1,198	616	1,191	774	527	264	7,478



3.6.4. Respondents Stopped Themselves from Complaining

- Approximately 31% 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 results were obtained across all RHAs except for Capital region where a lower proportion of respondents stopped themselves from complaining (29% compared to 31% overall).
- This finding indicates that nursing home staff may not hear about important concerns. It is important to recognize that empowering family to communicate issues to staff and training staff how to receive such information is an important quality improvement issue.

Figure 38: Respondents Stopped Themselves from Complaining



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?

ALBERTA (N=2376)

Table 50: Respondents Stopped Themselves from Complaining

RHA / Respondents Stopped Themselves from Complaining	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	700/	670/	669/	700/	60%	710/	669/	670/	760/	60%
NO	12%	01%	00%	12%	69%	/170	00%	07%	15%	09%
Yes	28%	33%	34%	28%	31%	29%	34%	33%	25%	31%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	210	128	618	379	189	362	253	160	77	2,376



7.402

261

3.6.5. Respondent Involvement in Decisions about Care

80% of respondents reported they were involved in decisions about the resident's care. Similar results were found for most RHAs, except for Chinook where a greater proportion of respondents reported they were involved in comparison to the overall total.

RHA /Respondent Involvement Chinook Pallise DTHR Calgary East Central Capital Asper Peace Cnty Northern L in Decisions about Care Total (R1) (R5) (R6) (R7) (R8) (R9) (R2) (R3) (R4) No 15% 22% 20% 20% 21% 20% 20% 18% 22% 19% Yes 80% 85% 80% 78% 81% 78% 80% 79% 80% 82% Grand Tota 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%

1.890

Table 51: Respondent Involvement in Decisions about Care

435

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

558

Number of respondents

55% of those respondents involved in decisions about the resident's care in the last 6 months were "always" involved as much as they wanted; 35% said this was "usually" the situation.

1.182

618

1.174

767

517

Results across all RHAs are not significantly different from the overall total, except for Capital where a greater proportion of respondents report they were "always" involved as much as they wanted (60% compared to 55% overall).

Figure 39: Respondent Involvement in Decisions about Care



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?

Table 52: Respondent Involvement in Decisions about Care

RHA / Respondent Involvement in Decisions about Care	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	1%	-	1%	1%	1%	1%	1%	1%	1%	1%
b) Sometimes	11%	8%	10%	9%	10%	8%	9%	11%	8%	9%
c) Usually	36%	38%	38%	34%	35%	31%	35%	32%	34%	35%
d) Always	52%	53%	51%	56%	55%	60%	55%	56%	58%	55%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	463	336	1,454	920	481	939	584	407	197	5,781



3.6.6. Respondent Given Info about Payments or Expenses

- 28% of respondents asked the nursing home for information about payments or expenses in the last 6 months.
- Chinook, Peace Country and Northern Lights saw a greater proportion of respondents who asked about payments or expenses. Calgary and Aspen health regions saw a smaller proportion of respondents who asked about payments or expenses (Table 53).

Table 53: Respondent Asking about Payments or Expenses

(K3)	(R4)	(R5)	(R6)	(R7)	(R8)	(R9)	Iotal
5% 75%	70%	72%	71%	76%	65%	64%	72%
1% 25%	30%	28%	29%	24%	35%	36%	28%
0% 100%	100%	100%	100%	100%	100%	100%	100%
38 1,939	1,219	628	1,212	789	541	265	7,595
5	% 75% % 25% 0% 100% 88 1,939	75% 70% % 25% 30% 0% 100% 100% 18 1,939 1,219	75% 70% 72% % 25% 30% 28% 0% 100% 100% 100% 18 1,939 1,219 628	% 75% 70% 72% 71% % 25% 30% 28% 29% 0% 100% 100% 100% 100% 18 1,939 1,219 628 1,212	% 75% 70% 72% 71% 76% % 25% 30% 28% 29% 24% 0% 100% 100% 100% 100% 100% 18 1,939 1,219 628 1,212 789	% 75% 70% 72% 71% 76% 65% % 25% 30% 28% 29% 24% 35% 0% 100% 100% 100% 100% 100% 18 1,939 1,219 628 1,212 789 541	% 75% 70% 72% 71% 76% 65% 64% % 25% 30% 28% 29% 24% 35% 36% 0% 100% 100% 100% 100% 100% 100% 88 1,939 1,219 628 1,212 789 541 265

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

72% of respondents that asked about payments and expenses "always" received all the information they wanted about payments or expenses; 20% said this was "usually" the practice.

Figure 40: Respondent Given Info about Payments or Expenses



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

Similar results were obtained across most RHAs except for East Central and Calgary where a greater proportion of respondents "always" received all the information they wanted. Chinook and David Thompson health regions saw fewer respondents that "always" received all the information they wanted (see **Table 54**).

Table 54: Respondent Given Info about Payments or Expenses

RHA / Respondent Given Info about Payments or Expenses	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	3%	3%	2%	3%	1%	1%	1%	3%	2%	2%
b) Sometimes	5%	5%	5%	6%	5%	5%	4%	9%	4%	5%
c) Usually	30%	21%	17%	25%	15%	19%	18%	22%	22%	20%
d) Always	62%	72%	76%	66%	80%	75%	77%	67%	72%	72%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	177	102	465	355	172	351	188	188	93	2,091



3.6.7. Participated in Care Conference in last 12 Months

Approximately 7 respondents out of 10 (71%) were part of a care conference, either in person or by phone. Calgary and Peace Country health regions saw significantly lower results compared to the overall average; while Palliser health region saw significantly higher results (Table 55).

Figure 41: Participated in Care Conference in last 12 Months

- 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Yes No
- 44. In the last 12 months, have you been part of a care conference, either in person or by phone?

ALBERTA(N=7370)

Table 55: Participated in Care Conference in last 12 Months

RHA / Participated in Care Conference in last 12 Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Νο	27%	25%	32%	27%	28%	28%	32%	34%	28%	29%
Yes	73%	75%	68%	73%	72%	72%	68%	66%	72%	71%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	557	431	1,875	1,180	614	1,174	767	513	259	7,370

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

Figure 42 shows of those who did not participate, 37% were asked to participate in a care conference in last 12 months.



Figure 42: Were Asked But Chose Not to Participate in a Care Conference



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

Table 56: Were Asked But Chose Not to Participate in a Care Conference

RHA / Respondents That Were Asked But Choose Not to Participate in a Care Conference in Last 12 Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R 6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	69%	64%	66%	53%	63%	62%	67%	60%	62%	63%
Yes	31%	36%	34%	47%	37%	38%	33%	40%	38%	37%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	137	96	548	285	157	296	228	161	66	1,974

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

- The proportion of respondents that were asked but chose not to participate in a care conference are not significantly different across RHAs except for DHTR where this proportion is smaller.
- At the time of the survey, Alberta Continuing Care Health Service standards required an annual health service team conference to review or update the resident's care plan. The standards also stated that with resident permission, involvement of family members in the care planning process should be supported. Therefore, the assumption is the majority of respondents, who are sufficiently involved, should have received the opportunity to participate in the care planning process.
- The number of respondents who either participated or were asked to participate in a care conference but choose not to represents 81% of the total respondents. This leaves 19% who were not given the opportunity to participate. This is summarized in **Table 57**.

Care Conference Participation	N	%
Respondents who participated in a care conference	5,202	71%
Respondents that were asked but choose not to participate	732	10%
Respondents that were not given an opportunity to participate	1,436	19%
Total Respondents	7,370	100%
Respondents who either participated or who were asked to participate in a care conference	5,934	81%

Table 57: Care Conference Participation Summary



3.6.8. Unhappy with Care at the Nursing Home

Approximately one in three (33%) respondents were unhappy with the care the resident received at the nursing home in the last 6 months. Similar results were found for most RHAs except for Chinook where there were a greater proportion of respondents (39%) who were unhappy with the care at the nursing home.

Table 58: I	Unhappy	with (Care a	t the	Nurs	ing H	lome	

RHA / Unhappy with Care	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	61%	69%	67%	67%	69%	69%	66%	68%	69%	67%
Yes	39%	31%	33%	33%	31%	31%	34%	32%	31%	33%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	564	436	1,896	1,189	616	1,188	772	526	260	7,447

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

- 90% 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.
- Similar results were found for all RHAs and no ratios were statistically different from total overall results.

Figure 43: Respondent Informing Staff about Concerns



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

■ ALBERTA (N=2397)

Table 59: Respondent Informing Staff about Concerns

RHA / Respondents Informing Staff About Their Concerns	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Νο	12%	10%	9%	10%	10%	8%	12%	13%	12%	10%
Yes	88%	90%	91%	90%	90%	92%	88%	88%	88%	90%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	215	131	622	384	190	365	253	160	77	2,397


3.6.9. Satisfied with the Way Care Concerns Were Handled

- > 10% 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.
- > Similar results were obtained across most RHAs.

Figure 44: Satisfied with the Way Care Concerns Were Handled



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

■ ALBERTA (N=2114)

Table 60: Satisfied with the Way Care Concerns Were Handled

RHA / Satisfied with the Way Care Concerns Were Handled	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
a) Never	7%	10%	7%	9%	8%	7%	8%	8%	3%	8%
b) Sometimes	35%	40%	41%	36%	40%	39%	36%	39%	38%	39%
c) Usually	48%	43%	43%	43%	40%	45%	43%	40%	47%	44%
d) Always	10%	7%	9%	12%	12%	8%	13%	12%	12%	10%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	186	115	548	343	168	332	217	137	68	2,114



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.

Details about each attribute are reported in this section. The information provided is for the entire survey population and the nine (9) regional health authorities of Alberta.



3.7.1. Nursing Home Staff Expect Family Member to Help

- Overall, 70% of respondents helped with the care of the resident when they visited in the past 6 months.
- Results across all RHAs are not significantly different from the overall total. \geq
- > By itself this should not be viewed negatively; many visiting family members want to help. The more important issue is whether they feel obligated or required to help.

Table 61: Helped With Care in Last 6 Months

RHA/Helped With Care in Last 6 Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	29%	32%	29%	31%	28%	33%	29%	34%	29%	30%
Yes	71%	68%	71%	69%	72%	67%	71%	66%	71%	70%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	556	437	1,892	1,186	614	1,187	762	526	256	7,416

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

Figure 45: Nursing Home Staff Expect Family Member to Help



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

Results across most RHAs are not significantly different from the overall total, except for \geq Calgary where more respondents said that staff expect them to help with the care of the resident, as highlighted in Table 62 below.

Table 62: Nursing Home Staff Expect Family Member to Help

RHA / Nursing Home Staff Expect Family Member to Help	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	81%	84%	80%	84%	85%	85%	83%	85%	86%	83%
Yes	19%	16%	20%	16%	15%	15%	17%	15%	14%	17%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	555	433	1,874	1,175	613	1,167	758	521	255	7,351
Note: Individual proportions may not su	im to 100% o	due to round	ling of decir	nale						

 \triangleright Overall, 17% of respondents reported that the nursing home staff expect them to help when they visit; considering only those respondents that helped with the care of the resident, 24% reported they felt staff expected them to help. This result suggests that respondents may be more likely to help with the care of the resident if they feel staff expect them to help.



3.7.2. Helped with Drinking

Overall, 43% of respondents helped the resident with drinking at least once in the last 6 months. Results across most RHAs are not significantly different from the overall total, except for Peace Country where slightly fewer respondents (38%) helped with drinking and Calgary where slightly more respondents (47%) helped with drinking.

Table 63: Helped with Drinking

RHA / Helped with Drinking - During a Visit in the Last 6 Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Νο	59%	61%	53%	59%	53%	60%	55%	62%	55%	57%
Yes	41%	39%	47%	41%	47%	40%	45%	38%	45%	43%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	567	441	1,905	1,197	623	1,199	772	527	260	7,491

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

Overall 24% of those respondents that helped with drinking 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. Results across all RHAs are not significantly different from the overall total.

Figure 46: Helped with Drinking because Staff did not Help or Resident Waited too Long



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

ALBERTA(N=3064)

Table 64: Helped with Drinking because Staff did not Help or Resident Waited too Long

RHA / Helped with drinking Because Staff did not help or Resident waited too long	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	76%	77%	75%	73%	79%	77%	78%	80%	71%	76%
Yes	24%	23%	25%	27%	21%	23%	22%	20%	29%	24%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	220	168	845	459	279	462	329	188	114	3,064



3.7.3. Helped with Eating

Overall, 44% of respondents helped the resident with eating at least once in the last 6 months. Significant differences were found in Palliser, Calgary, Capital, Peace Country and Northern Lights health regions as highlighted in **Table** 65.

Table 65: Helped with Eating

RHA / Helped with Eating - During a Visit in the Last 6 Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	58%	61%	52%	59%	54%	59%	53%	60%	50%	56%
Yes	42%	39%	48%	42%	46%	41%	47%	40%	50%	44%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	571	444	1.920	1.200	624	1.204	778	530	263	7.534

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

Overall, 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. Results across all RHAs are not significantly different from the overall total.

Figure 47: Helped with Eating because Staff did not Help or Resident Waited too Long



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

ALBERTA (N=3203)

Table 66: Helped with Eating because Staff did not Help or Resident Waited too Long

RHA / Helped with Eating because staff did not help or Resident waited too long	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Νο	79%	84%	77%	79%	80%	77%	81%	82%	76%	79%
Yes	21%	16%	23%	21%	20%	23%	19%	18%	24%	21%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	228	170	892	481	276	474	356	201	125	3,203



3.7.4. Helped with Toileting

Overall, 24% of respondents helped the resident with toileting at least once in the last 6 months. Results across all RHAs are not significantly different from the overall total.

Table 67: Helped with Toileting

RHA / Helped with Toileting - During a Visit in the Last 6 Months	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
Νο	74%	77%	75%	77%	75%	75%	76%	75%	80%	76%
Yes	26%	23%	25%	23%	25%	25%	24%	25%	20%	24%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	566	442	1,910	1,192	619	1,195	773	529	261	7,487

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

Overall, 48% 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. Results across all RHAs are not significantly different from the overall total.

Figure 48: Helped with Toileting because Staff did not Help or Resident Waited too Long



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

ALBERTA (N=1734)

Table 68: Helped with Toileting because Staff did not Help or ResidentWaited too Long

RHA / Helped with Toileting because staff did not help or resident waited too long	Chinook (R1)	Palliser (R2)	Calgary (R3)	DTHR (R4)	East Central (R5)	Capital (R6)	Aspen (R7)	Peace Cnty (R8)	Northern L. (R9)	Total
No	470/	EE0/	49%	E 40/	E 40/	EC0/	E 20/	450/	E00/	E 20/
NO	41%	55%	4570	54%	54%	20%	53%	45%	50%	52%
Yes	53%	45%	51%	46%	46%	44%	47%	55%	50%	48%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of respondents	143	97	450	267	147	277	177	128	48	1,734



3.8. Key Findings - Global Overall Ratings

- 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 – 10. The average score for 7,448 respondents is 8.1 with a margin of error of 0.4%.

Figure 49: Global Rating of Care at the Nursing Home



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?

Overall care ratings: As shown in **Figure 50** average scores vary substantially across the RHAs, from 7.8 to 8.7. Based on methods refined for other CAHPS surveys as well as the NH-CAHPS¹¹ survey, the 0 to 10 global rating scale is generally collapsed into 3 score categories for reporting purposes. The lowest category is comprised of ratings from 0 to 6 (indicating poor care), the middle category consists of ratings of 7 and 8 (indicating average care), and the highest category 9 and 10 (indicating excellent care).

¹¹ T5 Instructions for Analyzing CAHPS Data: Using the CAHPS Analysis Program Version 3.0; CAHPS Survey and Reporting Kit 2005. AHRQ.







3.9. Overall Care Rating – Quartile Analysis

3.9.1. 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.

For this reason, facility level overall average care ratings (Q46) were analyzed in terms of 99 facilities with so called "reliable" sample sizes. The overall average care ratings of the remaining facilities with small sample sizes were also normalised using the normal distribution parameters calculated for the 99 facilities with reliable sample sizes (see **Section 3.9.7**).

A total of 99 facilities with reliable sample sizes were selected and the following calculations were done:

- Average global ratings of care for each of the 99 facilities.
- Average global ratings of care were then normalized.
- A non-parametric test for normality (Lillifors) was conducted and the hypothesis of a normal distribution of the average global ratings of care of the 99 facilities could not be rejected.
- A 95% confidence interval was calculated for each facility's average global rating of care and converted into a "quartile" confidence interval.





Figure 51: Nonparametric Test for Normality of Care Ratings for 99 Facilities

As expected and as shown in Figure 52, an approximately equal number of facilities were classified in each quartile.



Figure 52: Normalized Care Ratings for the 99 Facilities



Key Findings for the 99 nursing homes with reliable sample sizes

- > The average care rating for all 99 facilities is 8.0 on a 0 to 10 rating scale.
- The higher the quartile, the higher the average care score and the lower the number of beds. Therefore, facilities with fewer beds are more likely to obtain better care scores.
- There are only 21 facilities for which the calculated average score remains within its quartile with 95% certainty.
- The facilities belonging to the upper (75%-100%) average care score quartile with 95% certainty are operating with nearly two times less total number of beds (100 versus 238 beds) on average than the facilities belonging to the lower (0-25%) quartile. The statistically significant differences between the upper 9 facilities in the upper (75%-100%) quartile and the 4 lowest facilities in the lower (0-25%) quartile are examined in Section 3.9.6.

Quartile	Number of Facilities	Total Respon- dents	Avg. # of Respon- dents by Facility	Average Care Rating (0-10)	95%Confidence Interval Lengths in Terms of Number of Quartiles ("Q")	Average Number of Beds
Upper	23	988	43.0	8.9	9 facilities overlap no other quartile 10 facilities overlap 1 other quartile 4 facilities overlap 2 other quartiles	82
Middle (+)	27	1,504	55.7	8.3	5 facilities overlap 1 other quartile 22 facilities overlap 2 other quartiles	91
Middle (-)	26	2,119	81.5	7.9	5 facilities overlap 1 other quartile 21 facilities overlap 2 other quartiles	150
Lower	23	1,789	77.8	7.3	4 facilities overlap no other quartile 19 facilities overlap 1 other quartile	153
All	99	6,400	64.6	8.1	13 in same quartile @ 95% certainty	119

Table 69: Statistics for 99 Nursing Homes with Reliable Samples Sizes

Upper 9	9	444	49.3	9.1	9 highest performing facilities in upper quartile with 95% certainty	100
Lower 4	4	409	102.3	7.1	4 lowest performing facilities in lower quartile with 95% certainty	238

- Figure 53 shows the distribution of the 6,400 respondents from the 99 facilities with reliable sample sizes, grouped in quartiles that are determined by facility average overall care rating.
- For example, the average care rating of the 988 respondents from the 23 upper quartile facilities was 8.9 while the average care rating of the 1,789 respondents from the 23 lower quartile facilities was 7.4. Approximately one out of four (25%) respondents from the lower quartile facilities rated the care poorly (i.e. a number of 6 or less on a 0-10 rating scale) while for the upper quartile facility respondents, only 1 out of 20 (5%) provided such low ratings.







3.9.2. Upper Quartile Facilities

There are 23 nursing homes in the upper (75-100%) quartile.

Key Findings:

- > The overall average care rating for this group is 8.9.
- The average global care ratings for the facilities in this quartile range from 8.5 to 9.7 on a 0 to 10 rating scale.
- > 9 facilities of the 23 belong to the upper quartile with 95% certainty.
- ➤ 10 facilitys' care ratings 95% confidence interval overlap two quartiles (i.e. care ratings could either be in the upper quartile or in the middle plus quartile with 95% certainty).
- The 95% confidence interval of four (4) facilities overlaps 3 quartiles, from the middle (-) to the upper quartile.



3.9.3. Middle (+) Quartile Facilities

There are 27 nursing homes in the middle (50%-75%) plus quartile.

Key Findings:

- > The overall average for this group is 8.3.
- The average global care ratings for the facilities in this quartile range from 8.1 to 8.5 on a 0 to 10 rating scale.
- > 5 facilitys' care ratings 95% confidence interval overlaps two quartiles.
- > 22 facilitys' care ratings 95% confidence interval overlaps three quartiles.

3.9.4. Middle (-) Quartile Facilities

There are 26 nursing homes in the middle (25%-50%) minus quartile.

Key Findings:

- > The overall average care rating for this group is 7.9.
- The average global care ratings for facilities in this quartile range from 7.8 to 8.1 on a 0 to 10 rating scale.
- > 5 facilitys' care ratings 95% confidence interval overlaps two quartiles.
- > 21 facilitys' care ratings 95% confidence interval overlaps three quartiles.

3.9.5. Lower Quartile Facilities

There are 23 nursing homes in the lower (0-25%) quartile.

Key Findings:

- > The overall average care rating for this group is 7.4.
- The average global care ratings for facilities in this quartile range from 6.9 to 7.7 on a 0 to 10 rating scale.
- > 4 facilitys' care ratings 95% confidence intervals remain in the lower quartile.
- > 19 facilitys' care ratings 95% confidence intervals overlap two quartiles.



3.9.6. 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 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. Results may be significantly impacted by *confounding variables* such as respondent and resident characteristics and facility characteristics such as the number of beds or community size. Statistically significant difference does not say anything about the magnitude of the difference or whether the difference is "clinically" important. Benchmarking (i.e. achieving the "average" or even a higher benchmark score) is not the objective; improving the quality of care is the objective.

Care ratings were compiled for each facility belonging to a short list of 99 nursing homes with reliable sample sizes (greater than 25 respondents per facility and 95% confidence interval ranges). The total number of respondents for the 99 facilities was 6,400 compared to 7,448 for all 173 facilities or 86% 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 several quartiles.

Nine nursing homes belonging to the upper quartile and 4 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 3.11**.

As shown in **Table 70**, the gap between upper and lower quartile facilities is +2.0 on the 0 to 10 scale of the overall care rating. There are 444 respondents in the 9 upper quartile facilities compared to 409 in the lower quartile facilities. The difference in the propensity to recommend the facility between upper and lower quartiles is +25%. This is further analyzed in **Section 3.11**.

Survey Questions	Upper Quartile	Lower Quartile	Significant
	9 Facilities	4 Facilities	Differences with
	444 respondents	409 respondents	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?	9.1 (Average Care Rating)	7.1 (Average Care Rating)	+2.0
If someone needed nursing home care, would you recommend this nursing home to	77% "Definitely yes" 22% "Probably yes"	31% "Definitely yes" 43% "Probably yes"	+46% -21%
them?	99%	74%	+ 25%
	(Total)	(Total)	(Total)

Table 70: Upper vs. Lower Quartile Facilities - Care Rating / Propensity to Recommend

In the following analysis, we only examine questions with significant differences between the upper and lower quartiles, limited to those facilities belonging exclusively to those quartiles with 95% confidence. 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*¹² composite variable are 52.2 / 100 for the lower quartile, and 76.6 / 100 for upper quartile facility respondents, a significant difference of 24.4 out of 100, showing a considerable range of performance between facilities. Note: this score is a result of all items comprising the composite.

- As illustrated in Table 71 below, all individual questions included in this composite variable showed significant differences between upper and lower quartile facility respondents.
- Upper quartile facility respondents feel there were *alway*" or *usually* enough nurses and aides in the nursing home to a greater extent compared to lower quartile facilities (73% upper and 41% lower), and they were more likely to find a nurse or aide when they wanted one (96% upper and 70% lower).
- The resident's clothes of upper quartile respondents were damaged or lost at least once to a lesser extent than for lower quartile respondents (46% upper and 67% lower).
- The resident's room always or usually looked and smelled cleaner for upper quartile compared to lower quartile respondents (97% upper and 77% lower).
- A smaller proportion of upper quartile facility respondents reported the resident's medical belongings (like hearing aids, eye-glasses, and dentures) were damaged or lost (29% upper and 42% lower).
- The resident always or usually looked and smelled cleaner for upper quartile compared to lower quartile respondents (95% upper and 78% lower).
- The public areas of the upper quartile facilities *always* or *usually* look and smell cleaner compared to lower quartile facilities (99% upper and 85% lower).
- ➢ Upper quartile facility respondents are more likely to believe that the noise level around the resident's room was *always* or *usually* acceptable to them (97% upper and 90% lower).
- Upper quartile facility respondents are more likely to *always* or *usually* find places to talk to the resident in private (98% upper and 95% lower).

¹² The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.11.1.



Table 71: Significant differences for Nursing home staffing, care of belongings and environment

Composite variable attributes	All	Upper Quartile	Lower Quartile	Upper Less Lower
How often there are enough nurses or aides (048) Percentage of respondents that	54%	73%	11%	
felt that there was <i>always</i> or <i>usually</i> enough	(N=7369)	(N=438)	(N=409)	32%
nurses and aides in the nursing home.				
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=4910)	46% (N=311)	67% (N=247)	-21%
Can find a nurse or aide (Q11) Percentage of respondents that were <i>always</i> or <i>usually</i> able to find a nurse or aide when they wanted one.	84% (N=6409)	96% (n=344)	70% (N=376)	26%
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=7528	97% (N=444)	77% (N=415)	20%
Resident's medical belongings lost (Q35) Percentage of respondents that reported the resident's medical belongings were damaged or lost.	33% (N=7391)	29% (N=440)	42% (N=408)	-13%
Resident looks and smells clean (Q22) Percentage of respondents that reported the resident <i>always</i> or <i>usually</i> looks and smells clean.	89% (N=7485	95% (N=443)	78% (N=408)	17%
Public areas look and smell clean (Q33) Percentage of respondents that reported the public areas of the nursing home <i>always</i> or <i>usually</i> look and smell clean.	95% (N=7538)	99% (N=445)	85% (N=417)	14%
Additional related items not included in the c	omposite			
Acceptable noise level around resident room (Q31) The noise level around the resident's room was always or usually acceptable to respondents.	92% (N=7528)	97% (N=443)	90% (N=414)	7%
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.	94% (N=7459)	98% (N=441)	95% (N=412)	3%



(2) Kindness and Respect

The mean scores (0-100) for the *Kindness and respect*¹³ composite variable are 65.3 / 100 for lower quartile, and 88.3 / 100 for upper quartile facility respondents, a significant difference of 23.0 out of 100 between upper and lower quartiles.

- As illustrated in **Table 72** below, upper quartile facility respondents reported that nurses and aides *always* or *usually* really cared about the resident (98% upper and 75% lower) and treated the resident with courtesy and respect to a greater extent than lower quartile respondents (98% upper and 91% lower).
- A greater proportion of upper quartile facility respondents never saw any nurses or aides be rude to their resident or any other resident (93% upper and 76% 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 (96% upper and 77% lower).
- Upper quartile respondents *always* or *usually* saw the nurses and aides treat the resident with *kindness* more often than lower quartile respondents (97% upper and 84% lower).
- Finally, there is greater proportion of lower quartile 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 (2% upper and 9% lower) but this difference is <u>not</u> statistically significant.

Composite variable attributes	All	Upper Quartile	Lower Quartile	Upper Less Lower
Nurses and aides really cared about the resident (Q14) Percentage of respondents that <i>always</i> or <i>usually</i> feel the nurses and aides really cared about the resident.	87% (N=7528)	98% (N=446)	75% (N=413)	23%
Nurses and aides treated resident with courtesy and respect (Q12) Percentage of respondents that <i>always</i> or <i>usually</i> saw the nurses and aides treat the resident with courtesy and respect.	95% (N=7542)	98% (N=446)	91% (N=416)	7%
Nurses and aides were rude to residents (Q15) Percentage of respondents that <i>never</i> saw nurses or aides being rude to the resident or any other resident.	87% (N=7488	93% (N=444)	76% (N=414)	17%
Nurses and aides were appropriate with difficult residents (Q24) Percentage of respondents that felt the nurses and aides <i>always</i> or <i>usually</i> were appropriate with difficult residents.	90% (N=2324)	96% (N=109)	77% (N=137)	19%
Nurses and aides treated resident with kindness (Q13) Percentage of respondents that believe nurses and aides <i>always</i> or <i>usually</i> treated the resident with kindness.	89% (N=2311)	97% (N=447)	84% (N=418)	13%
Additional related items not included in the composite				
Protection of resident's physical privacy (Q34) Percentage of respondents that ever saw nurses and aides fail to protect any resident's privacy while the resident was dressing, showering, bathing, or in a public area.	5% (N=7448)	2% (N=441)	9% (N=413)	Not statistically significant

Table 72: Significant differences for Kindness and respect

¹³ The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.11.1.



(3) Providing information and encouraging family involvement

The mean scores (0-100) for the *Providing Information and encouraging family involvement*¹⁴ composite variable are 70.1 / 100 for lower quartile, and 84.3 / 100 for upper quartile facility respondents, a significant difference of 13.7 out of 100 between upper and lower quartiles.

- 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 (96% upper and 74% lower).
- The proportion of respondents that reported the nurses and aides did not try to discourage them from asking questions about the resident are slightly different between the upper and lower quartile facilities (99% upper and 95% lower).
- There is no statistical difference between upper and lower quartiles for respondents that stopped themselves from talking to any nursing home staff about their concerns because they thought they would take it out on the resident (20% upper and 31% lower).
- The nurses and aides from the upper quartile facilities are more likely to *always* or *usually* explain things in a way that was easy to understand (97% upper and 86% 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 (94% upper and 85% lower).
- The proportion of respondents that *always* or *usually* did get all the information they wanted about payments or expenses is very similar for both groups and not statistically different (96% upper and 92% lower).
- Upper quartile facility respondents were far less likely to be unhappy with the care the resident received than lower quartile facility respondents (15% upper and 51% lower) and were much more satisfied with the way the nursing home staff handled concerns (69% upper and 46% lower).

¹⁴ The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.11.1.



Table 73: Significant differences for	Providing information	and encouraging
family involvement	-	

Composite variable attributes	All	Upper Quartile	Lower Quartile	Upper Less Lower
Nurses and aides give respondent				
Information about resident (Q27)	87%	96%	74%	220/
usually get information about the resident from	(N=6491)	(N=377)	(N=372)	2270
a nurse or an aide as soon as they wanted.				
Nurses and aides explain things in				
understandable way (Q28) Percentage of	0.29/	07%	969/	
respondents that reported the nurses and	93% (N-7426)	9770 (N-442)	00% (N=445)	11%
aides always or usually explain things in a way	(11-7420)	(11-442)	(11-443)	
that was easy to understand.				
Nurses and aides discourage respondent				
questions (Q29) Percentage of respondents	97%	99%	95%	40/
to discourage them asking questions about the	(N=7478)	(N=445)	(N=410)	4%
resident				
Respondent stops self from complaining				
(Q41) Percentage of respondents that stopped				Not
themselves from talking to any nursing home	31%	20%	31%	statistically
staff about their concerns because they	(N=2376)	(IN=61)	(N=202)	significant
thought they would take it out on the resident.				
Respondent involved in decisions about				
care (Q43) Percentage of respondents that	90%	94%	85%	
were always or usually involved as much as	(N=5781)	(N=351)	(N=342)	9%
they wanted to be in the decisions about the	, , , , , , , , , , , , , , , , , , ,	. ,	, , , , , , , , , , , , , , , , , , ,	
resident's care.				
navments or expenses (052) Percentage of				Net
respondents that always or usually did get all	92%	96%	92%	statistically
the information they wanted about payments or	(N=2091)	(N=142)	(N=132)	significant
expenses.				
Additional related items not included in the c	omposite			
Unhappy with care at some time in past 6				
months (Q38) Percentage of respondents that	33%	15%	51%	36%
were ever unhappy with the care the resident	(N=7447)	(N=439)	(N=414)	0070
received at the nursing home.				
Satisfied with the way concerns were	F 40/	000/	400/	
nancied (Q40) Percentage of respondents	54%	69%	46%	23%
that were always or usually satisfied with the	(IN=2114)	(IN=52)	(IN=100)	
way the nursing nome stan handled concerns.				



(4) Meeting Basic Needs

The mean scores (0-100) for the *Meeting basic needs*¹⁵ composite variable are 62.6 / 100 for lower quartile, and 90.7 / 100 for upper quartile facility respondents, a significant difference of 28.1 out of 100 between upper and lower quartiles.

- Upper quartile facility respondents believe that nurses and aides made the resident wait too long to a lesser extent than lower quartile respondents for:
 - Toileting (19% upper and 63% lower)
 - Drinking (9% upper and 36% lower)
 - Eating (8% upper and 30% 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 (8% upper and 32% lower).

Table 74: Significant differences for Meeting basic needs

Composite variable attributes	All	Upper Quartile	Lower Quartile	Upper Less Lower
Helped because waited too long for help with toileting (Q21) Percentage of respondents that believe staff didn't help or made the resident wait too long for toileting	48% (N=1734)	19% (N=74)	63% (N=120)	- 44%
Helped because waited too long for help with drinking (Q19) Percentage of respondents that believe staff didn't help or made the resident wait too long for drinking	24% (N=3064)	9% (N=163)	36% (N=157)	- 27%
Helped because 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=3203)	8% (N=154)	30% (N=162)	- 22%
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.	17% (N=7351)	8% (N=245)	32% (N=308)	- 24%

¹⁵ The method used to compute composite scores from the individual items contributing to the composite is described in Section 3.11.1.



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

Overall average care ratings were also calculated for the remaining 73 facilities with small samples (with 2 to 25 respondents) and normalised using the calculated mean and variance derived from the 99 facilities with reliable sample sizes. One facility was excluded as there was only 1 respondent. The 73 small sample facilities obtained better care ratings than the 99 facilities with reliable sample sizes and 47 of the 73 facilities belong to the upper (75%-100%) quartile of the reliable sample facilities.



Figure 54: Normalisation of Care Ratings of Remaining 73 Small Sample Facilities

As shown in **Table 75** below, the reliable sample facilities (> 25 respondents) obtained lower average global care ratings than small sample facilities (8.1 on a 0 to 10 scale compared to 8.7) and were operating 3 times more beds on average than small sample facilities (121 versus 39).

Table 75: Reliable Sam	ple Facilities ver	sus Small Sam	ple Size Facilities
------------------------	--------------------	---------------	---------------------

Facility Sample Size	Number of Facilities	Total Respon- dents	Avg # of Respon- dents by Facility	Average Care Rating	95%Confidence Interval Lengths in Terms of Number of Quartiles	Average Number of Beds
>25	99	6,400	64.6	8.1	13 in same quartile @ 95% certainty	118.9
<=25	73	1,047	14.3	8.7	20 in same quartile @ 95% certainty	32.0
All	172	7,447	43.3	8.4	33 in same quartile @ 95% certainty	82.7



Key findings on the 73 nursing homes with small sample sizes are as follows:

- The average care rating of all 73 facilities on a 0 to 10 scale is 8.7, an average significantly higher than the 8.1 score obtained by the 99 reliable sample facilities.
- The average number of beds operated by facilities with small samples is substantially less than for the 99 facilities with reliable samples (32 versus 119, nearly a 1 to 4 factor).
- Forty-seven out of 73 (or 64%) of the small sample facilities are in the upper (75%-100%) quartile; 20 of these are in the upper quartile with 95% certainty.

As shown in **Table 76**, 20 facilities of the upper quartile (labelled Upper1) have the following characteristics: their 95% confidence intervals do not extend into any other quartile; they are operating 30 beds on average; their average care rating score is 9.4 on a 0 to 10 care rating scale.

Quartile	Number of Facilities	Total Respon- dents	Avg# of Respon- dents by Facility	Average Care Rating	95%Confidence Interval Lengths in Terms of Number of Quartiles ("Q")	Average Number of Beds
Upper	47	677	14.4	9.1	20 facilities overlap no other quartile 11 facilities overlap with 1 other quartile 15 facilities overlap with 2 other quartiles 1 facility overlaps with 3 other quartiles	30
Middle (+)	16	255	15.96	8.4	9 facilities overlap with 2 other quartiles 7 facilities overlap with 3 other quartiles	37
Middle (-)	6	68	11.3	8.0	6 facilities overlap with 3 other quartiles	28
Lower	4	47	11.8	7.4	2 facilities overlap with 2 other quartiles 2 facilities overlap with 3 other quartiles	45
All	73	1,047	14.3	8.7	20 in same quartile @ 95% certainty	30
Upper1	20	293	16.3	9.4	20 in Upper with 95% certainty	30
Upper2	27	384	14.5	8.8	11x 1Quartiles / 15x 2Qs / 1x 3Qs	30

Table 76: Statistics on 73 Nursing Homes with Small Samples

Overall findings for the "Lower, Middle (-), Middle (+) Quartile" Facilities with Small Sample Sizes:

- > The overall average for this group is 8.1.
- The average global care ratings for facilities in these quartiles range from 7.2 to 8.5 on a 0 to 10 rating scale.

Overall findings for the Upper1 Quartile Facilities with Small Sample Sizes:

- > The overall average for this group is 9.4.
- The average global care ratings for facilities in this quartile range from 9.0 to 9.8 on a 0 to 10 rating scale.
- > Care ratings 95% confidence intervals remain in the upper quartile with 95% certainty.



Overall findings for the Upper2 Quartile Facilities with Small Sample Sizes:

The average global care ratings of facilities in this quartile range from 8.6 to 9.3 on a 0 to 10 rating scale, and the overall average is 8.8.

3.10. Facility-level Effects

3.10.1. Overall Care Ratings versus Facility Size

The results demonstrate that a facility operating fewer beds is more likely to obtain a better overall care rating from respondents. **Figure 55** shows the detailed distribution of number of beds by facility care rating quartile. Clearly, the average number of beds declines as we move towards the higher care rating quartiles. Facilities belonging to the upper (75%-100%) quartile were operating two times less number of beds (e.g. 82 versus 153 beds) on average than the facilities in the lower (0-25%) quartile. This is also confirmed by statistical tests comparing means from different quartiles.



Figure 55: Distribution of Number of Beds by Facility Care Ratings (Reliable Samples)



Figure 56 is similar to the previous figure but for nursing homes with small sample sizes (total 73 facilities). Most of the facilities fall in the upper (75%-100%) care rating quartile (47 out of 73 facilities) and the average number of beds per quartile varies from 28 (25%-50% quartile) to 45 (lower quartile).



Figure 56: Distribution of Number of Beds by Facility Care Ratings (Small Samples)

Both graphs suggest that smaller nursing homes are pre-disposed to more positive ratings from respondents than are large facilities. 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 small 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. (Note: there are several larger facilities in the top quartile with 95% certainty, hence it is possible for larger facilities to achieve this level of performance).



3.11. Global Overall Care Rating Forecasting Model

3.11.1. 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 <u>Appendix A</u>. 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
- Q19 Helped because staff didn't help or resident waited too long for help with drinking
- Q21 Helped because staff didn't help or resident waited too long for help with toileting

(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
- 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
- Q41 Respondent stops self from complaining
- Q43 Respondent involved in decisions about care
- Q51 Respondent given info about payments and expenses

(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
- Q37 Resident's clothes lost

The composite variables for each one of the 7,528 respondents 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 1/33/67/100 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.
- 2. 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).
- 3. 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.
- 4. Composite variables were calculated for each one of the 7,528 individual respondents.



3.11.2. Forecasting Models

A base forecasting model was developed by Agili-T to identify those factors with the strongest relationship with the overall rating of care. The base model was calculated from 7,528 respondents of 173 different facilities and explains **59.8%** of the variance in the overall care rating score.

Several other models were explored and can be found in <u>Appendix C</u>. Reported forecasting models are essentially the base model where the following confounding variables were included: respondent gender, facility ownership, 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 the analysis of significant differences in global care ratings for respondents grouped by confounding variable values ranges.

The most reliable forecasting model is summarized in **Table 77**. 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 59.8% to 69.6%.

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.

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
Composite 1 : Nursing home staffing, care of belongings and environment	0.297	.305	.276
Composite 2: Kindness and respect	0.238	.232	.208
Composite 3 : Providing information and encouraging family involvement	0.106	.104	.170
Composite 4: Meeting basic needs	0.067	.066	.065
Constant	30.385	31.456	28.219
R-Square (Adjusted)	0.598	.603	.696
(r tajaotoa)	(.598)	(.601)	(.681)

Table 77: Summary of Forecasting Models



As shown in **Table 78** 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 0.276. 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 0.276. 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 8.6.

It is important to note that when composites are not included in the regression model, the confounding effects of facility and respondent characteristics are much larger. Said another way – composites and the quality issues they address account for a large proportion of the variance in the overall rating and have much greater predictive power of the overall rating than do the confounders. This further confirms that the questions reflect quality of care as opposed to underlying respondent or facility characteristics.

	Care Rating Forecasting Model	Coefficients / constant		
1) Nur env	sing home staffing, care of belongings and ironment ("NH-C4" = 7 attributes)	0.276 (significant)		
2) Kin	dness and respect ("KR-C2" = 5 attributes)	0.209 (significant)		
3) Pro invo	viding information and encouraging family olvement ("INFOC3" = 6 attributes)	0.170 (significant)		
4) Mee	ting basic needs ("BN-C1" = 3 attributes)	0.065 (significant)		
5) Con =fer	founding variable - Respondent gender (1= male, 2 nale)	Not significant		
6) Con own	founding variable – Facility ownership (1= privately- ed; 2 = voluntary owner; 3 = publicly-owned)	Not significant		
7) Con 34;3	founding variable – Respondent's age group (18-24; 25- 35-44;45-54;55-64;65+)	Not significant		
8) Con 10,0	founding variable - Facility community size (1= over)00; 2= under 10,000; 3= under 2000)	Facilities servicing communities under 2,000 are more likely to rate care positively. (Significant) Note: There is covariance with facility size.		
9) Con 100	founding variable - Number of beds in facility (1= over beds; 2= < 100 beds; 3= < 25 beds)	Not significant		
10) Con per i	founding variable – (Q05) Expected resident manency in the nursing home (1= yes; 2= no)	Not significant		
11) Con (1=	founding variable – (Q06) Resident in a shared room yes; 2= no)	Not significant		
12) Con pers	founding variable – Respondent is most experienced son with resident's care (1= yes; 2= no; 3= do not know)	Not significant		
13) Con dec	founding variable – (Q08) Resident capable of making isions (1= Never; 2= Sometimes; 3=Usually; 4=Always)	Not significant		
14) Con time Mor	founding variable – (Q09) Frequency of visit $(1=0-1)$ is; $2=2-5$ times; $3=6-10$ times; $4=11-20$ times; $5=$ e than 20 times)	Not significant		
15) Con	stant	28.775		
Strengt variabilit the inde	Strength of the linear relationship (R-Square = 69.6% of variability in the nursing home overall care rating is explained by the independent composite and confounding variables).696			
 Only respondents from Upper + Lower quartile facilities with 95% certainty are included (N= 859) Notes This model explains 70% of overall care ratings by those respondents. Care ratings were converted from a 0-10 scale to a 0-100% scale. Composite variables are based on a 0-100% scale. 				

Table 78: Global Rating of Care Forecasting Model



3.11.3. Propensity to Recommend a Nursing Home

92% of respondents would either "definitely" or "probably" recommend the nursing home

- Willingness to recommend is another global issue included in most CAHPS surveys. Respondents were asked how likely they would be to recommend the nursing home facility to others should they need a nursing home.
- ➢ As shown in Figure 57, 92% of respondents would definitely (54%) or probably (38%) recommend the nursing home where their resident is living (or was living).

Figure 57: Propensity to Recommend a Nursing Home



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

ALBERTA(N=7418)

The willingness to recommend is similar across the regional health authorities when answers are grouped as either "not recommend" ("probably no and definitely no) or "recommend" (probably yes and definitely yes).



Figure 58 below shows the distribution of the willingness to recommend by response choice options.

Figure 58: Respondent Willingness to Recommend the Nursing Home







3.12. Comments Analysis

3.12.1. Number of Comments by Dimension

The questionnaire included one open-ended question (Q65): "Do you have any suggestions how care and services at this nursing home could be improved? If so, please explain." Respondent comments were classified in 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 (see **Table 81** in Appendix B for comment coding by composite variable). Each comment was further classified as being either positive ([©]), negative ([©]) or a suggestion (q). Please note that some comments, due to their nature, were not classifiable in any of the above-mentioned dimensions; however, they were labelled as either positive, negative or suggestion.

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. Negative comments were labelled as such because 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, suggestions represent specific recommendations by respondents as a means to improve the provision of care and services.

Overall, 59% of respondents provided qualitative feedback representing a total of 4,721 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, 7,943 statements were identified representing an average of .94 thematic statements per respondent. Each dimension is defined by a list of attributes that can be found in **Table 79** below.

Dimension (attributes)	© % Positive Comments	NegativeComments	Q % Suggestions	Total
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.	1.6%	57.7%	0.8%	60.1%
Kindness and respect: 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	4.3%	6.7%	0.3%	11.3%
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	0.8%	8.0%	0.3%	9.0%
Meeting basic needs: Resident helped because staff didn't help or resident waited too long for help with eating / drinking / or toileting	0.7%	18.4%	0.4%	19.5%
TOTAL	7.4%	90.9%	1.7%	100%

Table 79: Number of Comments by Dimension



3.12.2. Number of Comments by Type of Respondent

The proportion of positive, negative and suggestive comments was computed for each respondent. When a comment is dominated by positive comments, the respondent is classified as complimenting while in the opposite case, it is classified as complaining. **Table 80** provides a summary of comments by type of respondent.

Respondents Groupings	Compliments	Complaints	Other
Respondents with primarily positive			
comments	196		
Respondents with only positive			
Comment(S)			
comment(s) and half suggestion(s)	7		
 Respondents with more than half of all comment(s) that are positive [>50% positive] 	20		
Respondents with primarily negative			
comments		3452	
 Respondents with only negative comment(s) 		0.02	
Respondents with half negative			
comment(s) and half suggestion(s)		171	
comment(s) that are negative) [>50%		171	
negative			
Respondents with exactly half negative			
comment(s) and half positive			
comment(s) (it was assumed that		133	
negative comments have more weight			
Respondents with exactly a third			
negative comment(s), a third positive		4	
comment(s) and a third suggestion(s)			
Other respondents			30
Respondents with only suggestion(s)			50
Other respondents			708
Total Respondents with comments (N=4721)	223	3760	738
% Based on only respondents with comment(s) (N=4721)	5%	80%	16%
% Based on of all survey respondents (N=7943)	3%	47%	9%

 Table 80: Number of Comments by Type of Respondent

Appendix A

Questionnaire and Survey Materials Used 1st Stage - NH-CAHPS[®] Questionnaire & Cover Letter 2nd - Stage Reminder Postcard 3rd - Stage Reminder Letter



Partnering to achieve world-class excellence in all dimensions of quality and safety across Alberta's health system.

<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>. 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 has made long term care a priority focus in 2007.

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 Agili-T Health Solutions Inc. Agili-T 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 Agili-T (toll free) at **1-877-904-2542**.

Thank you in advance for your participation!

Sincerely,

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</u> <u>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 postagepaid 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: ABC123

If you have any questions regarding this survey, please contact Agili-T Health Solutions (toll free) at **1-877-904-2542**.

Thank you.

This CAHPS[®] Nursing Home Questionnaire is used with permission of the Agency for Healthcare Research and Quality (AHRQ) and may not be used by any other individual or organization for any purpose without written permission from AHRQ.

Comment: This Canadian survey instrument differs from the American CAHPS Nursing Home Survey Family Instrument in the following ways: 1) demographic items have been modified for use in Canada; 2) several additional questions have been added; 3) minor modifications were made to the final U.S. instrument released in 2008.



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
 - $_{9}\Box$ 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?

- $_{1}\square$ Less than 1 month
- $_2\square$ 1 month to almost 3 months
- $_{3}\square$ 3 months to almost 6 months
- $_4\square$ 6 months to almost 12 months
- $_{5}\Box$ 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
 - ₃Don'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

ABC123 2
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 51 on Page 7
 - $_2\square$ 2 5 times in the last 6 months
 - $_{3}\square$ 6 10 times in the last 6 months
 - $_{4}\square$ 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
 - $_2\square$ No \rightarrow 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 <u>eating</u>?
 - $_1\square$ Yes
 - $_{2}\square$ No \rightarrow 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 <u>drinking</u>?
 - $_1\square$ Yes
 - 2□ No → If No, Go to Question 20 on page 4

- 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 toileting?

 $_2\square$ No \rightarrow 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

 $_{2}\square$ No \rightarrow 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
 - $_{2}\square$ No \rightarrow If No, Go to Question 28
- 27. In the last 6 months, how often did you get this information as soon as you wanted?
 - $_1\square$ Never
 - $_2\square$ 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?
 - $_1\square$ Never
 - $_2\square$ Sometimes
 - ₃ Usually
 - ₄□ Always

₁□ Yes

- 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?
 - $_1\square$ Never
 - $_2\square$ Once
 - $_{3}\square$ 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
 - $_2\square$ No \rightarrow 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
 - $_2\square$ Once or twice
 - $_{3}\square$ 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?
 - $_1\square$ Yes
 - 2□ No → If No, Go to Question 42 on page 6

- 39. In the last 6 months, did you talk to any nursing home staff about this concern?
 - ₁□ Yes
 - ₂ \square No \rightarrow 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
 - $_{2}\square$ No \rightarrow 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 \rightarrow 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

YOU AND YOUR ROLE

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. In the last 6 months, did you ask the nursing home for information about payments or expenses?
 - ₁□ Yes
 - $_2\square$ No \rightarrow If No, Go to Question 53
- 52. 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

- 53. In the last 6 months, did you help your family member with managing finances, such as paying bills or filling out insurance claims?
 - ₁□ Yes
 - ₂ No
- 54. 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?

- ₁□ Yes
- ₂ No
- ₃ Don't know
- 55. 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?

1□ Yes → If Yes, Go to Question 57 on page 8

2□ No

- ₃Don't know
- 56. Is someone else your family member's legally appointed guardian or agent?
 - ₁□ Yes
 - ₂ No
 - ₃Don't know

57. 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
- $_7\Box$ 75 or older

58. Are you male or female?

- 1□ Male
- ₂ Female

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

- $_{1}\square$ Grade school or some high school
- $_2\square$ 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.)

60. Would you say you are...

Please check all that apply.

- 1 White / Caucasian
- ₂ \Box Other \rightarrow

(Please print.)

- 61. What language do you mainly speak at home?
 - 1 English

₂ French

 $_{3}\Box$ Other \rightarrow

(Please print.)

- 62. Did someone help you complete this survey?
 - ₁□ Yes
 - $_2\square$ No \rightarrow Go to Question 64

- 63. How did that person help you? Check all that apply.
 - $_{1}\square$ Read the questions to me
 - $_2\square$ Wrote down the answers I gave
 - $_{3}\Box$ Answered the questions for me
 - 4□ Translated the questions into my language
- 64. 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
 - ₃Don't Know
- 65. 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.

2nd Stage Reminder Postcard

PO Box 2502, Station M, Calgary, AB T2P 0G3
[salutation] [first name] [last name] [address] [city], [prov] [postal code]
Last week 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 Agili-T Health Solutions, 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: [access code] .
Sincerely,
John Cowell, MD <i>Chief Executive Officer</i> Health Quality Council of Alberta



Partnering to achieve world-class excellence in all dimensions of quality and safety across Alberta's health system.

<DATE>

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

Dear <Mr./Ms. Family Name>,

We recently sent you a survey regarding the quality of care and services that <Name of resident> receives at <Name of care centre>.

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, (Agili-T Health Solutions 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 Agili-T (toll free) at **1-877-904-2542**.

Sincerely,

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

Appendix B Comment Coding by Composite Variable

1	Nursing home staffing, care of belongings and environment					
	Staffing levels - Number of staff members per shift - Work load - Staff wages - Turnover rate - Consistency of staff - Staff need to file reports and paper work - Separate staff for cleaning - nurses should not be cleaning rooms					
	Staff availability - Responding to a call (button) - Can find a nurse or aide when needed - Staff too busy talking to each other - Staff sleeping - Staff is lazy					
	Laundry service - Care of resident's clothing - lost - damaged - Towels, linen, gowns					
	Cleanliness of resident's room - Room looks and smells clean - Bathroom in the room - not in common areas					
	Resident's Hygiene - Resident looks and smells clean - Bathing frequency - Grooming - Dental care - Pedicure - Cleanliness of personal equipment - wheelchair cushion					
	Resident's belongings - Resident's medical or personal belongings were damaged or lost - Not including laundry					
	Temperature and air quality - Room or common areas are either too hot or too cold - Windows opened for fresh air - Lack of ventilation					
	Cleanliness and condition of the facility - Common areas look and smell clean - General condition of the facility and grounds - Renovations - painting - décor - Equipment - lifts, elevators, wheelchairs - Building security - locked doors					
	Noise levels - Around resident room - Hallways - Common areas - In room (room mates) - Staff yelling					

Table 81: Comment Coding by Composite Variable

1	Nursing home staffing, care of belongings and environment (cont.)
	Private area for resident and family interaction - Places for respondent to talk to the resident in private - Private family lounge
	Quality of staff - Competency - Effort - Training level - Experience
	Condition of resident's room - Size of resident's room and bathroom - Paint, renovate, decorate
	Transportation of patients - Medi-van - for doctors visits, excursions
	Smoking - No smoking lounge - Smoking outside upsets visitors
2	Kindness and Respect
	Concern for resident's well being - Staff cares about resident - Staff really cared about the resident
	Courtesy and respect - Staff treat the resident with courtesy and respect - Staff treat the resident rudely - Staff are mean - Residents are ignored
	Handling of difficult resident - Nurses and aides handled difficult residents in a way that was appropriate
	Kindness - Nurses and aides treated the resident with kindness - Compassion - Patience - Staff rushes resident's care
	 Privacy Nurses and aides protect resident's privacy while the resident was dressing, showering, bathing, or exposed in a public area Privacy in the room when sharing the room Sharing of rooms - private rooms Curtains Same sex workers
	Respect between residents - How residents treat each other - Residents abusive towards each other - Residents abusive toward staff
	Language - Staff speaks English - Staff speaks foreign language between themselves - upsets residents

3	Providing information and encouraging family involvement							
	Flow of information between the facility and the family - Getting information about the resident from a nurse or an aide as soon as they wanted - Nurses and aides discourage family member from asking questions about the resident - Yearly or monthly reports and meetings about the resident - Family expressed how the resident should be cared for and information was ignored - Information about change in care, change in health condition, accidents, injuries, etc.							
	Nurses and aides explain things in understandable way - Nurses and aides explain things in a way that was easy to understand							
	Fear of repercussion - Respondents stopped themselves from talking to any nursing home staff about their concerns because they thought they would take it out on the resident							
	Involved in decisions about care - Respondents are involved as much as they wanted to be in the decisions about the resident's care - Respondents want to be asked to get involved							
	Information about payments or expenses - Respondents get all the information they wanted about payments or expenses							
	How concerns are handled - The way the nursing home staff handles concerns - Patient advocacy - impartial third party to listen to complaints by the residents - Nurses and aides discourage respondent questions - Accountability of issues							
	Communication between staff - Different staff members relay different information - Information about the resident's care is not transmitted between staff and administration - shift changes							
	Staff's availability to answer questions - Staff not available to speak to - Administrative staff not available on weekends							
	Staff identification - Staff wear name tags - Staff position clearly identified - job description and responsibilities							
4	Meeting basic needs							
	Help with toileting - Nurses and aides made the resident wait too long for toileting - Toileting - diapers frequency							
	 Help with drinking and eating Nurses and aides made the resident wait too long for drinking Nurses and aides made the resident wait too long for eating Offering water - residents suffer from dehydration 							
	Family member help - Nursing home staff expects family members to help with the care of residents when they visit - Family member helps without being asked to ensure proper care							
	Appropriate dress - Resident is dressed appropriately relative to seasons, occasions, and time of day - Resident is dressed with clean clothes - Resident not dressed at all							

4	Meeting basic needs (cont.)
	Medical needs - Doctor's care, availability, communication, competence - Paramedical services - physiotherapy - Psychotherapy - Dentist - Podiatrist - Medication control
	Food - Quality and variety - Nutritional value - Dietician - Food preparation - taste, appearance, temperature
	Family hire outside help - Extra Care - Care needs not met by home staff
	Physical handling of residents - Moving resident from bed to chair - Helping with walking - Rough handing - bruises
	No Category
	Administration - Cost effectiveness - Value - Charge corresponding to services rendered - Management and supervision of staff - Visiting expenses – parking - Separate ward for dementia patients - Budgetary control - government spending - Management does not communicate or respect staff - Chain of command unclear
	Staff financial interaction with residents - Staff selling products to residents - Asking residents for personal effects - Staff accepting money or gifts for care - Staff managing resident's allowance
	Distance from residents - Residents are in homes that are too far from family
	Activities - Mental and physical stimulation - Recreation - Stimulation through interaction with staff and other residents - Activities - indoor and outdoor - Entertainment - Roommate compatibility
	Resident supervision - Left alone and unsupervised too long - Resident's security - wander off - Frequency of check on residents

No Category (cont.)
General care - The home and staff does a good job - Daily care plans - Overall quality of care
Personal care - One on one care - Individual care and attention - Pampering - Personal touch - Making sure resident could reach call button - Cleaning eye wear
Resident's involvement in care - Information about resident's condition and care provided to the residents - Allowing capable residents to make decision about themselves
Language of resident other than English - Resident expects to be spoken to in their language

Appendix C Regression Outputs for Forecasting Models



Forecasting Models

Several forecasting models were developed and the results of four of those models are presented in this section.

(1) Model No.1 – Four Composite Variables Base Model

REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Q046_A /METHOD=ENTER BN_C1 KR_C2 INFO_C3 NH_C4 /RESIDUALS DURBIN.

- The model is based on 7,528 respondents for which at least one composite variable was calculated.
- "Missing pairwise" SPSS option was used
- The adjusted R-square of this base model No.1 is 59.8% and the constant is 30.385

The F-Test in the ANOVA table below shows that the regression equation is significant.

Table 82: ANOVA for Model No.1

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	799660.111	4	199915.028	1758.938	.000ª
Residual	537027.876	4725	113.657		
Total	1336687.987	4729			

Table 83: Coefficients for Model No.1

Model (1)	В	Std. Error	Beta (Standardized)	t	Sig.
(Constant)	30.385	.071		56.784	.000
Meeting basic needs	.067	.001	.112	10.232	.000
Kindness and respect	.238	.001	.345	26.851	.000
Providing information and encouraging family involvement	.106	.001	.115	9.973	.000
Nursing home staffing, care of belongings and environment	.297	.001	.363	29.841	.000



The B coefficients are all positive; therefore, an increase in each of the composites scores will lead to an increase in the overall care rating.

Composite	Regression Coefficient				
Nursing home staffing, care of belongings and environment	0.297				
Kindness and respect	0.238				
Providing information and encouraging family involvement	0.106				
Meeting basic needs	0.067				
Constant	30.385				
Adjusted R-square = 0.598 (60% of the variation in the overall care rating)					

Table 84: Composite Effect on Overall Rating of Care for base Model No.1

As shown in **Table 84**, the *Nursing home staffing, care of belonging and environment* is the most important to the overall rating of care with a coefficient of 0.297. 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 (0.297). For example, if the *Nursing home staffing, care of belonging and environment* composite improves from 50 to 70 out of 100, an initial overall care rating of 80% is predicted to increase to approximately 86%.

In conclusion, this regression model offers strong evidence that the respondent's scores for the four composites is a very good predictor of the overall global care rating. The next step was the exploration of other models to enhance the basic model.



(2) Model No.2 – Composite Variables, Confounding Variables

REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Q046_A /METHOD=ENTER BN_C1 KR_C2 INFO_C3 NH_C4 /METHOD=ENTER d_gender1 /METHOD=ENTER d_gen

- This model is the base model No.1 including the following confounding variables: respondent gender, resident facility ownership (RHA, private, voluntary), respondent age group, facility location community size and number of beds in facility.
- The selection of confounding variables was based on the analysis of significant differences in global care ratings for respondents grouped by confounding variable values ranges.
- The R-square increased from 59.8% to only 60.1%; the confounding variables enhanced slightly the predictability of the forecasting model. Therefore, other models had to be explored.
- As expected, respondent age has a relationship with results, with those aged 18-24 and 65+ more likely to rate care positively.
- Gender was not found to be significant.

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Comments
 Composites variables + capacity of making decisions + frequency of visits 	.598	.598	10.661	Not Significant
2 +Gender (male, female)	.599	.598	10.658	Not Significant
 3 +Ownership (public, voluntary, private) 	.600	.599	10.644	Not Significant
4 +Age (18-24; 25-34;35-44; 45-54;55-64;65+)	.601	.600	10.629	Significant
5 +Community Size (Over 100,000; under 100,000; under 10,000; under 2000)	.602	.601	10.618	Not Significant
6 + Number of Beds (over 300 beds; < 300 beds; < 100 beds; < 25 beds)	.603	.601	10.620	Not Significant

Table 85: R-square Improvements for Regression Model No.2



(3) Model No.3 – Composite Variables, More Confounding Variables

REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING PAIRWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT Q046_A /METHOD=ENTER BN_C1 KR_C2 INFO_C3 NH_C4 q8_rec Q009 /METHOD=ENTER d_gender1 /METHOD=ENTER d_ownership1 d_ownership2 /METHOD=ENTER d_age1 d_age2 d_age3 d_age4 d_age5 d_age6 /METHOD=ENTER d_size1 d_size2 d_size3 /METHOD=ENTER d_bed1 d_bed2 d_bed3 /METHOD=ENTER d_perm1 d_perm2 /METHOD=ENTER d share1 /METHOD=ENTER d_exp1 d_exp2.

- This model is model No.2 with the following additional confounding variables: resident is expected to be permanent in the nursing home or not, resident in shared room or not, respondent is most experienced person with resident or not.
- The R-square did not increase.
- Respondents for larger facilities in terms of number of beds are also predicted to rate care more negatively.
- Resident ability to make daily decisions (Q8), and resident expected to remain in facility (Q5) were not significant, although these variables were suggested to have potential for case mix adjustment in pilot study work.

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Comments
 Composites variables + capacity of making decisions + frequency of visits 	.601	.600	10.633	Significant Significant Not Significant
2 +Gender (male, female)	.601	.600	10.631	Not Significant
3 +Ownership (public, voluntary, private)	.601	.600	10.632	Not Significant
4 +Age (18-24; 25-34;35-44; 45-54;55-64;65+)	.602	.601	10.623	Significant
5 +Community Size (Over 100,000; under 100,000; under 10,000; under 2000)	.602	.601	10.626	Not Significant
6 + Number of Beds (over 300 beds; < 300 beds; < 100 beds; < 25 beds)	.603	.601	10.621	Significant
 7 + Residents that are expected to be permanent at the nursing home or not 	.603	.601	10.618	Significant
8 + Residents in shared room or not	.603	.601	10.619	Not Significant
9 + Most experienced respondent or not	.603	.601	10.620	Not Significant

Table 86: R-square Improvements for Regression Model No.3



(4) Model No.4 – Composite Variables, UPPER + LOWER Quartile Facilities; and potential confounding variables

- This model is the model No.3 but includes <u>only</u> the 859 respondents whose resident is living in any of the 4 facilities belonging to the lower quartile group or in one of the 9 facilities belonging to the upper quartile group with 95% certainty (e.g., focus on respondents from facilities that are at both extremes in terms of overall care rating performance).
- Including confounding variables increases the R-square value from 0.679 to 0.696, and allows estimation of the effects of confounding variables.
- Respondents from facilities located in communities under 2,000 inhabitants are predicted to rate care more positively.

Table 87: R-square Improvements for Regression Model No.4

Model	R	Adjusted R	Std. Error of	Comments
Widden	Square	Square	the Estimate	Comments
 Composites variables + capacity of making decisions + frequency of visits 	.679	.675	10.474	Significant Not Significant Not Significant
2 +Gender (male, female)	.679	.674	10.485	Not Significant
3 + Age (18-24; 25-34;35-44; 45-54;55-64;65+)	.685	.677	10.446	Not Significant
4 + Community Size (Over 100,000; under 10,000; under 2000)	.693	.683	10.344	Significant
5 + Number of Beds (over 300 beds; < 300 beds; < 100 beds; < 25 beds)	.693	.682	10.360	Not Significant
6 + Ownership (public, voluntary, private)	.694	.681	10.369	Not Significant
 7 + Residents that are expected to be permanent at the nursing home or not 	.695	.681	10.371	Not Significant
8 + Residents in shared room or not	.695	.681	10.377	Not Significant
9 + Most experienced respondent or not	.696	.681	10.380	Not Significant

(5) Four Composite Variables, Propensity to Recommend

- This model is the base model No.1 with four composite variables but the outcome variable is the propensity to recommend the nursing home (question 47).
- The R-square value is only 42.7% despite the fact that the coefficients of the composite variables were comparable to the ones obtained in the previous four models.
- This model was not retained.

Appendix D Working Group Credits



Survey Credits

Numerous individuals from many organizations contributed to the design, testing and completion of this survey initiative. This includes people from individual facilities, health regions and government that helped compile resident and family contact lists, facilitated on-site interviews, and supported the initiative throughout the entire process. The HQCA would like to thank these many individuals.

Working Group and Contributors

The working group was established to evaluate existing survey instruments, select the most appropriate instrument, and oversee the pilot study completed prior to the full survey. The following individuals made significant contributions or provided advice at various points in the process. Most were not involved at every stage and thus may not own all decisions and directions taken by the HQCA to complete this initiative.

Carol Adair – University of Calgary Carol Anderson – Capital Health Barb Cameron – Palliser Health Region Beth Gorchynski – Calgary Health Region Cheryl Knight – Chinook Health Olesia Luciw-Andryjowycz – Alberta Health and Wellness Lynne Mansell – Capital Health Colleen Maxwell - University of Calgary Raynell McDonough - Alzheimer's Society of Calgary Lisa Ramotar - Capital Health Barb Rocchio – Alberta Health and Wellness Susan Slaughter - University of Calgary Laurel Strain - University of Alberta Brenda Zilke - David Thompson Health Region Tim Cooke - HQCA Charlene McBrien-Morrison – HQCA Judith Sangl - AHRQ Edward Seksenski - CMS

Facility Site Liaisons

Across Alberta, 173 facilities participated in this survey. Each had a site liaison that supported the resident interviewers, and helped compile the contact information for the family survey. These tasks were added to an already busy set of clinical and administrative responsibilities and we would like to thank them for their support.

HQCA Resident Interview Team

Sarah Sapergia (Project Manager) Jodi Branton Heath McLeod Keri-Lynn Strain Jill Smith Kaitlin Long Stacey Schriver

AHRQ Pilot Study and Collaboration

Judith Sangl - AHRQ Chun-Ju Hsiao - AHRQ Julie Brown - RAND Carol Cosenza - UMB Edward Seksenski - CMS Elizabeth Frentzel - AIR Steven Garfinkel - AIR Roger Levine - AIR Karen Gold - AIR

AHRQ – Agency for Healthcare Research and Quality AIR – American Institutes for Research HQCA – Health Quality Council of Alberta UMB – University of Massachusetts Boston CMS – Centers for Medicare and Medicaid Services Yolan Parrott Aimee Galick Brenna Sloan Tat Wong Kaylin Betteridge Carol Stokell Jeffrey Doherty

Analysis and Report Writing

Richard Pridham - Agili-T Health Solutions Inc. Marc Shaigetz - Agili-T Health Solutions Inc. Steve Perrone - Agili-T Health Solutions Inc. Maxime Paquet - Agili-T Health Solutions Inc. Tim Cooke – HQCA Charlene McBrien-Morrison - HQCA Rick Schorn - HQCA Dianne Schaeffer - HQCA

RAND – Research and Development Corporation



210, 811 – 14 Street NW Calgary, Alberta, Canada T2N 2A4 T: 403.297.8162 F: 403.297.8258 E: info@hqca.ca **www.hqca.ca**