Data Documentation
The Prevalence of Culture Change Practice in US Nursing Homes:
Findings from a 2016/17 Nationwide Survey

Contents

Data Sources

We merged data from several different data-sources (listed below) to complete our analyses. We have created a de-identified version of our final dataset, which is available for public download. All analyses described in this document were conducted using Stata 14.

- **2016/2017 Nursing Home Culture change Survey (NHCCS):**
  Raw de-identified data from the 2016/17 NHCCS is provided on the website for download. This data has been linked with variables from several different data sources as described below.

- **2009/2010 Culture Change Survey**
  We used one variable from the 2009/10 culture change survey in our analysis. This variable is included in the dataset available for download on the website.

- **2015 Certification and Survey Provider Enhanced Reporting (CASPER) data**.
  We derived several variables from the CASPER data. For each CASPER derived variable we either included the variable in the downloadable dataset or provide instructions for how to create the variable using the data provided. The state where each nursing home is located has been excluded to maintain confidentiality.

- **2015 Long-Term Care Facts on Care in the United States (LTCfocUS) dataset.**
  The LTCfocUS data used in the study analyses was derived from claims, enrollment, and nursing home assessment data from the Centers for Medicare and Medicaid Services (CMS). Public use versions of these variables (which suppress information that do not meet cell size restrictions) can be accessed at https://ltcfocus.org/. The data set available for download links the 2016/17 NHCCS to this public use version of the data.

  Using LTCFocUS methodology, we created our own versions of these variables in order to retain small cells by purchasing the underlying CMS data and constructing our own variables under a CMS Data Use Agreement. Thus, due to cell size restrictions, the linked NHCCS –LTCfocUS data available for public download is not identical to the final data set used in the study analyses.

  If readers are interested, they can visit the Research Data Assistance Center (ResDAC) at www.resdac.org for information on how they can purchase their own CMS data.

- **2011 Policy Survey, conducted by Brown University.**
  We obtained 2009 Nursing Home Medicaid reimbursement rates from this survey. These rates have been included in our downloadable data.

- **Medicaid and CHIP Payment and Access Commission Report.**
  We obtained data about state level NH pay for performance programs and whether these programs included culture change-related measures using a publicly available report compiled by the Medicaid and CHIP Payment and Access Commission available at: https://www.macpac.gov/publication/nursing-facilty-payment-policies. These data were confirmed and modified as needed via website reviews and in some cases correspondence with state culture change leaders. Data regarding state pay for performance has been included in our downloadable data.

Calculation of Culture Change Index Scores for 2016/17 NHCCS

Instructions for: Physical Environment Index:

1) Recode all survey items included in the physical environment index, as described below
2) Determine number of missing items for questions 14a – 14k
3) If missing 4 or more items for 14a-14k , or if missing question 3 , or missing question 4
   - Exclude, do not calculate a score for this index

   If missing 4 or fewer items for 14a-14k, AND not missing question 3 AND not missing question 4
   - Calculate mean score for items 14a-14k (for completed items)
   - Replace score of missing responses for 14a- 14k items as the mean of the completed items calculated above
4) Sum scores of all index items to determine total physical environment score.

Instructions for: Resident-Centered Care, Staff Empowerment, Staff Leadership, and Family and Community Engagement Indices:

1) Recode all survey items included in index of interest, as described below
2) Determine number of missing items
3) If missing >40% of items
   - Exclude, do not calculate a score for this index for this NH

   If missing <= 40% of items
   - Calculate mean score of complete items
   - Replace score of missing items as the mean of the completed items
4) Sum scores of all index items to determine total index score.

Re-Coding of Index Items

Physical Environment

Survey Questions (variable names): q14_a q14_b q14_c q14_d q14_e q14_f q14_g q14_h, q14_i, q14_j, q14_k

Response	Yes	No	We are Working on This	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	98	99	77
Recode As	2	1	1	missing	missing	missing

Survey Questions (variable names): q3

Response	0%	1-4%	5-25%	26-75%	76-100%	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	4	5	98	99	77
Recode As	1	1	1	2	2	missing	missing	missing

Survey Questions (variable names): q4

Response	Yes	No	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	98	99	77
Recode As	1	2	missing	missing	missing

Resident Care Practice
Survey Questions (variable names):
- q23_a q23_b q23_c q23_d q23_e q23_f q23_g q23_h q23_i
- Note: Question 23_ j is not included in the index score

Response	Yes	No	We are Working on This	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	98	99	77
Recode As	2	1	1	missing	missing	missing

Staff Empowerment
Survey Questions (variable names):
- q15_a, q15_b, q15_c, q15_e, q15_f
- q17_a, q17_b, q17_c, q17_d, q17_f, q17_g, q17_h, q17_i
- Note: Questions 15_d and 17_e are not included in the index score

Response	Never	Sometimes	Often	Always	Not Applicable	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	4	5	98	99	77
Recode As	1	1	2	3	Missing	missing	missing	missing

Staff Leadership
Survey Questions (variable names):
- q18_a, q18_b, q18_c, q18_d, q18_e
- q27_b q27_d q27_e
- Note: q27_a is reverse scored (see below)

Response	Rarely	Sometimes	Often	Almost Always	Not Applicable	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	4	5	98	99	77
Recode As	1	1	2	3	Missing	missing	missing	missing

Survey Questions (variable names): q27_a

Response	Rarely	Sometimes	Often	Almost Always	Not Applicable	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	4	5	98	99	77
Recode As	3	2	1	1	Missing	missing	missing	missing

Family and Community Engagement
Survey Questions (variable names):
- q24_a, q24_c, q24_d, q24_e, q24_f
- q25_a, q25_b, q25_c,25_d
- Note: Question q24_b is not included in the index score

Response	Rarely	Sometimes	Often	Almost Always	Not Applicable	Don't Know/ Not sure	Missing	Confusing Answer
Code in Raw Data	1	2	3	4	5	98	99	77
Recode As	1	1	2	3	Missing	missing	missing	missing

Analysis Instructions by Figure / Table

Figure 1

Sample Description: 1,155 Nursing homes (NH) with a response to **BOTH** the survey question about overall culture change in the facility for the 2009/2010 survey (variable name: OverallCC_200910) and the identical question in the 2016/2017 survey (variable name: q21).

Exclusions: Any NHs that were missing a response to the overall culture change question at either or both time points.

Variable Coding: Variables at both time points have been recoded as follows (details about raw survey data are included in the attached data dictionary):

- **Traditional NHs:** NHs that chose either the response - **No discussion** around culture change, or the response Culture change is **under discussion**, but we haven't changed the way we take care of residents
- **Strivers:** NHs that chose the response - Culture change has **partially changed** the way we care for residents in some or all areas of the organization
- **Complete Adopters (Part of NH):** NHs that chose the response - Culture change has **completely changed** the way we take care of residents in **some areas** of the organization
- **Complete Adopter (Total NH):** NHs that chose the response - Culture change has **completely changed** the way we take care of residents **in all areas** of the organization.

Note: Several NHs answered "other" and provided text responses to the overall culture change question. The study team reviewed the text responses and categorized NHs into their overall culture change categories as indicated in the table below.

Re-coding of "Other" Responses to Overall Culture Change Question

Traditional Nursing Homes
CORPORATION NOT WILLING TO DO WHAT IS NECESSARY TO ACCOMPLISH THIS
Haven't heard of any discussions since I arrived a year ago.
CULTURE CHANGE IS NOT TERMINOLOGY THAT IS USED. PHILOSOPHY OF THE RESIDENT/STAFF TEAMS CENTER AROUND PERSONAL RESPONSIBILITY AND PURPOSEFUL LIVING.
FACILITY UNDER CONSTANT CULTURAL/IMPROVED CHANGES
SMALL RURAL FACILITY WE HAVEHAD DISCUSSION OVER CULTURE CHANGE. AVG RESIDENTS ARE NOT OF DIFFERENT CULTURES.
CULTURE CHANGE IS AN ON-GOING PROCESS
WE JUST ACQUIRED THIS CUMMUNITY IN FEBRUARY &MANY THINGS WERE A PRIORITY BEFORE CULTURE CHANGE. IT WILL COME IN THE NEAR FUTURE. THOUGH. CHANGING WHO WE TAKE CARE OF....MOVING AWAY FROM BEHAVIORAL CARE.
facility has only been open since 2014
we care for residents using the ministries values
CULTURE CHANGE IS A CONTINOUS PROCESS, THE CHANGES HAVE TO BE MONITORED AS NEW EMPLOYEES ENTER THE ORGANIZATION. IF THEY CAME FROM ANOTHER LTC FACILITY they need to be oriented to our facility. We have always had a customer service attitude

Strivers
We continue to provide person center5ed care and culture change
We do not use the word culture change but we discuss changes related to person centered care often and work to implement
We are looking into scheduling changes that involve self-scheduling. We make changes in baby steps.
I HAVE ONLY BEEN EMPLOYED HERE FOR 9 MONTHS & IMPLEMENTING CULTURE CHANGE.
We've been using a resident centered approach since before it was defined. There are simply times when it isn't practical.

Complete Adopters (Total NH)
WE ARE IN PROCESS OF USING THE HOUSEHOLD MODEL OF CARE. WE HAVE USED PIONEERING PRACTICES SINCE 2003.

Missing
Resident centered care has always been our focus.
Already resident centered.
In this facility, the prescriptions of culture change were adopted in the 60's. I'm new
There was never really a "pre-culture change" reality at our facility. Not sure how to answer this question in one line.

Analysis: Stata *tabulate* command, create pie charts using Microsoft Excel.

Figure 2

Eligible Sample: 1,584 NHs that completed the 2016/2017 NHCCS

Exclusions:

- 43 NHs that did not answer the survey question about overall culture change (q21)
- For each index we excluded NHs that were missing a score for that index
    - Physical Environment: 104 NHs excluded
    - Residence Centered Care: 76 NHs excluded
    - Staff Empowerment: 137 NHs excluded
    - Staff Leadership: 148 NHs excluded
    - Family and Community Engagement: 83 NHs excluded

Variable Coding: See description of overall culture change variable in Figure 1

Analysis: Calculate mean index scores stratified by overall culture change categories (Stata *summarize by* command), create bar chart using Microsoft Excel.

Table 2

Eligible Sample: 1,584 NHs that completed the 2016/2017 NHCCS

Exclusions:

- 71 NHs that completed the short survey
- 19 NHs that only partially completed their surveys
- For each index NHs that were missing a score for that index are excluded from the table (see table 2 in paper for final ns)

Analysis:

- Total possible score: See details regarding calculation of index scores.
- Range of Scores, mean scores, and standardized mean scores are based on distribution of included NHs. Weighted results use sampling weights (variable name= aweight)
- Omega Total is calculated using the Pysch package in R. The steps to calculate are as follows:
  - Use **tetrachoric** (for physical environment index) or **polychoric** (all other indices) commands to create tetrachoric or polychoric matrices.
  - Use **omega** command calculate McDonald's Omega for each matrix.

Table 3

Eligible Sample: 1,584 NHs that completed the 2016/2017 NHCCS

Exclusions:

- 71 NHs that completed the short survey
- 19 NHs that only partially completed their surveys
- NHs missing a leadership score (see Table)
- NHs Missing Administrator or DON Turnover Data from NHCCS (see in Table)
- NHs missing CASPER or LTCFocUS data (see Table)
- For eeach index NHs that were missing a score for that index are excluded from the analyses (see Table)
- See Table for final sample sizes

Missing Data[1] for Ordered Regression Analyses

	Physical Environment N^1 (%)	Resident Centered Care n^1 (%)	Staff Empowerment n^1 (%)	Family and Community Engagement n^1 (%)
Total Nursing Homes Included in Analysis	1,358 (90.90%)	1,368 (91.57%)	1,375 (92.04%)	1,372 (91.83%)
Missing >40% of Items Needed to Calculate Index Score	34 (2.27%)	42 (2.81%)	71 (4.75%)	20 (1.34%)
Missing Leadership Score	49 (3.28%)	51 (3.41%)	3 (0.20%)	62 (4.15%)
Missing Administrator or DON Turnover Data (from survey)	32 (2.14%)	25 (1.67%)	25 (1.67%)	19 (1.27%)
Missing CASPER or MDS Data	21 (1.41%)	8 (0.54%)	20 (1.34%)	21 (1.41%)

1. Calculated based on 1,494 NHs that had a fully complete full-length survey (NHs with short and partially complete surveys excluded from table).

Variable Coding: A description of all variables included in the ordered regression analysis is provided in Table 2.

Analysis: Four ordered regression analyses (one for each index) with the outcome quartile of performance on the index of interest, and NH characteristics as explanatory variables. All model are weighted using sampling weights (adminweight) and confidence intervals are clustered on state.

Stata code for ordered regression models:

Physical Environment
ologit phys_score_quart i.profit i.bedcount   occupancy_5pct i. multifac i. religaff i.DON_turn2 i.admin_turn2 i.anyunit i.CCRI i.p4p2014 rnhrppd_std lpnhrppd_std cnahrppd_std i.subregion_n i.herf_quart i.metro03 i.pctblack_cat i.pcthisp_cat i.pctmedicare_cat i.pctmedicaid_cat avgage agg_cmi_2011p_std avgadl_2011p_std highcfs_10point medicaidrate_10dollar lead_3point [***pweight***=adminweight], ***or cluster***(state)

Resident Centered Care
ologit rescare_score_quart i.profit i.bedcount   occupancy_5pct i. multifac i. religaff i.DON_turn2 i.admin_turn2 i.anyunit i.CCRI i.p4p2014 rnhrppd_std lpnhrppd_std cnahrppd_std i.subregion_n i.herf_quart i.metro03 i.pctblack_cat i.pcthisp_cat i.pctmedicare_cat i.pctmedicaid_cat avgage agg_cmi_2011p_std avgadl_2011p_std highcfs_10point medicaidrate_10dollar lead_3point ***pweight***=adminweight], ***or cluster***(state)

Staff Empowerment
ologit staffemp_quart i.profit i.bedcount   occupancy_5pct i. multifac i. religaff i.DON_turn2 i.admin_turn2 i.anyunit i.CCRI i.p4p2014 rnhrppd_std lpnhrppd_std cnahrppd_std i.subregion_n i.herf_quart i.metro03 i.pctblack_cat i.pcthisp_cat i.pctmedicare_cat i.pctmedicaid_cat avgage agg_cmi_2011p_std avgadl_2011p_std highcfs_10point medicaidrate_10dollar lead_3point [***pweight***=adminweight], ***or cluster***(state)

Family and Community Engagement
ologit famcom_quart i.profit i.bedcount   occupancy_5pct i. multifac i. religaff i.DON_turn2 i.admin_turn2 i.anyunit i.CCRI i.p4p2014 rnhrppd_std lpnhrppd_std cnahrppd_std i.subregion_n i.herf_quart i.metro03 i.pctblack_cat i.pcthisp_cat i.pctmedicare_cat i.pctmedicaid_cat avgage agg_cmi_2011p_std avgadl_2011p_std highcfs_10point medicaidrate_10dollar lead_3point [***pweight***=adminweight], ***or cluster***(state)

Guide to Variables Included In Ordered Regression Model by Data Source

Variable Name	Description	Coding/ Instructions
2016 / 2017 NHCCS		
phys_score_quart	Quartile of performance on the physical environment index.	Calculate physical environment score (as described in earlier section), divide NHs by quartile of performance. Quartiles numbered 1-4, with 1 indicating lowest quartile.
rescare_score_quart	Quartile of performance on the resident centered care index.	Calculate resident centered care score (as described in earlier section), divide NHs by quartile of performance. Quartiles numbered 1-4, with 1 indicating lowest quartile.
staffemp_score_quart	Quartile of performance on the staff empowerment index. Numeric 1-4, with 1 indicating lowest score.	Calculate staff empowerment score (as described in earlier section), divide NHs by quartile of performance. Quartiles numbered 1-4, with 1 indicating lowest quartile.
famcom_score_quart	Quartile of performance on the family and community index. Numeric 1-4, with 1 indicating lowest score.	Calculate physical environment score (as described in earlier section), divide NHs by quartile of performance. Quartiles numbered 1-4, with 1 indicating lowest quartile.
lead_3point	A one point increase in lead_3point indicates a 3 point increase in performance on the leadership index.	Calculate staff leadership score (as described in earlier section), divide by 3.
CCRI	Part of a Continuing Care Retirement Community	0 = No, 1 =Yes Code yes if: - NH answered "Yes" to "Is your facility part of a Continuing Care Retirement Community?"(q1) or - NH indicated they have long-term care beds (q2_b=1) AND assisted living residences (q2_d=1) ND independent living residences (q2_c=1).
DON_turn2	Number of directors of nursing (DON) in past two years	Derived from NHCCS variable: Number of DONs in past two years (q36_1) 0: One 1: Two or More
admin_turn2	Number of administrators in past two years	Calculating using *number of administrators in past two years (q35_1)* 0: One 1: Two or More

Variable Name	Description	Coding/ Instructions
2015 CASPER		
profit	Profit status	1 = For Profit, 0=Not for profit
bedcount	Categorical variables of total beds in NH	Categorical version of *total number of beds in facility (totbeds)* 1: <80 2: 80-120 3: >120
occupancy_5pct	A one point increase indicates a five point increase in occupancy rate (Number of occupied beds / total number of beds)	Calculate *using occupancy rate (occrate)* Calculation: occrate/5
multifac	Part of chain	0 = No, 1 =Yes
religaff	Religious affiliation	0 = No, 1 =Yes
anyunit	Does the NH have any special care unit (not including ventilator units)	0 = No, 1 =Yes
rnhrppd_std	Standardized RN Hours per Resident Day (Number of RN hours / number of residents in the facility)	Calculate using *total RN hrs/day/resident (rnhrppd)* Standardize using Stata *std* command
lpnhrppd_std	Standardized LPN Hours per Resident Day (Number of LPN hours / number of residents in the facility)	Calculate using *total LPN hrs/day/resident (lpnhrppd)* Standardize using Stata *std* command
cnahrppd_std	Standardized CNA Hours per Resident Day (Number of CNA hours / number of residents in the facility)	Caculate using total *CNA hrs/day/resident (cnahrppd)* Standardize using Stata *std* command
herf_quart	Quartile of performance on Hirschman-Herfindahl Competition Index (Concentration based on # of NHs and beds in county; 0-1 (high to low)).	Calculate using *Herfindahl Index County (herfcty)*, divide NHs by quartile of performance. Quartiles numbered 1-4, with 1 indicating lowest scores.
Metro03	Located in a metropolitan county in 2003.	0 = No, 1 =Yes
subregion	Census Sub-Region	9 Sub-Regions: West North Central, West South Central, East North Central, East South Central, Middle Atlantic, Mountain New England, Pacific, South Atlantic
state	State	*Not included in shared dataset*

Variable Name	Description	Coding/ Instructions
2015 LTCfocUS[1]		
pctblack_cat	Percent of residents who are black. Categorized to lowest decile, below median, above median, top decile	Calculate using *percent black in facility (pctblack_2011p)* 1: Lowest decile 2: Below median 3: Above median 4: Top decile
pcthisp_cat	Percent of residents who are Hispanic. Categorized to below median, above median, top decile.	Calculate using *percent Hispanic in facility* (pcthisp_2011p) 1: Below median 2: Above median 3: Top decile
pctmedicare_cat	Percent of Residents with Medicare. Categorized to lowest decile, below median, above median, top decile	Derived from LTCfocus variable: Pct Medicare (paymcare) 1: Lowest decile 2: Below median 3: Above median 4: Top decile
pctmedicaid_cat	Percent of Residents with Medicaid Categorized to lowest decile, below median, above median, top decile	Calculate using *percent of residents with Medicaid (paymcaid)* 1: Lowest decile 2: Below median 3: Above median 4: Top decile
avgage	Average age of residents, years	
agg_cmi_2011p_std	Standardized average Resource Utilization Group Nursing Case Mix Index (RUGS-NCMI)	Calculate using *average RUG IV NCMI (agg_cmi_2011p)* Standardized using Stata *std* command
avgadl_2011p_std	Standardized average activities of daily living (ADL) score	Calculate using *mean ADL score of residents in facility (agg_cmi_2011p)* Standardized using Stata *std* command
highcfs_10point	A one point increase represents a 10 percent increase in the percent of residents in the facility with a cognitive function score of 4 (severe cognitive impairment).	Calculate using *percent residents with high CFS (4) in facility* (pcthighcfs). Calculation: Pcthighcfs / 10

Variable Name	Description	Coding/ Instructions
	Other Data Sources	
p4p2014	State pay for performance	0: No pay for performance (p4p) 1; P4p without culture change measures 2: P4p with culture change measures
medicaidrate_10dollar	A one point increase indicates a $10 increase in the 2009 Medicaid Reimbursement Rate (Dollars per resident day)	Calculating *using 2009 payment rate (mcaidrate_2009)* Calculation: mcaidrate_2009 / 10

1. The LTCfocUS data used in the study analyses was derived from claims, enrollment, and nursing home assessment data from the Centers for Medicare and Medicaid Services (CMS). Public use versions of these variables (which suppress information that do not meet cell size restrictions) can be accessed at https://ltcfocus.org/. The data set available for download links the 2016/17 NHCCS to this public use version of the data.

2016-2017 Nursing Home Culture Change Survey: Data Dictionary

GENERAL NOTES:

- **[SP] = Single punch question** - only one response allowed; variable name matches question number.

- **[MP] = Multi punch question** - more than one response allowed; variable created for each response option.
    a. Naming convention used is *'question number_response option code'* (Example: Q28_1)
    b. +/- used in SAS formats. 1 = + (selected), 0 = - (not selected).

- **Grid questions (MP Down, SP Across)**:
    a. Variable created for each row in the grid
    b. Naming convention used is *'question number_letter of the row'* (Example: Q2_a, Q2_b)

- **Numeric box questions**
    a. Naming convention used is: *'question number_box number'* (Example: Q38_1, Q38_2).

- **Other/specify text fields** - separate variables with *'other'* at the end of the variable name (Example: Q21_6_other).

- **The following data entry codes for the <u>mail version of the survey</u>** were used for all questions unless otherwise specified: **CONFUSING ANSWER (77), DON'T KNOW/NOT SURE (98) AND MISSING (99).**

- **Missing answers for the Web version of the survey will appear in the data as '.' – No code is assigned.**

- **Skip logic –** noted before each question (Example: [ASK IF Q4=1 (YES)]) – **questions skipped because of logic in mail survey and web survey will also appear as '.'**

BACKGROUND VARIABLES:

Strata – sampling strata

Mode_N – survey mode
     0 = Web
     1 = Mail

Surveystatus – Status of the survey based on questions answered.
     1 = complete
     2 = partially complete (*answered Q1 but did not answer Q15, Q19 and Q20*)

Shortsurvey – flag for cases that completed the abbreviated version of the survey over the phone
     1 = Short survey

adminweight – Sampling Weight

[ASK ALL] [SP]

Q1. Is your facility part of a Continuing Care Retirement Community?

1 ☐ Yes

2 ☐ No

98 DON'T KNOW/NOT SURE [MAIL ONLY]

99 MISSING [MAIL ONLY]

77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q2. Please indicate if your organization has each of the following. Please select "Will implement within 2 years" if plans have been approved or money is obligated.

Does your organization have…	Yes	No	Will implement within 2 years	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. A specific unit where subacute or rehab care is provided	1	2	3	98	99	77
b. Long-term care beds	1	2	3	98	99	77
c. Independent living residences	1	2	3	98	99	77
d. Assisted living residences	1	2	3	98	99	77
e. A dementia care unit for long-stay residents	1	2	3	98	99	77
f. A dementia care unit for assisted living residents	1	2	3	98	99	77
g. Its own palliative care consulting program staffed by nurse and physician palliative care specialists	1	2	3	98	99	77
h. An arrangement with an external provider for non-hospice palliative care consulting	1	2	3	98	99	77

[ASK ALL] [SP]

Q3. What percent of your residents has a private room?

 ₁☐ 0%
 ₂☐ 1 to 4%
 ₃☐ 5 to 25%
 ₄☐ 26 to 75%
 ₅☐ 76 to 100%

 98   DON'T KNOW/NOT SURE [MAIL ONLY]

 99   MISSING [MAIL ONLY]

 77   CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q4. Do any of your rooms have a bathroom (that is, a toilet and sink) that is shared by 3 or more residents?

 ₁☐ Yes
 ₂☐ No

 98   DON'T KNOW/NOT SURE [MAIL ONLY]

 99   MISSING [MAIL ONLY]

 77   CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q4=1 (YES)] [SP]

Q5. What percent of rooms has a bathroom (that is, a toilet and sink) shared by 3 or more residents?

 ₁☐ 1 to 4%
 ₂☐ 5 to 25%
 ₃☐ 26 to 50%
 ₄☐ 51 to 75%
 ₅☐ 76 to 100%

 98   DON'T KNOW/NOT SURE [MAIL ONLY]

 99   MISSING [MAIL ONLY]

 77   CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q4=1 (YES)] [SP]

Q6. Is your facility working to reduce the number of rooms with bathrooms shared by 3 or more residents?

 ₁☐ Yes
 ₂☐ No

 98   DON'T KNOW/NOT SURE [MAIL ONLY]

 99   MISSING [MAIL ONLY]

 77   CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q7. Does your facility have long-stay residents (those with stays of more than 100 days)?

    1☐ Yes
    2☐ No

    98 DON'T KNOW/NOT SURE [MAIL ONLY]

    99 MISSING [MAIL ONLY]

    77 CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q7=1 (YES)] [SP]

Q8. What percent of long-stay residents' rooms has monitoring cameras installed by family members?

    1☐ 0%
    2☐ 1 to 2%
    3☐ 3 to 10%
    4☐ 11 to 25%
    5☐ 26 to 50%
    6☐ More than 50%

    98 DON'T KNOW/NOT SURE [MAIL ONLY]

    99 MISSING [MAIL ONLY]

    77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q9. In order to make a facility less like an institution and more like a home, some facilities have redesigned some sections of their facilities into **Households** of no more than 14 to 20 residents that include kitchens, dining facilities, and common living areas.

Do any of your residents live in **Households** that include kitchen and dining facilities?

    1☐ Yes
    2☐ No

    98 DON'T KNOW/NOT SURE [MAIL ONLY]

    99 MISSING [MAIL ONLY]

    77 CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q9=1 (YES)] [SP]

Q10.   What percent of your residents lives in **Households**?

1☐ 1 to 4%
2☐ 5 to 25%
3☐ 26 to 75%
4☐ 76 to 100%

98 DON'T KNOW/NOT SURE [MAIL ONLY]

99 MISSING [MAIL ONLY]

77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q11.   Some facilities provide care within **Small Homes** of no more than 8 to 10 people (such as Green Houses) that include private bedrooms, kitchens, dining rooms and common living areas. **Small Homes** are often detached from a traditional facility but may also be integrated into a more traditionally-designed facility.

Do any of your residents live in **Small Homes** that include private bedrooms, kitchens, dining rooms, and common living areas?

1☐ Yes
2☐ No

98 DON'T KNOW/NOT SURE [MAIL ONLY]

99 MISSING [MAIL ONLY]

77 CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q11=2 (NO)] [SP]

Q12.   We are interested in knowing if your facility is planning to open **Small Homes**. By planning to open, we mean the plans are approved or money is obligated and implementation is expected within 2 years. Are you planning to open **Small Homes**?

1☐ Yes
2☐ No

98 DON'T KNOW/NOT SURE [MAIL ONLY]

99 MISSING [MAIL ONLY]

77 CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q11=1 (YES)] [SP]

Q13.   What percent of your residents lives in **Small Homes** that include private bedrooms, kitchens, dining rooms, and common living areas?

1 ☐ 1 to 4%
2 ☐ 5 to 25%
3 ☐ 26 to 75%
4 ☐ 76 to 100%

98   DON'T KNOW/NOT SURE [MAIL ONLY]

99   MISSING [MAIL ONLY]

77   CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q14.   Please indicate if each of the following statements applies to your facility.

	Yes	No	We are working on this	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. The lighting, furniture, and overall environment in residents' living areas are similar to what we would use in our own homes	1	2	3	98	99	77
b. We have indoor and/or outdoor play areas for children	1	2	3	98	99	77
c. Residents who are mobile (with or without assistive devices) can come and go freely in our facility's outdoor spaces	1	2	3	98	99	77
d. We have eliminated nursing stations	1	2	3	98	99	77
e. We have kitchen areas that are accessible to residents and families 24/7	1	2	3	98	99	77
f. We use open dining where a meal is available for <u>at least a two hour period</u> during which residents can choose when to eat	1	2	3	98	99	77
g. All residents can keep their doors closed or open, as they prefer	1	2	3	98	99	77
h. We provide or coordinate free transportation for individual residents to go out for non-medical reasons, such as to local stores of their choice or social visits to friends or family	1	2	3	98	99	77

i. We display residents' personal items, such as family photos, in common living areas outside of their rooms	1	2	3	98	99	77
j. We have a communication system in place that we use as an alternative to overhead paging	1	2	3	98	99	77
k. Noise at night is reduced	1	2	3	98	99	77

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q15.   For this question, **staff** refers to all <u>non-management</u> employees of the facility in all departments. Please indicate how often your staff does each of the following.

In your facility, how often…	Never	Sometimes	Often	Always	Not Applicable	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Does staff work together to cover shifts when someone can't come to work?	1	2	3	4	5	98	99	77
b. Is staff cross-trained to perform tasks outside of their assigned job duties, such as housekeeping staff trained to provide feeding assistance or nursing assistants trained to provide activities?	1	2	3	4	5	98	99	77
c. Is staff, other than activity and management staff, involved in planning social events?	1	2	3	4	5	98	99	77
d. In the past 12 months, have nurses been scheduled to work who are employed by an agency rather than employed by your facility?	1	2	3	4	5	98	99	77
e. Do staff teams create their own work schedules for their units (that is, schedule days and hours to work)?	1	2	3	4	5	98	99	77
f. Are new staff and residents formally introduced to each other?	1	2	3	4	5	98	99	77

[ASK ALL] [SP]

Q16.   The next questions are specifically about nursing assistants. **Nursing Assistants** refer to those direct-care workers who provide hands-on personal care. For these questions, please consider Shahbazim as nursing assistants.

Does your facility have nursing assistants?

₁☐ Yes

₂☐ No

98   DON'T KNOW/NOT SURE [MAIL ONLY]

99   MISSING [MAIL ONLY]

77   CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q16=1 (YES)] [GRID; SP ACROSS/MP DOWN]

Q17.   Please indicate how often nursing assistants at your facility do each of the following.

In your facility, how often…	Never	Sometimes	Often	Always	Not Applicable	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Do nursing assistants take part in quality improvement teams?	1	2	3	4	5	98	99	77
b. Do nursing assistants attend resident care plan meetings?	1	2	3	4	5	98	99	77
c. Do nursing assistants know when a resident's care plan has changed?	1	2	3	4	5	98	99	77
d. Are changes in residents' care made as a result of nursing assistants' input?	1	2	3	4	5	98	99	77
e. Does your facility permit nursing assistants to choose which residents they care for?	1	2	3	4	5	98	99	77

f. Do nursing assistants work with the same residents?	1	2	3	4	5	98	99	77
g. Do nursing assistants alter their work priorities to meet residents' needs?	1	2	3	4	5	98	99	77
h. Do nursing assistants communicate with family members to convey or obtain information about residents?	1	2	3	4	5	98	99	77
i. Does your facility give bonuses, raises, or other rewards to nursing assistants who receive extra training or education?	1	2	3	4	5	98	99	77

[ASK IF Q16=1 (YES)] [GRID; SP ACROSS/MP DOWN]

Q18.   Please indicate how often each of the following takes place at your facility.

In your facility, how often…	Rarely	Sometimes	Often	Almost Always	Not Applicable	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Do nursing assistants participate in formal processes that allow them to contribute ideas on improving resident care?	1	2	3	4	5	98	99	77
b. Do nursing assistants participate in conducting in-service education of facility staff?	1	2	3	4	5	98	99	77
c. Are new nursing assistants assigned to a peer mentor?	1	2	3	4	5	98	99	77
d. Do nursing assistants participate in hiring decisions of new staff?	1	2	3	4	5	98	99	77
e. Do supervisors "pitch in" to assist nursing assistants when they get busy?	1	2	3	4	5	98	99	77

[ASK ALL] [SP]

Q19.   Please indicate which one of the following statements best describes what you believe was your facility's practice **during the first half of 2010**. If you are not sure, please provide your best estimate. *(Please select <u>one</u> answer)*

₁☐ There was no discussion around culture change

₂☐ Culture change was under discussion, but we hadn't changed the way we took care of residents

₃☐ Culture change had partially changed the way we cared for residents in some or all areas of the organization

₄☐ Culture change had completely changed the way we took care of residents in some areas of the organization

₅☐ Culture change had completely changed the way we took care of residents in all areas of the organization

₆☐ Other *(please explain: _____Q19_6_other_____)*

   98   DON'T KNOW/NOT SURE [MAIL ONLY]

   99   MISSING [MAIL ONLY]

   77   CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q20.   For each of the following statements, please indicate what you believe was your facility's practice **during the first half of 2010**. If you are not sure, please provide your best estimate.

During the first half of 2010, was it the practice in your facility that…	Yes	No	We were working on this	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Residents chose the times they preferred to eat?	1	2	3	98	99	77
b. Residents chose when they wanted to get up in the morning?	1	2	3	98	99	77
c. Residents participated in choosing the types of activities that were offered to them?	1	2	3	98	99	77
d. Residents participated in deciding which nursing assistants were assigned to care for them?	1	2	3	98	99	77

[ASK ALL] [SP]

Q21.   Please indicate your nursing home's involvement in culture change or resident-centered care **now**. *(Please select one answer)*

₁☐ There is no discussion around culture change

₂☐ Culture change is under discussion, but we haven't changed the way we take care of residents

₃☐ Culture change has partially changed the way we care for residents in some or all areas of the organization

₄☐ Culture change has completely changed the way we take care of residents in some areas of the organization

₅☐ Culture change has completely changed the way we take care of residents in all areas of the organization

₆☐ Other *(please explain:*

_____ Q21_6_other_____*)*

98   DON'T KNOW/NOT SURE [MAIL ONLY]

99   MISSING [MAIL ONLY]

77   CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q21=3-6] [GRID; SP ACROSS/MP DOWN]

Q22.   Please indicate if you believe that culture change has changed the way that you take care of the following types of residents.

Has culture change changed the way you take care of residents…	Yes	No	We are working on this	Not Applicable	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Who receive subacute or rehabilitation care?	1	2	3	4	98	99	77
b. With Alzheimer's Disease or dementia?	1	2	3	4	98	99	77

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q23.   For each of the following statements, please indicate if this is your facility's practice **now**.

At the present time, is it the practice in your facility that…	Yes	No	We are working on this	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Residents choose the times they prefer to eat?	1	2	3	98	99	77
b. Residents choose when they want to get up in the morning?	1	2	3	98	99	77
c. Residents choose the time of day they want to bathe?	1	2	3	98	99	77
d. Residents choose the way they bathe, such as shower, bed bath, or bathtub?	1	2	3	98	99	77
e. Residents participate in choosing the types of activities that are offered to them?	1	2	3	98	99	77
f. Residents participate in deciding which nursing assistants are assigned to care for them?	1	2	3	98	99	77
g. Residents participate in developing their care plan?	1	2	3	98	99	77
h. Residents participate in the hiring of new nursing assistants?	1	2	3	98	99	77
i. Residents with memory problems have special activities designed for them?	1	2	3	98	99	77
j. Residents or their family members are provided with opportunities to express their preferences about end-of-life care?	1	2	3	98	99	77

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q24.   For these questions, **Family** refers to persons of importance to residents, such as friends, spouses, partners, children or other family members. Please indicate how often your facility does each of the following.

How often does your facility…	Rarely	Sometimes	Often	Almost Always	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Schedule care plan conferences when family members can attend them, including evenings?	1	2	3	4	98	99	77
b. Allow family members to visit loved ones anytime (i.e., 24/7)?	1	2	3	4	98	99	77
c. Inform family members about changes the facility is making to improve its quality?	1	2	3	4	98	99	77
d. Ask family members for input when the facility is considering changing facility-wide care practices?	1	2	3	4	98	99	77
e. Formally introduce family members to the nursing assistants taking care of their loved ones?	1	2	3	4	98	99	77
f. Notify family members when there is a change in the nursing assistants who care for their loved ones?	1	2	3	4	98	99	77

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q25.   For these questions, **Community Members** refer to individuals not employed or contracted by your facility. Examples include neighboring businesses and individuals, a business person or lawyer, a researcher, an educator or a healthcare provider in the community. Please indicate how often your facility does each of the following.

How often does your facility…	Rarely	Sometimes	Often	Almost Always	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Have community members participate in facility activities such as movies, parties, or exercise programs?	1	2	3	4	98	99	77
b. Include community members on facility committees other than the Board of Directors?	1	2	3	4	98	99	77
c. Have community members lead resident activities such as discussion groups or lectures?	1	2	3	4	98	99	77
d. Ask for community members' input when the facility is considering new initiatives?	1	2	3	4	98	99	77

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

[DON'T KNOW/NOT SURE (98) NOT USED FOR DATA ENTRY SINCE ALREADY CAPTURED IN RESPONSE SET]

Q26.   Please indicate how often your facility might engage in the following activities when a resident is dying or has died.

How often does your facility…	Rarely	Sometimes	Often	Almost Always	Don't Know	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Discuss a resident's spiritual needs at care planning conferences when the resident has an acute or chronic terminal illness?	1	2	3	4	5	99	77
b. Document in the care plan of a terminally ill resident what is important to the individual at the end of life, such as the presence of family or religious or cultural practices?	1	2	3	4	5	99	77
c. Have a room available to provide special accommodations, such as a private room or a bed for a loved one, when a resident is actively dying?	1	2	3	4	5	99	77
d. Honor in some public way (either at the facility or in the community) a resident who has died?	1	2	3	4	5	99	77
e. Honor the resident's body in some manner upon its removal from the facility?	1	2	3	4	5	99	77
f. Send a sympathy card to family members or significant others after a resident has died?	1	2	3	4	5	99	77
g. Follow up with roommate(s) or friend(s) in the facility to provide emotional support after a resident has died?	1	2	3	4	5	99	77

[ASK ALL] [GRID; SP ACROSS/MP DOWN]

Q27.   Please indicate how often each of the following takes place at your facility.

In your facility, how often…	Rarely	Sometimes	Often	Almost Always	Not Applicable	DON'T KNOW/NOT SURE [MAIL ONLY]	MISSING [MAIL ONLY]	CONFUSING ANSWER [MAIL ONLY]
a. Are facility-wide management decisions made by <u>leaders</u> exclusively?	1	2	3	4	5	98	99	77
b. Are scheduling changes made so <u>staff</u> can attend professional development or advancement activities?	1	2	3	4	5	98	99	77
c. Do <u>leaders</u> tell <u>staff</u> why their suggestions were not implemented?	1	2	3	4	5	98	99	77
d. Do <u>staff</u> receive annual training in person-centered care or culture change?	1	2	3	4	5	98	99	77
e. Do <u>staff</u> substitute for <u>leaders</u> in representing the facility to the external community, such as at meetings, presentations, and promotional activities?	1	2	3	4	5	98	99	77

[ASK ALL] [MP]

Q28.   This question is about your **Nursing Staff**, including Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Nursing Assistants. Which direct care nursing staff at your facility are unionized? *(Please check all that apply)*

1 ☐ Registered Nurses (RNs)

2 ☐ Licensed Practical Nurses (LPNs)

3 ☐ Nursing Assistants

4 ☐ *No direct care nursing staff are unionized* **[SP - exclusive]**

98 DON'T KNOW/NOT SURE [MAIL ONLY]

99 MISSING [MAIL ONLY]

77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q29.   Please think about the **Nursing Assistants** who were employed at any time during the <u>past 12 months</u>. About what percent of these nursing assistants left your employment in the <u>last 12 months</u>?

- 1☐ 0 to 20%
- 2☐ 21 to 40%
- 3☐ 41 to 60%
- 4☐ 61 to 90%
- 5☐ 91 to 100%
- 6☐ *Not applicable, facility does not have Nursing Assistants*

98   DON'T KNOW/NOT SURE [MAIL ONLY]

99   MISSING [MAIL ONLY]

77   CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q29=1-5] [SP]

Q30.   About what percent of the **Nursing Assistants** who are employed at your facility <u>today</u> has worked at the facility for <u>at least 12 months</u>?

- 1☐ 0 to 50%
- 2☐ 51 to 75%
- 3☐ 76 to 90%
- 4☐ 91 to 100%

98   DON'T KNOW/NOT SURE [MAIL ONLY]

99   MISSING [MAIL ONLY]

77   CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q31.   Please think about the **LPNs** who were employed at any time during the <u>past 12 months</u>. About what percent of these LPNs left your employment in the <u>last 12 months</u>?

- 1☐ 0 to 20%
- 2☐ 21 to 40%
- 3☐ 41 to 60%
- 4☐ 61 to 90%
- 5☐ 91 to 100%
- 6☐ *Not applicable, facility does not have LPNs*

98   DON'T KNOW/NOT SURE [MAIL ONLY]

99   MISSING [MAIL ONLY]

77   CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q31=1-5] [SP]

Q32. About what percent of the **LPNs** who are employed at your facility <u>today</u> has worked at the facility for <u>at least 12 months</u>?

    ₁☐ 0 to 50%
    ₂☐ 51 to 75%
    ₃☐ 76 to 90%
    ₄☐ 91 to 100%

    98 DON'T KNOW/NOT SURE [MAIL ONLY]

    99 MISSING [MAIL ONLY]

    77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q33. Please think about the **RNs** who were employed at any time during the <u>past 12 months</u>. About what percent of these RNs left your employment in the <u>last 12 months</u>?

    ₁☐ 0 to 10%
    ₂☐ 11 to 24%
    ₃☐ 25 to 40%
    ₄☐ 41 to 100%
    ₅☐ *Not applicable, facility does not have RNs*

    98 DON'T KNOW/NOT SURE [MAIL ONLY]

    99 MISSING [MAIL ONLY]

    77 CONFUSING ANSWER [MAIL ONLY]

[ASK IF Q33=1-4] [SP]

Q34. About what percent of the **RNs** who are employed at your facility <u>today</u> has worked at the facility for <u>at least 12 months</u>?

    ₁☐ 0 to 50%
    ₂☐ 51 to 75%
    ₃☐ 76 to 90%
    ₄☐ 91 to 100%

    98 DON'T KNOW/NOT SURE [MAIL ONLY]

    99 MISSING [MAIL ONLY]

    77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [NUMERIC BOX]

Q35.   In the past 2 years, how many different Administrators have there been in your facility, **including** yourself?
If you have been the only Administrator in the past 2 years, please answer '1'.

   Q35_1   _____ Administrators

      98 DON'T KNOW/NOT SURE [MAIL ONLY]

      99 MISSING [MAIL ONLY]

      77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [NUMERIC BOX]

Q36.   In the past 2 years, how many different Directors of Nursing have there been in your facility? *If there has only been one Director of Nursing in the past two years, please answer '1'.*

   Q36_1   _____ Directors of Nursing

      98 DON'T KNOW/NOT SURE [MAIL ONLY]

      99 MISSING [MAIL ONLY]

      77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [SP]

Q37.   How long have you been a nursing home Administrator?

   1☐ 5 years or less
   2☐ 6 to 10 years
   3☐ 11 to 15 years
   4☐ 16 to 25 years
   5☐ More than 25 years

      98 DON'T KNOW/NOT SURE [MAIL ONLY]

      99 MISSING [MAIL ONLY]

      77 CONFUSING ANSWER [MAIL ONLY]

[ASK ALL] [NUMERIC BOX]

Q38.   How long have you been the Administrator at this facility?

   Q38_1   _____ Years   Q38_2   _____ Months

      98 DON'T KNOW/NOT SURE [MAIL ONLY]

      99 MISSING [MAIL ONLY]

      77 CONFUSING ANSWER [MAIL ONLY]