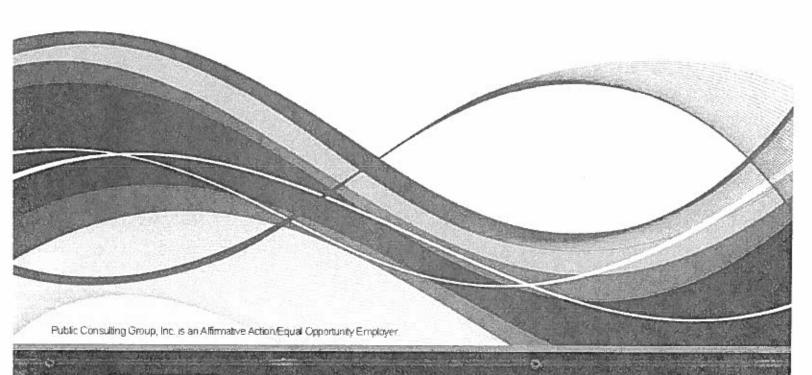
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Colorado Department of Health Care Policy and Financing

2011 Nursing Facilities Pay for Performance Review

June 30, 2011





Public Focus. Proven Results³⁸

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June 30, 2011

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I. EXECUTIVE SUMMARY

PCG has completed its third year of reviewing, evaluating, and validating nursing home applications to the Colorado Department of Health Care Policy and Financing Pay for Performance (P4P) program. The current year's review process included a redesign of PCG's prior-developed evaluation tool, the assessment of nursing home application scores, and recommendations for further enhancements to the P4P program.

The P4P program was developed to support the implementation of resident-centered policies and home-like environments throughout Colorado's nursing homes. This is achieved by reimbursing homes a supplemental payment based on performance according to established measures that are designed to evaluate quality of life and quality of care in the home. Incentive payments are determined according to point thresholds, and the table below provides a breakdown of the 2011 applicant homes as they fall into each point range.

Point Range	Per Diem Rate Add-On	Number of 2011 Homes
0-45	No Add-On	14
46 – 60	\$1.00	20
61 – 79	\$2.00	29
80 – 100	\$3.00	15

The 2011 P4P program built upon experience gained over the prior two years of operation, including many of PCG's past recommendations for improvement. In Section IV of this report, PCG has again provided multiple discussions on potential improvements to the application including both specific performance measure recommendations and general application comments such as:

- Analysis on what makes a detailed narrative;
- Discussion on application submission formats; and
- Consideration of the Minimum Data Set 3.0 in future applications.

In Section V, PCG also identifies illustrative comments from Nursing Home Administrators (NHAs) regarding their satisfaction with the P4P program. Administrators have reported that participation in the program has facilitated improvements in the home including, but not limited to, increased staff satisfaction and retention, improved quality of care, strengthened staff-resident relationships, environmental transformations, and added inspiration for culture change.

Finally, PCG has examined three years of application data on the P4P program and identified trends that clearly support NHA comments. The data shows that homes that have participated in all three years of the program show significantly higher scores than those that have not, as well as increased quality of care when compared against non-P4P homes. Overall, trends show an increased adoption of culture change and positive signs of improvement for the state's homes.

II. INTRODUCTION

A. Purpose of Project

In December 2010, the Department of Health Care Policy and Financing (the Department) sought quotations from qualified and experienced vendors to conduct reviews to evaluate and validate whether nursing homes that applied for additional reimbursement under the P4P program have implemented and are in compliance with performance measures as defined by the Department.

The Department wishes to foster a person-centered and directed model of care in a home-like environment for Colorado's nursing home residents. Under HB 08-1114, an additional per diem rate based upon performance was to be paid to those nursing home providers that provide services resulting in better care and higher quality of life for their residents effective July 1, 2009. Using this per diem add-on methodology, nursing homes could apply for the P4P program quarterly. Under SB 09-263, additional payments to nursing homes for the Pay-For-Performance program are paid a supplemental payment rather than a per diem payment effective July 1, 2009. Nursing homes must now apply for the Pay-For-Performance program annually, with a deadline of February 28th for 2011, as all supplemental payments for the year must be calculated prior to the July 1 rate-setting date.

B. Goals of the P4P Initiative

The Department received 78 applications by the February 28, 2011 deadline. These applications were reviewed, evaluated, and validated using the Colorado Nursing Homes 2011 Pay-For-Performance (P4P) Application. The rate effective date for these providers is July 1, 2011.

C. Major Deliverables

PCG was tasked with reviewing, evaluating, and validating whether nursing homes that applied for additional reimbursement related to the Pay-For-Performance program are eligible for additional reimbursement. The performance measures serve to gauge how homes provide high quality of life and high quality of care to their residents.

The P4P measures have been established in the application in two domains:

- 1. Quality of Life
- 2. Quality of Care

The 2011 P4P application has 30 performance measures in the domains of Quality of Life and Quality of Care. The reimbursement for these measures is based on points. A nursing home may earn a total of up to 100 points. The threshold for any reimbursement begins with scores of 46



points or higher. 49 points are possible for the Quality of Life domain and 51 points are possible for the Quality of Care domain. Each nursing home chooses which of these measures it applies for.

Within each domain are sub-category measures. On the application forms, each of these sub-category measures is further described by definitions, minimum requirements, required documentation, and the possible points for each sub-category measure. The state has directed the Contractor to assign the points merited for each measure contingent upon the review, evaluation and validation that the sub-category measurement requirements have been documented and met.

Specifically, the Department required that the contractor is responsible for the following:

- Reviewing, evaluating, and validating applications submitted by nursing homes that applied between February 1, 2010 and February 28, 2011 to participate in the P4P program.
- Developing and implementing the evaluation tool that will be used to measure compliance with each P4P subcategory measure.
- Developing and maintaining a record file for each nursing home that applies for the P4P program.
- Making the results of all evaluations and reports available to the Department for a period of six (6) years after the end of the contract resulting from the DQ.
- Reviewing and providing final analysis and decisions about score revisions to the Department regarding facilities' requests for reconsiderations of the review results.
- Developing template letters to inform the Department and the homes about the results of its review, evaluation, and validation of the P4P application and supporting documentation review.
- Developing the reporting mechanisms and any other ancillary documents and systems to successfully implement this program.
- Holding bi-weekly meetings with the Department to ensure that the work is progressing appropriately.
- Making recommendations to the Department for which homes should have on-site visits and conducting review and validations of no less than 10 percent of the P4P applicants.
- Providing the final evaluation results of the P4P applications to the Department in a standardized format developed by the Contractor and approved by the Department by April 30, 2011.

¹ See Colorado Code of Regulations at 10 CCR 2505-10 8:443.12 for points associated with the pay-for-performance per diem add ons. Retrieved on 6-18-20 11 from

http://www.sos.state.co.us/CCR/Rule.do?deptID=7&deptName=2505,1305 Department of Health Care Policy and Financing&agencyID=69&agencyName=2505 Medical Services Boar&ccrDocID=2921&ccrDocName=10 CCR 2505-10 8.400 MEDICAL ASSISTANCE - SECTION 8.400&subDocID=50025&subDocName=8.443 NURSING FACILITY REIMBURSEMENT&version=24



 Providing a report to the Department by June 30, 2011 detailing the Contractor's experience with this project and submitting recommendations to the Department for continuing and improving this project that might be used in a future solicitation process.

D. Project Team

PCG assembled a team of nationally recognized Subject Matter Experts (SMEs) in long term care policy and planning for this effort. The project was directed by Sean Huse, an experienced manager in Colorado for Medicaid over the past eight years. Mr. Huse managed the project with Les Hendrickson, a national expert on long term care reimbursement policy and planning. In addition to the two project managers the team was supported by Amy Elliot of the Pioneer Network, a national leader in the work on models of person-directed care in nursing homes.

This team of project managers and SMEs was assisted by PCG Business Analysts and Senior Consultants with backgrounds researching and analyzing P4P reimbursement structures. Team members included Joe Weber, Jonathan Hover, Garrett Abrahamson, Asher Cowan, and Lauren Rodrigues. PCG believes this staffing approach is balanced, thoughtful, and represents the knowledge and experience necessary to successfully accomplish the Department's multiple objectives.

III. APPROACH

A. Assessment of Applications

PCG drew on the experience gained while reviewing both the 2009 and 2010 P4P applications to develop a standardized approach for reviewing the current year's 78 applications that were submitted to the Department. During the period of March 21, 2011 through March 29, 2011, PCG's team of reviewers worked together to evaluate the applications. Working together in this collaborative environment allowed reviewers the opportunity to discuss ambiguous applications and develop a uniform approach to the reviews.

To maintain a consistent, equitable evaluation of all of the applications across the team of reviewers, a strict interpretation of the definition, minimum requirements, and required documentation for each performance measure as described in the published P4P application was adopted. Reviewers took the position that the application was a request for state and federal reimbursement for nursing home services and the application would be held to the same standards of accuracy and verifiability that would be required of a Medicaid cost report form.

Each performance measure was broken down into one or more specific minimum requirements based on the language and checklist items listed for each measure in the application. Reviewers examined the supporting documentation submitted in each provider's application to answer "Yes" or "No" to the question, "Did the home meet the minimum requirement?" To gain points on a measure, the provider needed to show the required documentation for each minimum requirement.

The 2011 application included the same high level of detail for each measure that was established in the 2010 application, listing types of required documentation such as narratives, pictures, policy documents, and testimonials. When documentation was listed as required, each piece had to be present in order to meet the requirement. Reviewers did, however, exercise judgment in reviewing documentation provided. For example, if there was no explicit statement that staff members assist with resident room decoration, but pictures show various paint colors, wall hangings, and large pieces of personal furniture, the reviewer would assume that the nursing home staff assisted with the process. To ensure that applications were scored consistently, reviewers debated ambiguous documentation and made sure to apply decisions to all application materials throughout the process.

In all cases, a literal definition of the minimum requirements was applied. If, for example, the requirement is for 12 hours or more of continuing education, answers of 11.99 or less did not meet the requirement. If the care planning requirement calls for both ten initial and ten quarterly care plans, then there had to be at least ten of each present to meet the requirement.

In some cases, if no supporting documentation was included in the section designated for a particular performance measure, the reviewer searched the other sections in the application to see



if documentation could be found elsewhere that would meet the minimum requirement. If the application showed that the minimum requirement for a measure was in fact met, then a "Yes" answer was assigned to the measure regardless of whether or not the home claimed a score for that measure. For example, if a home did not report a score for the neighborhoods/households measure, yet the application provided ample documentation that the home had neighborhoods then the review would assign a "Yes" score to the measure. Also, for performance measures containing an option for multiple point levels, such as the +2, +4, or +6 continuing education, reviewers would change the number of points awarded when appropriate. For example, if the provider applied for +6 continuing education, but the documentation only showed +4, the reviewer would say "No" to +6 and add a "Yes" to +4.

B. Evaluation Tool

In 2009 and 2010, PCG utilized a Microsoft Access database developed as an evaluation tool to store information, self-reported scores, and application evaluations for each provider that submitted an application. The evaluation tool used with the 2010 applications was redesigned to incorporate changes in the 2011 application, and improvements were also made to increase reviewer functionality and quality assurance checks.

After entering in provider information, such as address, phone number, preparer name, etc., reviewers entered in the homes' self-reported scores. Self-reported scores were entered exactly as provided, even when the homes awarded themselves partial points or points for both options of an either/or measure. Then, reviewers read each application and its supporting documentation to evaluate and score the applications on each of the subcategory performance measures.

As previously mentioned, the measures were broken down into one or more minimum requirements and reviewers would assign a "Yes," "No," or "Did Not Apply" to each as appropriate. The database contained a field for reviewers to add comments pertaining to any of the minimum requirements or the decision that was made. The points for a measure would only be assigned when all minimum requirements had a "Yes" entered as a status. Partial points cannot be assigned for a performance measure.

A "No" response for any of the minimum requirements resulted in no points being awarded for that performance measure. For instance, for "Enhanced Dining," the reviewer would need to see back-up documentation that all of the following minimum requirements were met:

- 1. Include a detailed narrative describing your enhanced dining program.
- 2. Evidence that menu options are more than the entree and alternate selection.
- 3. Evidence that these options included input from a resident/family advisory group such as resident council or a dining advisory committee.
- 4. Evidence that the residents have had input into the appearance of the dining atmosphere.
- 5. Evidence that the Residents have access to food at any time and staff are empowered to provide it.



6. Supporting documentation can be resident signed testimonials, resident council minutes, minutes from another advisory group or a narrative and photographs of changes in the dining atmosphere.

If the home failed to provide evidence for any of the above mentioned requirements, a "No" response would be entered for that requirement resulting in the home receiving zero points for the performance measure.

The database entry fields were designed so that the total score being accumulated by the applicant was not apparent to the reviewer. This ensured that the supporting documentation for each minimum requirement for each performance measure was evaluated independently without knowledge of cumulative point thresholds.

After all of the applications had been evaluated, summary reports could be run showing nursing home scores, as well as detailed reports by nursing home showing all scores and reviewer comments for each minimum requirement.

C. Quality Assurance

Throughout the evaluation process, steps were taken to ensure the quality of reviews. Discussions between reviewers on ambiguous aspects of documentation allowed for a standardized approach to scoring the large number of applications. Also, the database was designed to guide the reviewer through each performance measure, documenting his or her decision on each minimum requirement during the review.

In redesigning the evaluation tool for 2011, new quality assurance measures were built in to ensure review integrity. First to ensure that a reviewer could not accidentally skip a minimum requirement when evaluating a performance measure, automatic system checks were designed to check the status of all minimum requirements before proceeding from one performance measure to the next. If any minimum requirement status was blank, the system would show an error message and ask the reviewer to double check any missing statuses. Second, the assigning of scores for performance measure was automated. Processes were built into the evaluation tool to read the reviewers' "Yes" or "No" answers to minimum requirements and determine if points should be awarded or not. If the system found all "Yes" answers for a performance measure, then points would be assigned. If the system encountered any "No" or "Did Not Apply" answers for a performance measure, then no points would be assigned. This more automated scoring process provided real-time updating of score reports as any changes were made to a review.

Finally during the site visits, reviewers took notes about their findings with regard to specific performance measures. While no new documentation was accepted, reviewers identified any instances where documentation may have been misinterpreted in the original evaluation of an application, and after speaking with nursing home staff, it was deemed appropriate to change the scoring based on what was originally provided. For example, a training sign-in sheet for



"Bathing Without a Battle" that was not clearly identified in the application could be verified on a site visit. Also, any situations where reviews were seemingly inconsistent on a performance measure were noted. Upon returning from the visits, all reviewer comments and binders were checked a second time with regard to those noted performance measures to ensure accuracy.



IV. 2011 P4P APPLICATION, SCORING, AND COMMENTS

A. Overview of Application

Pursuant to HB 08-1114 the Department is required to reimburse nursing homes in Colorado an additional per diem rate based upon performance.² The payment is made to support policies that create a resident-centered and resident-directed model of care in a home-like environment for Colorado's nursing home residents.³

A P4P program is one way the Department can provide an incentive payment rewarding Colorado nursing homes that provide high quality of life and quality of care to their residents. The program is designed to be financially appealing to providers, simple to administer, contain easily accessible data to determine compliance, and is built around measures that are important to nursing home residents, families and consumers. The measures are centered on two "domains", "Quality of Life" and "Quality of Care".

Each measure has assigned points that, when totaled, will determine the amount of additional reimbursement per patient day. The following table shows the amount of the per diem add-on that can be obtained for 2011.

Calculation of the Per Diem Rate Add-On
0 -45 points = No add-on
46 - 60 points = \$1.00 per day add-on
61 - 79 points = \$2.00 per day add-on
80 - 100 points = \$3.00 per day add-on

The performance measures for 2011 are shown below. They are divided into two general domains, Quality of Life and Quality of Care.

DOMAIN: QUALITY OF LIFE	DOMAIN: QUALITY OF CARE
Subcategory: Resident-Directed Care	Subcategory: Quality Of Care
Enhanced Dining	12 hours Continuing Education
Flexible and Enhanced Bathing	14 Hours Continuing Education
Daily Schedules	16 Hours Continuing Education
End of Life Program	Quality Program Participation

² 10 CCR 2505-10 Section 8.443.12.

³ See the SB 06131 Pay for Performance Subcommittee Report and Recommendations for discussion of the rationale behind performance measure selection. Retrieved on June 30, 2010 from http://l65.127.10.10/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1224913928031&ssbinary=true

DOMAIN: QUALITY OF LIFE	DOMAIN: QUALITY OF CARE
Subcategory: Home Environment	Subcategory: Nationally Reported Quality Measures
Resident Rooms	Falls
Public and Outdoor Space	High Risk Pressure Ulcers
Overhead Paging	Chronic Care Pain
Neighborhoods/Households	Physical Restraints
	Urinary Tract Infection
Subcategory: Relationships with Staff, Family, Resident, and Community	Subcategory: Influenza Immunization for Staff and Residents
50% Consistent Assignments	Staff Influenza Immunization
80% Consistent Assignments	
Internal Community	Subcategory: Home Management
External Community	10% Medicaid above state average
Living Environment	5% Medicaid above state average
Volunteer Program	
Subcategory: Staff Empowerment	Subcategory: Staff Stability
Care Planning	Staff Retention Rate
Career Ladders/Career Paths	Staff Retention Improvement
Person-Directed Care	Director of Nursing Retention
New Staff Program	Nursing Home Administrator Retention
	Employee Satisfaction Survey

Changes to the 2011 P4P Application

The 2011 Pay for Performance application is 28-pages long consisting of 12 pages listing each measure and 16 pages of appendices providing information on how to score specific measures. The 2010 report by the Public Consulting Group described the changes from the 2009 to the 2010 application. This section of the 2011 report describes the changes from the 2010 to the 2011 application.

⁴ Public Consulting Group, (2010, December), Nursing Home Pay for Performance Application Review and Evaluation, a report prepared for State of Colorado, Department of Health Care Policy and Financing, Denver, CO. pp.5-6. Retrieved on 6-15-2011 from

http://www.colorado.gov/cs/Satellite?c=Document C&childpagename=HCPF%2FDocument C%2FHCPFDetail&c id=1251585657555&pagename=HCPFWrapper

The description of the changes is discussed in three parts: changes in the scoring of measures, changes affecting the description or requirements of multiple measures, and changes affecting only one measure.

Changes in the Scoring of Measures

There were no changes in the value of the scores assigned to each measure. However, there were changes in the in the percentages used to score the five quality-of-care measures.

Quality of Care Measure	2010 Application	2011 Application
Falls	Score of 13.1 or less	Score of 13.7 or less
Falls	Score >13.1 but <= 15.2	Score >13.7 but <= 16.8
High-Risk Pressure Ulcers	Score of 5.1 or less	Score of 5.8 or less
High-Risk Pressure Ulcers	Score of > 5.1 but <= 7.1	Score of > 5.8 but <= 8.1
Chronic Care Pain Score	Score of 1.2 or less	Score of 1.2 or less
Chronic Care Pain Score	Score of >1.2 but <= 2.3	Score of >1.2 but <= 2.1
Physical Restraints	Score of zero	Score of zero
Physical Restraints	Score of 1.7 or less	Score of 1.4 or less
UTI	Score of 5.3 or less	Score of 5.6 or less
UTI	Score >5.3 but <= 6.7	Score >5.6 but <= 7.8

Changes Affecting the Descriptions or Requirements of Multiple Measures

Minimum requirements for each measure were reformatted in the application from a one-paragraph text comment to a list with a checkbox next to each item. This format change was added to help applicants easily keep track of requirements while preparing their application.

The requirement for a narrative or "detailed narrative" was added to the list of requirements for eleven measures. The requirement for a written detailed narrative had been part of the general application instructions on page one of the 2010 application and in 2011 was itemized in the list of requirements for eleven measures.

Measures using photographs were rewritten to say that the photographs had to be captioned to identify the area and provide examples of why the photograph was relevant to the measure. This change was added since applications in 2009 and 2010 would include multiple photographs but some applications used the same photographs in multiple parts of the application. Nor was it always clear what the relationship was between photos and the specific measure.

Changes Affecting Only One Measure

• A website was provided where the video "Bathing without a Battle" could be obtained.



- In the End of Life Program measure, the requirement that documents the quarterly review
 of advanced directives was sharpened to say that the documentation should include forms
 of four residents covering a one-year period.
- The description of the Neighborhood/Household measure was substantially rewritten and expanded to better define what indicators could be used to identify progress towards creating a neighborhood within a home.
- The Internal Community measure documentation was expanded to include the requirement that no less than 12 monthly minutes of neighborhood, community or learning circles be included.
- The Volunteer Program documentation description was changed to say that samples of sign-in/sign-out sheets could be used as documentation of hours of visit.
- The format of the description of the Care Planning measure was changed to emphasize that both ten initial and ten quarterly care plans with certified nursing assistant (CNA) signatures had to be included.
- The verification for the Person-Directed Care measure was changed to state that, if the facility was registered as an Eden registered home, a Planetree Designated Facility or had a CARF Person-Centered Care accreditation then the home was deemed to meet the requirements of the measure. The 2010 application had only included Eden registration.
- The New Staff Program requirement that current staff be involved in the recruitment of new staff was eliminated. Still kept were the requirements that current staff members be involved in the orientation and mentoring of new staff.
- The Medicaid Occupancy Average measure was changed by adding the statewide average Medicaid occupancy rate to the description of the measure. Adding the rate makes it easier for homes to know if their Medicaid occupancy rate is above the statewide rate. The documentation for the home's Medicaid occupancy rate was also changed to simply say "Submit copy of most recent data available." The previous documentation had required the facility to submit a certification page from its Medicaid cost report.
- The documentation for the Staff Retention measure was simplified to require only a staff roster of staff employed on December 31st with the names of those hired on or before January 1st highlighted.



B. Prerequisites for Participation

The Code of Colorado administrative regulations at 10 CCR 2505 8.443.12 at 2.a. and 2.b. set two prerequisites for applying for the P4P add-on to the per diem:⁵

- 2.a. No home with substandard deficiencies on a regular annual, complaint, or any other Colorado Department of Public Health and Environment survey will be considered for P4P
- 2.b. The home must perform a resident/family satisfaction survey. The survey must (a) be developed, recognized, and standardized by an entity external to the home; and, (b) be administered on an annual basis with results tabulated by an agency external to the home. The home must report their response rate, and a summary report must be made publically available along with the home's State's survey results

These prerequisites were unchanged in 2011 from prior application years.

Colorado Department of Public Health and Environment Survey

PCG reviewers were supplied with a definition of a substandard deficiency and used the Department of Public Health and Environment (CDPHE) website at http://www.cdphe.state.co.us/hf/ncf/index.html to check on homes. The upper left hand corner of the webpage provides search choices. The CDPHE database contains a list of Colorado nursing homes and the results of surveys and complaint investigations. PCG staff looked up each home in the CDPHE database and identified any deficiency that CDPHE assigned to the home that fit the definition of substandard and occurred within the time frame specified. The survey closest to January 2011 was deemed to be the most recent survey. All of the homes submitting applications met this prerequisite.

Resident/Family Satisfaction Survey

This prerequisite measure was defined in the 2011 P4P application as "Survey must be developed, recognized, and standardized by an entity external to the home. The acceptable verification said that the "Resident/family satisfaction surveys must have been conducted and tabulated between January 1 and December 31 of the previous year. A Summary Report, identifying vendor completing, must be attached to this application and made available to the public along with the home's State Survey Results".

⁵ http://www.sos.state.co.us/CCR/Rule.do?deptID=7&deptName=2505,1305 Department of Health Care Policy and Financing&agencyID=69&agencyName=2505 Medical Services Boar&ccrDocID=2921&ccrDocName=10 CCR 2505-10 8.400 MEDICAL ASSISTANCE - SECTION 8.400&subDocID=50025&subDocName=8.443 NURSING HOME REIMBURSEMENT&version=20



As in reviews conducted during prior application years, some homes supplied the full copy of the survey whereas others only supplied cover pages of the survey. Reviewers gave credit to those homes that only supplied the cover pages, reasoning that these were evidence that the survey had been completed.

In reviewing the seventy-eight applications submitted for 2011, 13 applications, or 17 percent, did not contain a resident/family survey. The table below identifies those homes that did not submit documentation of a completed resident/family satisfaction survey.

2011 Homes without Documentation of a Resident/Family Satisfaction Survey

Provider#	Facility Name
00565034	Centura Health -Medalion HC
71454241	Woodridge Park Nrsing & Rehab
05652631	Canon Lodge
05650734	Mount St. Francis Nursing Center
00685046	Regent Park Nursing & Rehab
05652367	Gunnison Health Care
37605216	Broomfield Skilled Nursing & Rehab
05654702	Doak Walker
05653274	CSV - Homelake
05655709	Villa Manor Care Center
05650742	Life Care Center Pueblo
82159815	CSV - Fitzimons
34432850	Ft. Collins HC Center

C. Score Reporting

Summary Chart Showing Scores of Homes

The following table provides a summary of the self-reported and reviewer scores by home.

Provider#	Facility Name	Points Available	Self Score	Reviewer Score
63934272	Allison CC	100	86	86
96339349	Alpine Living Center	100	61	50
77105753	Amberwood Court	100	77	71
83603041	Bear Creek Care & Rehab	100	54	54
71787267	Brookshire House	100	73	73
37605216	Broomfield Skilled Nursing & Rehab	100	64	51
55754244	Cambridge CC	100	83	79
05652631	Canon Lodge	100	51	46
05259525	Castle Rock CC	100	89	87
53308310	Centennial Health Care Center	100	35	43
00565034	Centura Health - Medalion HC	100	44	33

Provider#	Facility Name	Points Available	Self Score	Reviewer Score
75951274	Cheyenne Mountain Care & Rehab	100	62	39
37976231	Christian Living Communities - The Johnson Center	100	33	31
42988268	Christopher House	100	80	78
05650338	Clear Creek Care Center	100	69	69
05652607	Colorow Care Center	100	78	76
05650833	Columbine West Health & Rehab	100	58	49
05654223	CSV - Bruce McCandless	100	84	60
82159815	CSV – Fitzimons	100	68	65
05653274	CSV – Homelake	100	81	78
05652748	CSV – Rifle	100	63	48
05651922	CSV – Walsenburg	100	68	66
73422070	Denver North CC	100	91	91
05654702	Doak Walker	100	86	70
13086863	Eagle Ridge at Grand Valley	100	73	75
05650080	Exempla Colorado Lutheran Home	100	81	77
05653423	Fairacres Manor	100	80	80
99000792	Four Corners HCC	100	62	60
34432850	Ft. Collins HC Center	100	47	44
34620885	Garden of the Gods CC	100	34	23
05655410	Glen Ayr Health Center	100	60	50
05652367	Gunnison Health Care	100	32	30
42402069	Harmony Pointe NC	100	98	96
15526755	Highline Rehab	100	80	80
05653571	Hildebrand Care Center	100	72	61
05651245	Holly Heights Nursing	100	100	98
05655147	Holly Nursing CC	100	71	71
05652672	Horizon Heights	100	79	79
77678737	Jewell Care Center	100	63	43
34300724	Julia Temple Healthcare Center	100	45	39
05652565	Juniper Village - The Spearly Center	100	79	70
05652052	Juniper Village at Lamar	100	67	56
05652045	Juniper Village at Monte Vista	100	71	67
11651016	Kenton Manor	100	64	66
05653290	Lemay Avenue Health & Rehab	100	66	64
05653001	Life Care Center of Greeley	100	48	35
05650742	Life Care Center Pueblo	100	62	62
05652722	Life Care of Westminster	100	79	52
46279865	Mesa Manor Rehab CC	100	55	48
05650734	Mount St. Francis Nursing Center	100	68	47
25930834	Mountain View CC	100	63	56
05650155	Mountain Vista Nursing Home	100	77	31
85608742	Namaste Alzheimer Center	100	75	68
05651294	North Shore Health & Rehab	100	85	80

Provider#	Facility Name	Points Available	Self Score	Reviewer Score
26554739	North Star Community	100	79	79
16433548	Paonia Care & Rehab	100	69	52
54603528	Parkview Care Center	100	107	85
05652839	Pine Ridge Extended Care Center	100	61	58
00685046	Regent Park Nursing & Rehab	100	25	10
05652508	Rowan Community	100	88	83
19005296	San Juan Living Center	100	70	62
05652615	San Luis Care Center	100	79	77
05651534	Sandalwood Manor	100	69	66
16876334	Sierra HC Community	100	87	89
05656269	St. Paul HCC	100	93	69
05652789	The Peaks Care Center	100	72	74
05651880	The Valley Inn	100	77	39
05650114	University Park CC	100	87	46
08858721	Uptown Health Care Center	100	90	90
05651468	Valley View HCC	100	86	86
05655709	Villa Manor Care Center	100	88	81
89157231	Vista Grande Inn	100	69	65
05656343	Walsh Healthcare Center	100	74	48
05652664	Westwind Village	100	82	81
80636217	Wheatridge Manor NH	100	67	67
71454241	Woodridge Park Nrsing & Rehab	100	68	54
70601577	Woodridge Terrace Nrsg & Rehab	100	47	41
71956000	Yuma Life Care Center	100	59	56

The table shows instances where reviewers assigned a higher score than the home requested. This situation occurs when, in the judgment of reviewers, the applications contained documentation that the home qualified for a measure even though the home did not apply for that measure.

D. Application Comments

In previous reports PCG has discussed each performance measure. Rather than repeating this format for the third time, PCG has chosen to make selected comments about specific measures and measures in general.

Specific Performance Measure Discussions

Neighborhoods

At this time, PCG is not recommending any changes to the neighborhood measure, but does think a comment on it is worthwhile to make. Even with the enhanced definition, this is not an



easy measure to work with. It is a multi-dimensional measure that spans both the physical and social space within the home. Some homes have more money and can afford to remodel portions of the home to create distinctive physical areas. Discussions with staff indicate that some groups of residents are easier to work with when the group contains socially active and engaged residents. Moreover, having a neighborhood is more of a process than it is an end point.

Because of this complexity, applications containing partial implementation documentation are hard to evaluate. For example, consider the home with 60 residents. The wings of the home have different signage and different décor, but do not have neighborhood meetings. Rather, two groups meet every morning. Spanish-speaking residents have an all-home meeting every morning, and English-speaking residents have an all-home meeting every morning. Reviewers audited this home and attended the morning meeting. The meeting was like the old fashioned New England stereotype of the town hall meeting. The home has thus created a meaningful social organization within the home, but the organization is not linked to where persons live within the home.

For example, consider also situations where some elements appear to be present but others do not. The home has signage and different colors denoting unique physical spaces within the home. The narrative indicates that residents had input into the décor changes and there are separate spaces e.g. a lounge, where persons from the neighborhood can meet and do activities. There are sparse staff notes of minutes of meetings. There is little mention of activities done by neighborhoods. Rather the home appears to put on external trips that are available to anyone in the home and internal events are also organized on an all-home basis. Thus, it is not clear to the reviewer to what extent residents have developed a local attachment to the other residents in their part of the home.

As stated above, PCG makes no recommendations for changes to this measure but does think it useful to flag that there are grey areas in the scoring of the measure as currently defined. Since the objective of neighborhoods/households is to deinstitutionalize the environment of the home by honoring resident choice in their daily schedules though consistent relationships in smaller environments, the current minimum requirements of the measure may not fully capture the intent of implementation and resulting potential outcomes.

Consistent Assignments

The Consistent Assignments measure contains a requirement that homes should submit "4 CNA assignment sheets from each neighborhood (2 from each of 2 different shifts/neighborhoods) for a previous consecutive 8 week period illustrating consistent assignment." This requirement can result in the home providing more than a hundred pages of back-up documentation. For example, a daily staff list of assignments for different parts of the home can run to two or more pages and 56 days of documentation are required.



An alternative that the Department might consider is to require documentation for consistent assignments under the same methodology that is used by the Advancing Excellence program. The program views consistent assignments from the resident's perspective of how many caregivers interact with them over a given time period. The Advancing Excellence Campaign has defined consistent assignment as at least 85% of long stay residents in the nursing home having a maximum of eight CNA caregivers over a four week period, and at least 85% of short stay residents having a maximum of eight CNA caregivers over a two week period.⁶ A tracking tool is already available to homes and the Department on the Advancing Excellence website at: http://www.nhqualitycampaign.org/star_index.aspx?controls=resByGoal#goal2. The majority of Colorado's nursing homes are enrolled in Advancing Excellence, and while not all of these homes pursue consistent assignment as a goal, many of them would benefit from consistent documentation.

Care Planning Documentation

In reviewing the documentation for the Care Planning measures, reviewers discussed whether simply asking for CNA testimonials might achieve the purpose of the measure. Requiring testimonials may impose less application burden on persons filling out the form instead of having to provide 10 initial and 10 quarterly.

The Staff Retention Rate

Research studies have pointed out the relationship between staff turnover and quality of care, and the pay-for-performance measures understandably include a staff retention measure and an improvement in staff retention measure. The staff retention measure uses a benchmark of 55%. Given the importance of staff retention, the state might consider adding a brief comment to Appendix 5 stating why 55% or better is an appropriate goal for staff retention.

Calculation of Staff Retention Rate

Appendix 5 states that supporting documentation include a "December 31 payroll roster listing names of all employees (except DON and NHA) AND dates of hire, with employees hired on or before January 1 highlighted." The directions for calculating the staff retention rate say to take the number of individuals who were on the payroll January 1 and the number of those individuals who were still on the payroll on December 31 and calculate the percentage of employees who remained the entire year.

After reviewing the documentation and verifying the percentage calculations, PCG reviewers felt it might be easier to require a payroll roster of all employees who were employed on January 1 and request applicants to highlight the names of persons who were still employed on December 31. The applicant still has to identify the employees who left, however, the use of a January 1 payroll roster permits verification of the total number of employees at the start of the year.

⁶ http://www.nhqualitycampaign.org/star index.aspx?controls=resByGoal#goal2



PCG reviewers noted the requirements in Appendix 5 were changed from 2009 to 2010 so that only one payroll roster was required, however, the 2010 text in Appendix 5 still refers to two payroll rosters in the comment "...number must be verifiable thru submitted supporting documentation – (1) or (2) above."

Documentation for DON NHA Retention

A modest clarity to this measure could be added if the text describing the documentation could suggest examples of types of documentation e.g. payroll rosters.

General Application Discussions

Detailed Narratives

The 2011 application listed a narrative or detailed narrative as a requirement for 11 of the performance measures, marking a change from a blanket requirement for a detailed narrative as stated on page one of the 2010 application. PCG uses a collegial process for reviewing the narratives. All reviewers sit in a conference room, work on applications and join in the discussion on issues raised by other reviewers. The change in the minimum requirements that explicitly repeated the need for a detailed narrative in multiple requirements naturally raised the issue of just what was "a detailed narrative."

Homes respond to this narrative requirement in a wide variety of ways, ranging from a few sentences to a few pages per narrative. The range of narratives encountered prompted the reviewers to conduct a quantitative analysis in order to provide a more objective foundation for the concept of a "detailed narrative" going forward.

The Enhanced Dining and External Community narratives were chosen as two sample performance measures to examine because of the definitive discussion points outlined in the application checklist for each measure. First, a reviewer compiled a list of all homes applying for each of the two measures. Then, for the quantitative analysis, the reviewer documented multiple data points on each narrative provided. These data points included both a word count and a count of how many discussion topics were touched upon. The discussion topics for each measure were identified based on the list of requirements outlined in the application.

For the External Community narratives, the three discussion points derived from the application requirements were:

- 1. How is the external community invited into the home?
- 2. How is the external community informed of home news and events?
- 3. How do residents stay engaged with the external community?

The table below summarizes the data collected from the External Community narratives, broken into groups by word count.

External Community Narrative Analysis

Word Count	Numer of Homes	Average Number of Discussion Points
0-200	39	1.82
201-400	21	2.10
401+	13	2.31

The average external community narrative contained 339 words and four homes had narratives that were 1500 words or greater. The trend data show that longer narratives covered more discussion points than shorter narratives. For example the average narrative containing 201 to 400 words discussed an average of 2.10 of the three possible discussion points. A look at the narrative word counts shows that there were 44 homes that had narratives of 299 words or less and only five of the 44 discussed all three external community discussion points. Whereas there were 29 homes with narratives of 300 words or more, and 11 of them discussed all three discussion points. Based on the analysis of the word count and readings of the external community narratives, reviewers concluded that an average of one paragraph (approximately 100 – 200 words) per discussion point provided a workable guideline on describing adequate detail without being too minimal or too excessive.

For the Enhanced Dining narratives, the four discussion points derived from the application requirements were:

- 1. Menu options are more than the entrée and alternate selection.
- 2. Options included input from a resident/family advisory group.
- 3. Residents have had input into the dining atmosphere.
- 4. Residents have access to food at any time.

The analysis performed on the Enhanced Dining narratives was two-fold, including a comparison of the word count to the number of discussion points covered and to a subjective evaluation of the level of detail. The detail grade was given on a 0-5 scale with 0 not mentioning any discussion points and 5 describing all four points in detail, with the intermediate values representing detailed coverage of varying amounts of points. The table below summarizes the data collected from the Enhanced Dining narratives, broken into groups by word count.



Enhanced Dining Narrative Analysis

Word Count	Numer of Homes	Average Number of Discussion Points	Average Detail Grade
0-200	17	2.35	2.12
201-400	28	2.96	3.25
401-600	20	3.40	3.90
600+	9	3.78	4.44

Because the Enhanced Dining measure required coverage of four discussion points, the narratives were generally longer containing an average of 386 words. A look at the narrative word counts shows that there were 38 homes that had narratives of 399 words or less and only nine of the 38 discussed all four enhanced dining requirements. Whereas there were 36 homes with narratives of 400 words or more, and 23 of the 36 discussed all four discussion points. As with the External Community narratives, longer narratives tended to cover more of the discussion points. More words also corresponded to a greater level of detail. If the same 100 – 200 word average paragraph length is applied, narratives with four or more paragraphs were found to be best able to cover the four necessary topics.

In addition to quantitative counts, reviewers also subjectively rated the quality of the narratives and used "an average detail grade" to score the narratives. This is admittedly a subjective measure, however it did correlate well with the quantitative results. Again, reviewers concluded that it takes paragraphs of about 100 to 200 words to convey a level of detail about a requirement that would appear to average readers to be a "detailed narrative."

What Makes a Good Narrative?

To supplement the quantitative analysis, the review team has also developed illustrative suggestions on what makes a detailed narrative that might be of help to persons having to write narratives for performance measures.

In the opinion of the review team, a good narrative should convey how the home fulfills the criteria for each measure. The appropriate level of detail may vary by performance measure, but in all cases a good narrative is a function of organization, length, coverage of performance measure criteria, and relevancy of details. The writer may use the performance measure descriptions and criteria checklists in the application as a good guideline for content. The writer should not merely mention the discussion points, but should also describe how the home accomplishes them. The narrative for each performance measure can provide excellent context for the rest of the supporting documents provided. As such, organization of the narrative into separate paragraphs addressing each requirement specifically can help to clarify what the supporting documents are meant to show and how the home's programs are meeting the performance measure requirements.. The Enhanced Dining performance measure is used below to illustrate the content of a proper narrative.

Sub-category: Resident Directed Care	Resident Definition/Minimum Requirement(s)/Required Documentation				
Enhanced Dining	Menus that include numerous options, menus developed with resident input. The dining atmosphere reflects the community. Residents have access to food 24 hours/day, and staff are empowered to provide food when resident desires it. Dining atmosphere is defined as the table settings, table cloths, lighting, music, servers and dining style (restaurant, salad bar, menu, buffet).	3			
M	Minimum requirement(s) with supporting documentation				
Include a detailed narrative describing your enhanced dining program					
Evidence that menu options are more than the entree and alternate selection					
Evidence that these options included input from a resident/family advisory group such as resident council or a dining advisory committee					
Evidence that the residents have had input into the appearance of the dining atmosphere					
Evidence that the Residents have access to food at any time and staff are empowered to provide it					
	documentation can be resident signed testimonials, resident council n m another advisory group or a narrative and photographs of changes is sphere				

The enhanced dining measure consists of four main discussion points: menu options, resident advisory group for menu selection, resident input into the dining atmosphere, and access to food at all times. A good narrative will touch on each of these points, describing how the home's programs meet these requirements and what documentation has been provided to prove this. An example has been provided under each discussion point below.

1) Menu options are more than the entrée and alternate selection.

Do more than simply state that there are multiple menu options. Describe what they are and how the menu varies from meal to meal and day to day. The details serve to give evidence of the options as well as to provide context for the supporting documents.

For each meal we provide our residents with a wealth of menu options to suit different tastes and dietary needs. For breakfast we offer a buffet of yogurt, cereal, fruit, baked goods, eggs, hash browns, and breakfast meats as well as a 'made to order' omelet bar. For lunch and dinner our menu consists of a main entrée, alternative, and a list of "always available" options such as a salad bar, deli sandwiches, and pasta. The entrées change daily, and the menus are rotated on a monthly basis. We use our outdoor barbecue in the summer to have weekend events and special events like our Cinco de Mayo celebration. We have included our menu for May, as well as our "always available" menu as well as photos of our outdoor events.

2) Options include input from a resident/family advisory group.

This discussion should show that residents have a voice in decisions regarding food and menu selection. Some details such as who is involved, how often they meet, and how the resident input translates into decisions about food and menu selection would support that statement.

The Dining Committee meetings serve as open forums where residents are able to discuss and give their input on menu and food selection. All residents are welcome to attend and participate in the weekly meetings on Monday evenings with the dining staff. Each meeting, the residents in attendance have the opportunity to express concerns, complaints, and praise for the past week's menus. They can then make suggestions for items on future menus. Based on the discussion, the dining staff develops the menu for the next menu cycle. The menus thus constantly evolve based on resident input. For those unable to attend the Dining Committee meetings, we have set up a suggestion box so their opinions can also be heard. The included Dining Committee minutes and samples from the suggestion box serve to illustrate the resident participation in the dining program.

3) Residents have had input into the dining atmosphere.

This section should similarly demonstrate the residents' roles in decision making. While describing the dining atmosphere, explain how residents contributed to certain decisions and why they particularly enjoy certain aspects of the dining experience.

The Dining Committee also affords residents the opportunity to express their opinions about the overall dining atmosphere. During our recent renovations of the dining hall, the staff relied primarily on resident input when choosing paint colors, fabrics, lighting, and place settings. Our residents also spearheaded the movement towards a restaurant style set-up with menus and server for greater ease in the dining experience. Residents enjoy the light music played in the background for its calming effect. The playlists are established weekly at the Dining Committee meetings.

4) Residents have access to food at any time.

Finally, describe the 24 hour a day food options and how residents may access them. The description should include specifics about what foods and liquids are offered, their locations, and the process of obtaining them.

Food and drinks are available 24 hours a day in each neighborhood. Snacks include crackers, cookies, sandwiches, fruit, and chips. Residents must simply ask a nurse to access the food at any hour of the day. Some residents also have refrigerators in their rooms where they may keep their own personal food and drinks.

As shown above, a detailed narrative should touch upon each main criteria point and illustrate how the home meets the requirement. The narrative can be concise while still providing enough relevant detail to provide a context for the supporting documentation.



The review team hopes that these suggestions about reasonable length and the structure of what to write may be of use to persons who are tasked with having to write a "detailed" pay-for-performance narrative.

Submission formats

Reviewers receive a range of submission formats. Any submission media is acceptable. It does not matter whether the submission is on a compact disc, is in a binder, or simply a collection of paper in a FedEx box. However, how the submission is organized is important. Submissions should have tabs, folding pages, plastic sleeves, paper clips, or some other marker clearly indicating the material discussing a single measure. It is helpful to reviewers if the material is organized sequentially matching the order in which the measures are discussed in the application. Submissions on a compact disc can be organized by folders with clear labels so that a reader can identify which measure(s) are discussed in each folder. This point is raised because PCG reviewers do encounter applications consisting of one large stack of paper without sections dividing them.

Unnecessary documentation

Homes are also submitting unnecessary documentation. Examples include:

- Complete copies of the CMS 2567 Statement of Deficiencies and Plan of Correction;
- Complete copies of family, resident, and employee satisfaction surveys;
- Copies of bathing preference forms for every resident in response to the requirement that "Residents are interviewed about choices, regarding time, choice of caregiver, and type of bath;"
- Copies of Daily Schedule preference forms for every resident when the Daily Schedule requirements refer to a narrative and four resident care plans and testimonials;
- Transcripts showing all courses taken by each employee instead of 20 percent of employees in each job category;
- Descriptions of all courses taken by employees regardless of what the course was about when the Person-Directed Care and Continuing Education requirements only request a list; and
- Multiple pictures of the same event or place when fewer photos would suffice.

Reusing Documentation

Comparisons of applications across time show that homes are resubmitting the same documentation they submitted in past years. For some material such as volunteer policies, end of life programs, career ladders and other relatively enduring policies this is appropriate. For other materials such as minutes of council meetings, testimonials, and photos of events it is more appropriate to submit material generated in the current application year.



Testimonials

Testimonial submissions have no standard format and are not defined in the application. Reviewers have accepted a wide range of testimonials since the format of the testimonial is not defined in the application. These formats include:

- Similarly-worded testimonials that the home prepared and each person signs a copy separately;
- Testimonials that have signatures versus testimonials that consist of quotes and are not signed;
- One generic statement that multiple persons sign; and
- Testimonials with duplicate paragraphs where it is clear that the home supplied draft testimonials for persons to write so the testimonial is a combination of what the home supplied and what the person added.

Minimum Data Set 3.0 and Nationally Report Quality Measures

The implementation of MDS 3.0 offers the state an opportunity to revisit the nationally reported quality measures in the application. To increase validity and reliability of assessment tools, MDS 3.0 contains improved sections and revised MDS items. In particular, the assessment of pain contains major revisions, and sections on falls and pressure ulcers also contain important changes. At minimum, PCG recommends that the state revisit the quality measures to determine the implications of MDS 3.0 on scoring.

Section F of the Minimum Data Set 3.0 and Daily Preferences

Section F of version 3.0 of the Centers for Medicare and Medicaid Services Minimum Data Set (MDS) has been substantially changed from version 2.0. The new Section F is titled "Preferences for Customary Routine and Activities" and its intent is described as "... to obtain information regarding the resident's preferences for his or her daily routine and activities. This is best accomplished when the information is obtained directly from the resident or through family or significant other, or staff interviews if the resident cannot report preferences."

The sixteen manual pages describing Section F implement and systematize the collection of information from residents as to what their preferences are. A list of the preferences, taken from the Centers for Medicare and Medicaid Service (CMS) MDS 3.0 manual is shown below. An issue for future consideration is how does the collection of preference information in the new MDS 3.0 impact the collection of preference information used in the pay-for-performance program. For example, can information on preferences be used in pay-for-performance measures? Can individual preference forms now used be eliminated and be replaced by MDS information? Can the section F manual material be used to train staff to elicit preferences from residents? PCG is not currently recommending any changes to the application pertaining to



Section F of the MDS 3.0, but believes the use of this data should be part of ongoing discussions with the Nursing Facility Advisory Committee.

F0800: Staff Assessment of Daily and Activity Preferences

F0800.	Staff Assessment of Daily and Activity Preferences			
Do not c	onduct if Interview for Daily and Activity Preferences (F0400-F0500) was completed			
	nt Prefers:			
Checkail that apply				
	A. Choosing dothes to wear			
	B. Caring for personal belongings			
	C. Receiving tub bath			
	D. Receiving shower			
	E. Receiving bed bath			
	F. Receiving sponge bath			
	G. Snacks between meals			
	H. Staying up past 8:00 p.m.			
	I. Family or significant other involvement in care discussions			
	J. Use of phone in private			
	K. Place to lock personal belongings			
	L. Reading books, newspapers, or magazines			
	M. Listening to music			
	N. Being around animals such as pets			
	O. Keeping up with the news			
	P. Doing things with groups of people			
	Q. Participating in favorite activities			
	R. Spending time away from the nursing home			
	S. Spending time outdoors			
	T. Participating in religious activities or practices			
	Z. None of the above			

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 $^{^7\} https://www.cms.gov/NursingHomeQualityInits/45_NHQIMDS30TrainingMaterials.asp$

V. ON-SITE REVIEWS

A. Selection of Homes to Review

As in prior years, reviewers were required to perform on-site reviews of at least ten percent of nursing homes in the applicant pool, which consisted of 78 homes in 2011. Reviewers consulted with the Department and determined that ten homes would be selected for on-site reviews. In determining which of the 78 homes would be selected, reviewers considered Colorado Code at 10 CCR 2505 section 8.443.12 4. which states that "Facilities will be selected for onsite verification of performance measures representations based on risk." Taking this statement into consideration, the selection of homes included both purposive and random sampling.

First, during the review of applications, reviewers took note of any instances where they were left with a question or idea that could warrant selection for an on-site review. A master list was maintained that could be consulted during the selection process. Five homes were noted with intriguing reasons that could merit an on-site review:

- Horizon Heights and Westwind Village shared certain documentation, such as pictures, in their applications. As a result, they were chosen in order to examine how they functioned together.
- Mount St. Francis showed documentation of very significant culture change during the application year and it was determined that the home could be an interesting example of change.
- A number of Juniper Village homes showed up in the 2011 applicant pool for the first time, so reviewers decided that selecting one of these homes would add a good addition to the on-site reviews.
- Fairacres Manor received all of the points applied for in both the 2010 and 2011 application years, which made them a good candidate for an on-site review considering the high point totals and apparent understanding of the application.

When it came time to begin the selection process, reviewers concluded that any homes that had been visited for prior application years did not present as high of a risk and should therefore be excluded from the pool in 2011. The remaining homes were grouped into geographic regions to ensure that homes from across the state would be part of the sample. The five homes listed above were selected first, leaving five homes to be chosen at random. A combination of geographic location and varying point levels was used to determine the remaining five homes.

Based on the above criteria for selection, the following ten homes were chosen for an on-site review:

- Columbine West Health & Rehab
- Fairacres Manor
- Holly Heights Nursing Center

- Horizon Heights
- Jewell Care Center
- Juniper Village The Spearly Center
- Mount St. Francis Nursing Center
- Parkview Care Center
- St. Paul HCC
- Westwind Village

B. Methods Used To Review Homes

The visits to the ten nursing homes involved two distinct phases. In each case a tour of the building was undertaken and a meeting with administrative staff was held.

Home Tour

The purpose of the tour was to obtain a better idea of the physical environment of the facility and the programs of the home. Generally, the reviewers used the tour to obtain verification of performance measures that could be visually observed. These included the:

- degree to which resident rooms were personalized;
- amount of institutional objects in hallways such as drug carts, lifts, and wheelchairs;
- home décor of the bathing area;
- presence of volunteers;
- presence of community groups;
- access of residents to food outside their main dining area;
- use of an overhead paging system;
- presence of animals and plants;
- memorial areas in remembrance to former residents, and
- evidence of neighborhoods.

Discussion with Staff

The meeting with administrative staff focused on the review of the application. The purposes of the review were to:

- learn how the application was put together;
 - o why did the home apply?
 - o when did the home start work on it?
 - o did the home receive any help from any one in putting it together?
- discuss each section of the application;
- learn why decisions were made to apply for some measures but not others;
- provide the administrative staff with the reviewers' reaction to the documentation;



- discuss the documentation with the home, and
- solicit opinions from the nursing home staff as to how to improve the process.

Resident Interviews

The resident interviews were conducted to accomplish two main goals:

- Obtain first-hand verification of the performance measures for the individual home.
 There are components (e.g. bathing environment) that can be seen on a tour of the home,
 so the interview is an additional opportunity to assess certain measures, (e.g. consistency
 assignments, internal and external community) which are not necessarily evident through
 a tour of the home.
- Assess any commonalities in findings of resident interviews from the cross-section of homes. This could be particularly valuable in providing additional insight into the overall efficacy of the P4P program from a resident perspective.

The reviewers maintained the position taken in prior years that no supplemental documentation would be accepted during a site visit. This decision was guided by administrative regulation 8.443.13 3., stating that "The required documentation for each performance measure is identified on the application and must be submitted with the application." Applications and supporting documentation as received are considered complete. Reviewers did not accept additional information, such as material that had been accidently omitted from the application. If, however, the visit to the home showed reviewers had not correctly understood information that was already in the application, then that changed understanding was used to review the scoring of the measure.

C. Site Visit Comments

During the site visits, reviewers collected noteworthy comments from administrators and other nursing home staff members regarding the P4P application.

- Knowledge Sharing- One home mentioned that they would like to see a meeting or conference where employees from different homes could share the changes going on at their respective homes. This could especially help those homes who are in the early stages of culture change by providing insight into the experiences of mentor homes that have already gone through the implementation process. It might also provide those homes with smaller budgets ideas for inexpensive ways to help start their culture change initiatives.
- <u>Case Mix-</u> Administrators of homes representative of mental and behavioral health environments felt that it was difficult to convey resident involvement in the home through the current application. For example, measures such as End of Life and Flexible

and Enhanced Bathing are less representative of this younger and more independent population.

- Outdoor Spaces- During visits to urban environments in downtown Denver, reviewers observed that the homes had created outdoor spaces that still reflect the intent of the application measure. Patios were enclosed with music piped in from speakers, so street and city sounds weren't evident. Homes also had vegetable or flower gardens maintained by the residents.
- Application Format- Nursing home administrators (NHAs) had questions regarding submission format. These included questions concerning the preferred submission medium CDs or binders, and the best format and layout of the application. An NHA also suggested that it would be helpful if the application contained criteria or points to address when writing a testimonial. Others felt the application has become much easier over the past few years and that the format with checklists has helped to navigate the process.
- <u>Changes in Quality Measures</u>- There were also questions from NHAs wondering how the quality measures will change on the next application due to MDS 3.0.

During site visits, reviewers asked administrators, staff and residents to describe the impact of the P4P application on the operational processes and outcomes in the home.

- Relationships- In interviews, homes emphasized a resident focus with a concentration on the relationships between staff and residents. This impact was confirmed by many resident interviews where residents described the facility as "home" and "safety". One administrator did note that the impact of relationships was difficult to convey through the current application measures.
- <u>Staff Outcomes</u>- Multiple homes indicated that staff satisfaction and retention has improved though implementation of P4P practices. Several homes also reported 0% use of agency staff.
- Quality of Care- Homes reported improvements to quality of care through an increased emphasis on quality initiatives. One administrator also cited the improved certified nursing assistant (CNA) and resident relationships as a primary factor in quality improvements, because CNAs are often the first to spot issues when they know resident behaviors so well.
- <u>Choice</u> Homes highlighted the importance of resident choice in schedule and caregivers.
 Administrators and staff also described supportive processes that had to change to accommodate resident choice in these areas such as changes to the "med. pass" and dining times. For the most part, resident interviews confirmed that they had choice in



their daily schedules. However, interviews did indicate that, even though the home has implemented the practice of providing choice, longstanding residents may not be aware that they can ask for changes in their schedule.

- <u>Care Planning</u>- There were indications that changes to care-planning and computer based
 "I Care Plans" assisted in accommodating resident preferences. However, one home noted that state surveyors may not be supportive of the I Care Plan practice.
- <u>Dementia-</u> Multiple homes highlighted dementia sensitivity training as part of ongoing education for staff in the home.
- Environmental Transformations- Homes visited were either in the midst of transforming
 the physical environment or had plans to undergo renovations in the coming year. These
 homes indicated that these are often iterative, one-unit-at-a-time, projects. Homes also
 noted that the application measures have supported organizational leadership in making
 renovation investment decisions.
- P4P has given them inspiration—Multiple homes indicated that they choose implementation initiatives for the year based on the P4P application. Interviews at the homes indicate that staff members are aware of actions that need to be taken to make the home more resident centered, e.g. the director of nursing that stated how they planned to take down the plexiglass on top of the nursing station desk because they knew it was not "homelike" and were going to change it.

VI. COLORADO P4P PARTICIPATION ANALYSIS 2009 - 2011

A. Participating Homes by Application Year

The P4P program has now been in effect for three years, and PCG has analyzed the participation of homes over the 2009 – 2011 period. The table below shows the number of homes participating in the program during each application year, broken down by the number of years participating.

Number of Homes Participating by Application Year

	Number of Homes Participating			
Participation Years	2009	2010	2011	
2009 - 2011	57	57	57	
2010 & 2011	•	11	11	
2009 & 2011	1 :	•	1	
2010 & 2009	18	18	•	
2011 Only	-		9	
2010 Only	-	12	-	
2009 Only	14	-		
Total Applicant Homes	90	98	78	

There have been a total of 122 participant homes over all three years of the P4P program, 78 of which applied for the 2011 application year. 57 of these 78 homes participated in all three application years, 12 had applied during one prior application year, and nine were applying for the first time in 2011. 14 homes participated only in 2009 and 30 homes stopped participating after 2010.

PCG was able to use the application data from these participant groups to examine trends over the 2009 - 2011 period, focusing especially on the group of 57 homes participating in all three years.

B. Score Improvement Analysis

PCG identified multiple trends in score improvements for homes participating in the P4P program over multiple years. First, the table below breaks out the 78 homes that applied in 2011 into three groups based on how many years they have participated and shows an average reviewer score for each group.

Average Reviewer Score of 2011 Applicant Homes by Number of Years Participating

Category	Average Reviewer Score	
Homes Participating 2009 - 2011	67.5	
Homes Participating 2010 & 2011	48.3	
Homes Participating 2011 Only	48.0	



There was only a minimal difference of .3 points between the group of homes participating for two years and the group of homes applying for the first time in 2011. However, the group of homes that have participated in all three years of the program showed an average reviewer score approximately 19 points higher than the rest of the homes applying in 2011. This trend shows that the three-year group has successfully implemented significantly more programs to meet the application performance measures than other homes in 2011.

The second trend found in score improvements relates to the annual improvement for the core group of 57 homes participating in all three years. The table below shows the average reviewer score for these 57 homes in each year of the program.

· Annual Improvement in Average Reviewer Score for Homes Participating All 3 Years

Category	2009	2010	2011
Average Reviewer Score	60.0	64.5	67.5
Annual Score Improvement		4.5	3.0
Percent Score Improvement	DE LA SECULIA	7.5%	4.7%

The average reviewer score for this group of homes has steadily increased in each year of the program, showing a 7.5 percent increase from 2009 to 2010 and a 4.7 percent increase from 2010 to 2011. These score improvements coupled with the overall higher 2011 average score shown in the earlier table illustrate that the P4P application is incentivizing continuous annual improvement for homes.

C. Self Score vs. Reviewer Score Analysis

PCG also compared self scores with reviewer scores to determine how well homes were identifying the performance measures that they qualify for under the application requirements. For this analysis, PCG again focused on the group of 57 homes participating in all three years to determine how this group was improving over time. The table below shows the average self score, average reviewer score, average point change, and average improvement in self scoring for each year of the program.

Improvement in Average Point Change from 2009 to 2011

Category	2009	2010	2011
Average Self Score	72.8	74.5	74.6
Average Reviewer Score	60.0	64.5	67.5
Average Point Change	(12.8)	(10.0)	(7.1)
Average Improvement in Self Scoring		2.9	2.9

For these 57 homes, the average point change decreases steadily in each year implying less of a gap between what reviewers think and what the homes think. While the average self scores are fairly similar in all three years, increasing average reviewer scores create an approximate three

point reduction in average point change each year. This improvement is likely due to multiple factors, including improved understanding of the application and increased implementation of programs by homes. However, a significant factor in this improvement is also likely due to improved clarity of performance measure requirements over time. In the second year of the program, the 2010 application incorporated changes from the 2009 application. Three new performance measures were added, available points were redistributed, and the requirements for performance measurements were detailed at much greater length with lists of example documentation. The 2011 application did not include as many drastic changes, but was again reorganized to include requirements in checklist form and to make other key clarifications.

To identify which performance measures were the most well-defined and the easiest for homes to accurately self score with supporting documentation, PCG examined how often each performance measure was being confirmed by reviewers. The table below shows the percent of homes with a self score for each performance measure that was confirmed by reviewers and is ranked by 2011 percentages. As is noted below the table, some percents are shown as greater than 100 percent due to a small number of instances when a home would not self score but a reviewer would find documentation and award the points anyway. On measures containing multiple point thresholds, it is also possible that a reviewer would deny the threshold that a home applied for and award for a different threshold based on the documentation provided.

Percent of Homes with Score Confirmed by Performance Measure (Ranked on 2011 Percentages)

	% of Homes with Score Confirm		
Performance Measure Title	2009	2010	2011
Chronic Care Pain (High)	83%	100%	138%
UTI (Low)	N/A	87%	111%
+6 Continuing Education	78%	72%	100%
Quality Program Participation	93%	92%	100%
High-Risk Pressure Ulcers (Low)	79%	76%	100%
Resident Rooms	98%	93%	99%
Staff Influenza Immunization	N/A	91%	98%
Physical Restraints (Low)	95%	83%	96%
Chronic Care Pain (Low)	97%	84%	96%
Staff Retention Rate	92%	97%	96%
New Staff Program	70%	70%	95%
Living Environment	95%	85%	95%
Falls (High)	N/A	80%	94%
Falls (Low)	N/A	95%	94%
High-Risk Pressure Ulcers (High)	88%	89%	93%
Physical Restraints (High)	71%	76%	93%
Volunteer Program	87%	92%	92%
Career Ladders/Career Paths	85%	84%	92%
External Community	98%	95%	89%
Daily Schedules	84%	75%	88%

	% of Homes with Score Confirmed*			
Performance Measure Title	2009	2010	2011	
80% Consistent Assignments	73%	89%	87%	
Overhead Paging	56%	81%	87%	
Employee Satisfaction Survey	91%	86%	86%	
Person-Directed Care	76%	63%	86%	
Flexible and Enhanced Bathing	71%	81%	86%	
Care Planning	74%	87%	85%	
UTI (High)	N/A	56%	85%	
NHA Retention	92%	91%	84%	
5% Medicaid	24%	94%	83%	
DON Retention	92%	77%	83%	
Public and Outdoor Space	89%	87%	82%	
End Of Life Program	77%	79%	81%	
Internal Community	90%	74%	80%	
Enhanced Dining	65%	73%	77%	
10% Medicaid	85%	49%	76%	
50% Consistent Assignments	67%	87%	75%	
Neighborhoods/Households	58%	57%	71%	
Staff Retention Improvement	33%	25%	67%	
+2 Continuing Education	45%	45%	50%	
+4 Continuing Education	56%	70%	33%	

^{*} The "% of Homes with Score Confirmed" includes cases where points were substantiated with documentation but the nursing home did not self score.

It is not unexpected that the upper half of the table includes many of the metric-oriented performance measures such as the quality measures, policy-oriented measures such as New Staff Program or Volunteer Program, and environment measures with fairly straightforward documentation requirements such as Resident Rooms (pictures) or Living Environment (testimonials and pictures). The lower half of the table presents some evidence of those measures with documentation requirements that are less clear and are more open for interpretation. Many of the Resident-Directed Care and Home Environment measures were found to be confirmed less often, such as Enhanced Dining, Internal Community, and Neighborhoods/Households. Using Neighborhoods/Households as an example, PCG presented a discussion of these measures containing greater ambiguity in Section IV. D. of this report.

D. Performance Measure Frequency Analysis

Finally, PCG examined the frequency of those performance measures being applied for and those measures being awarded by reviewers. The first table below shows the percent of total homes in an application year with a self score for each performance measure. Performance measures are ranked by a weighted average frequency over the three years.

Percent of Total Homes with Self Score by Performance Measure (Ranked by 3 Year Weighted Avg.)

	% of Total Homes with Self Score			
Performance Measure Title	2009 (90 Homes)	2010 (98 Homes)	2011 (78 Homes)	3 Year Weighted Avg.
Resident Rooms	99%	98%	100%	99%
Living Environment	97%	93%	94%	94%
Volunteer Program	94%	92%	96%	94%
Career Ladders/Career Paths	93%	96%	92%	94%
Enhanced Dining	92%	92%	95%	93%
External Community	92%	93%	94%	93%
Public and Outdoor Space	91%	88%	94%	91%
End Of Life Program	91%	87%	90%	89%
Staff Retention Rate	83%	91%	87%	87%
Quality Program Participation	84%	89%	81%	85%
Flexible and Enhanced Bathing	91%	80%	83%	85%
Daily Schedules	88%	81%	85%	84%
80% Consistent Assignments	89%	82%	79%	83%
New Staff Program	88%	81%	81%	83%
Overhead Paging	80%	81%	87%	82%
Employee Satisfaction Survey	86%	74%	85%	81%
Staff Influenza Immunization	N/A	80%	68%	74%
Internal Community	77%	63%	69%	70%
Care Planning	76%	62%	69%	69%
Person-Directed Care	69%	63%	65%	66%
Neighborhoods/Households	69%	62%	63%	65%
+6 Continuing Education	54%	65%	72%	64%
10% Medicaid	46%	62%	47%	52%
NHA Retention	54%	46%	47%	49%
Falls (Low)	N/A	39%	40%	39%
DON Retention	41%	36%	37%	38%
Physical Restraints (Low)	44%	30%	36%	36%
UTI (Low)	N/A	32%	36%	34%
High-Risk Pressure Ulcers (Low)	37%	30%	33%	33%
Chronic Care Pain (Low)	33%	26%	29%	29%
Falls (High)	N/A	15%	22%	18%
High-Risk Pressure Ulcers (High)	18%	18%	18%	18%
5% Medicaid	19%	16%	15%	17%
Physical Restraints (High)	8%	21%	18%	16%
Staff Retention Improvement	30%	8%	4%	14%
+2 Continuing Education	22%	11%	8%	14%
50% Consistent Assignments	13%	15%	10%	13%
UTI (High)	N/A	9%	17%	13%
+4 Continuing Education	18%	10%	8%	12%
Chronic Care Pain (High)	7%	13%	10%	10%

This table shows a very clear distinction between those performance measures with requirements that homes can more readily control through policy changes and those measures that homes can not immediately change. The least frequently applied for measures (bottom half of the table) consist almost entirely of quality measures, DON/NHA retention, and Medicaid utilization. These measures all have metrics that either require more significant amounts of time to change or are somewhat out of the control of administrators. The most frequently applied for measures (top half of the table) consist of the many resident-centered and staff-centered measures. These measures focus more on changing the attitudes and policies of the home, which are decisions that can be made much more immediately and directly by administrators and staff.

Presented similarly to the first table, the second table below shows the percent of total homes in an application year with a reviewer score for each performance measure. Performance measures are ranked by a weighted average frequency over the three years.

Percent of Total Homes with Reviewer Score by Performance Measure (Ranked by 3 Year Weighted Avg.)

	% of Total Homes with Reviewer Score			
Performance Measure Title		2010 (98 Homes)	2011 (78 Homes)	3 Year Weighted Avg.
Resident Rooms	97%	91%	99%	95%
External Community	90%	88%	83%	87%
Living Environment	92%	79%	88%	86%
Volunteer Program	82%	85%	88%	85%
Staff Retention Rate	77%	88%	83%	83%
Career Ladders/Career Paths	79%	81%	85%	81%
Quality Program Participation	79%	82%	81%	80%
Public and Outdoor Space	81%	77%	77%	78%
Employee Satisfaction Survey	78%	64%	73%	71%
End Of Life Program	70%	68%	73%	70%
Staff Influenza Immunization	N/A	72%	67%	70%
Daily Schedules	73%	60%	74%	69%
80% Consistent Assignments	64%	72%	69%	69%
Flexible and Enhanced Bathing	64%	64%	72%	67%
Enhanced Dining	60%	67%	73%	67%
New Staff Program	61%	56%	77%	64%
Overhead Paging	44%	65%	76%	61%
Internal Community	69%	47%	55%	57%
Care Planning	56%	54%	59%	56%
+6 Continuing Education	42%	47%	72%	53%
Person-Directed Care	52%	40%	56%	49%
NHA Retention	50%	42%	40%	44%
Neighborhoods/Households	40%	36%	45%	40%
Falls (Low)	N/A	37%	37%	37%
10% Medicaid	39%	31%	36%	35%

	% of Total Homes with Reviewer Score			
Performance Measure Title	2009 (90 Homes)	2010 (98 Homes)	2011 (78 Homes)	3 Year Weighted Avg.
Physical Restraints (Low)	42%	24%	35%	33%
UTI (Low)	N/A	28%	40%	33%
DON Retention	38%	28%	31%	32%
High-Risk Pressure Ulcers (Low)	29%	22%	33%	28%
Chronic Care Pain (Low)	32%	21%	28%	27%
High-Risk Pressure Ulcers (High)	16%	16%	17%	16%
Falls (High)	N/A	12%	21%	16%
Physical Restraints (High)	6%	16%	17%	13%
Chronic Care Pain (High)	6%	13%	14%	11%
5% Medicaid	4%	15%	13%	11%
50% Consistent Assignments	9%	13%	8%	10%
UTI (High)	N/A	5%	14%	9%
+4 Continuing Education	10%	7%	3%	7%
+2 Continuing Education	10%	5%	4%	6%
Staff Retention Improvement	10%	2%	3%	5%

Similar to the self score table above, performance measures are segregated into very distinct sections, with the lower frequency measures largely consisting of measures that homes have less control over. The higher frequency measures continue to be the many resident-centered and staff-centered measures. Within this group of more controllable measures, there are some that drop significantly in ranking as compared to the self-score table, such as Enhanced Dining, Flexible and Enhanced Bathing, and Neighborhoods/Households. These are a group of measures that tend to require much larger transformations, often including both physical and social aspects. The requirements for these measures tend to be both more ambiguous and substantially harder to obtain.



VII. IMPACT OF P4P INITIATIVE

Colorado's pay-for-performance program is a unique example of a state's use of reimbursement policy to incentivize quality improvements in nursing homes. Few states have programs in existence, and evaluations of the impact of this type of policy tool are limited. After three years of implementation, Colorado's program could provide additional insight into P4P policy through an examination of the quantitative and qualitative impact of P4P on residents, families and providers. Although a true empirical evaluation is out of the scope of this review, PCG and Pioneer Network embraced the opportunity to perform a high-level investigation of the longitudinal effects of the program to-date.

Of the 122 homes that have participated in the P4P program since 2009, nearly half (57 homes) have participated all three years. This core group of homes represents a consistent pursuit of P4P objectives, and the three year implementation timeframe allows for a preliminary assessment of any short-term outcomes in the following areas:

- 1. Quality of Care How does the core group of participant providers compare to other homes with respect to the quality of care measures identified in the application? How have these providers improved over time when compared to the rest of the homes in the state?
- 2. Adoption of Culture Change Have these providers continued to adopt additional measures of the P4P program each year (i.e. does the application appear to incentivize adoption of the measures)?
- 3. Anecdotal Impact What are the affects of the program on providers, staff, residents and families?

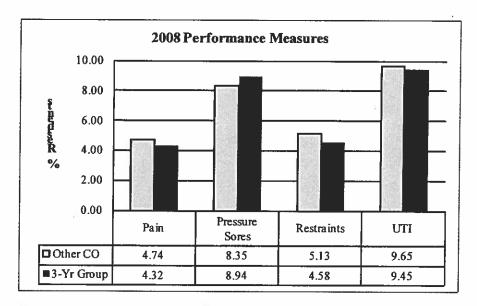
A. Quality of Care

To begin to analyze the high-level effects of the program on quality of care, current and historical data on quality measures were sourced from an archived log of Nursing Home Compare data maintained by Pioneer Network. In the following charts, 2008 Quarter 3 data represents the "pre" timeframe for the program. In addition, 2011 Quarter 3 quality measures were used to assess current performance in 2011.

The CMS Nursing Home Compare database is a compilation of the Online Survey, Certification and Reporting (OSCAR) database and the Minimum Data Set Repository (MDS). These data are risk-adjusted and compiled at the nursing home level and may not be an exact one-to-one match with the CASPER QI/QM reports used in the application. Still, Nursing Home Compare is comprised of MDS data and should be comparable for this type of assessment. Measures of Pain, High-Risk Long-Stay Pressure Sores, Restraints and Urinary Tract Infections were examined from the pre- to current timeframe (note: "Falls" is not currently a measurement in the NHC

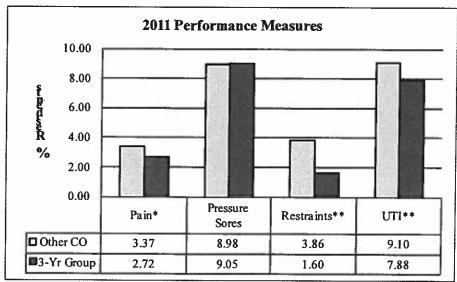
⁸ Arling, G., Job, C. & Cooke, V. (2009). Medicaid Nursing Home Pay for Performance: Where Do We Stand? *The Gerontologist*, 49 (5), 587-595.

database). The 57 homes participating in the program for three years (3-Yr Group) were compared to all other homes in the state with data reported for 2008 and 2011. Findings are presented below.



In 2008, prior to P4P, the 57 homes in the three-year (3-Yr) group performed similarly to all other Colorado homes with no statistically significant differences in the four performance measures. This is an important observation, because it challenges the perception that the 3-Yr Group were "exemplars" or higher performing homes prior to participating in the program.

In the third quarter of 2011, the 3-Yr Group performed statistically significantly better in three of the four quality measures when compared to all other homes in the state. Although pressure sores appear to be unaffected with no significant differences in percentages, pain, restraints and urinary tract infections are significantly lower in these homes when compared to other homes in the state. These percentages are also lower than national averages.



*p-value ≤ 0.1 ** p-value ≤ 0.05

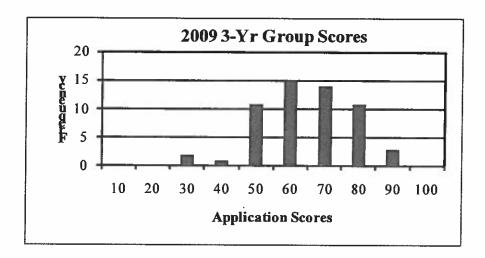
While these results are compelling, they also provide evidence that the performance measures of pain and restraints have improved for the other homes in Colorado from the 2008 to 2011 timeframe. Quality improvement initiatives such as Advancing Excellence coupled with other factors such as consumer involvement and evidence-based interventions could be contributing to reductions in these scores over time.

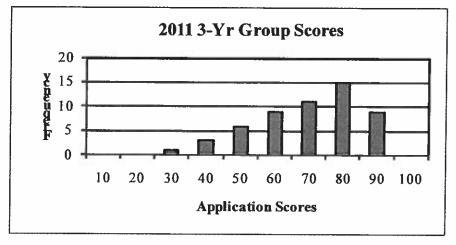
To further explore quality enhancements for the 3-Yr Group, a difference-in-difference approach was employed to test for statistically significant changes in the quality measures from the 2008 to 2011 timeframe for the 3-Yr group when compared to improvements for all other Colorado homes. In this analysis, the reduction in the use restraints was significant at the .05 level. This is a particularly interesting finding given that the use of restraints is the quality of care measure most correlated with quality of life and culture change implementation. It would be logical to assume that the quality of life measures in the P4P application would influence the use of restraints, and this analysis does support this hypothesis over the course of the P4P implementation.

B. Adoption of Culture Change

Although the group of homes participating in P4P for all three years has significantly improved in quality of care, this does not address the effect of P4P participation on the adoption of the quality of life measures identified in the application. The following graphs help to visualize longitudinal adoption for the core group of 57 homes. In 2009, application scores for this group followed a bell shaped curve with 70% of scores falling between the 50 to 70 point range and 24% of scores in the 80 to 100 point range.

⁹ Pioneer Network. (2011). Positive Outcomes of Culture Change. The Case for Adoption. *Tools for Change: Pioneer Network, 1 (2),1-6.*





By 2011, this same group of homes had improved scores significantly with 42% of scores now falling in the 80 to 100 point range. Given that 49 points of the application are based on quality of life, this confirms onsite reports that homes utilize the application as a goal-setting, implementation blueprint for yearly initiatives and activities.

The following are measures with the highest increases to adoption rates from 2009 to 2011 for the core group:

- +6 Continuing Education
- Overhead Paging
- New Staff Program
- Staff Retention Rate
- Care Planning
- 80% Consistent Assignments



These improvements are represented in the composite sketch and discussion of all participant homes in Section VI, but the scores for the 57 core participant homes are particularly interesting for the staff retention and care planning measures. For example, 90% of the 57 homes received reviewer's points for staff retention which is a 12% improvement for this group over the three year period. The cost ramifications of these improvements in retention are considerable and the quality implications are invaluable to residents. In addition, 74% of this group received points for care planning. This is remarkable given that the practice of including CNAs in care conferences is a relatively new concept. Yet, this data would indicate that this practice is disseminating rapidly among the consistent P4P participants.

These practice-specific examples are representative of a growing knowledge base regarding implementation by this core group of homes. As recommended earlier in this report, these homes may act as mentors to other homes in the state for best practices in the implementation of quality of life measures.

These quality of care and culture change impacts are significant results and substantiate the 2008 legislative intent in establishing the program.

C. Anecdotal Impact

One of the key areas of impact for the P4P program is measured by the effects on residents, families, and staff. At this point, evidence in this area is based largely on site visits and anecdotal information. However, based on three years of staff and resident interviews there are common findings:

- In support of the quantitative findings, providers report that participation in the program has improved care quality. Often times this is in conjunction with quality programs, but the practices in the application seem to be well aligned with the implementation of quality programs such as Advancing Excellence and also support the person-centered care objectives of MDS 3.0.
- Residents report a general appreciation of having choice in their environment and relationships with the staff and leadership of the organization.
- In support of the adoption analysis, providers report that implementation of application practices such as consistent assignment and internal community have improved staff retention and turnover.
- Providers report that elements such as the elimination of overhead paging have improved the environment without negative effects on operations.
- In interviews, non-leadership staff demonstrated an understanding of culture change concepts largely based on person-directed trainings.
- When family members were interviewed, they articulated a willingness to support P4P practices and an expectation that the program would positively affect outcomes.
- Providers report that the application is a blueprint for goal-setting and implementation each year.



• The testimonial requirements have the practical impact of demonstrating the importance of resident and non-management staff.

In summary, although an empirical analysis would be needed to ultimately determine causality from the P4P program, an initial evaluation of impact includes the following compelling findings:

- The core group of 57 homes participating in the program for all three years maintains statistically higher performance than state and national averages in three of the four quality measures examined in this report.
- These homes also significantly improved over other homes in the state from 2008 (pre-P4P) to 2011.
- P4P appears to be an incentive for homes to adopt practices identified in the application.
- There are anecdotal reports of additional benefits of the program for residents, families, and staff.



APPENDIX A – RECENT CULTURE CHANGE PUBLICATIONS

- AMDA. (2010). The Role of the Medical Director in Person-Directed Care. AMDA White Paper, G10. Retrieved June 19th, 2011, from http://www.amda.com/governance/whitepapers/G10.cfm
- Bowman, C. (2010). The Food and Dining Side of the Culture Change Movement:

 Identifying Barriers and Potential Solutions to Furthering Innovation in Nursing Homes.

 Pre-symposium Paper: Creating Home in the Nursing Home II: A National Symposium on Culture Change and the Food and Dining Requirements. Retrieved March 10th, 2010, from

 http://www.pioneernetwork.net/Data/Documents/dining%20symposium%20background%20paper%201-28-10.pdf
- Bump, L. (2010). The Deep Seated Issue of Choice. Creating Home in the Nursing Home II: A National Symposium on Culture Change and the Food and Dining Requirements.

 Retrieved June 19th, 2011, from http://www.pioneernetwork.net/Data/Documents/CreatingHomeOnline/Paper-Bump.pdf
- Edvardsson, E. & Innes, A. (2010). Measuring Person-centered care: A Critical Comparative Review of Published Tools. *The Gerontologist*, 50 (6), 834-846.
- Elliot, A. (2010). Occupancy and Revenue Gains from Culture Change in Nursing Homes: A Win-Win Innovation for a New Age of Long-Term Care. Seniors Housing & Care Journal, 18(1), 21-36.
- Farrell, D., Brady, C. & Frank, B. (2011). Meeting the Leadership Challenge in Long-Term Care: What you Do Matters. Health Professions Press.
- Frampton, S., Gil, H., Guastello, S., Kinsey, J., et. al. (2011). Long-Term Care Improvement Guide. Planetree/Picker Institute. Retrieved June 19th, 2011 from http://www.residentcenteredcare.org/Pages/About%20the%20guide.html
- Handy, L. (2010). Survey Interpretation of Regulations. Creating Home in the Nursing Home II: A National Symposium on Culture Change and the Food and Dining Requirements. Retrieved June 19th, 2011, from http://www.pioneernetwork.net/Data/Documents/CreatingHomeOnline/Paper-Handy.pdf
- Hyde, D. (2010). The Role of the Pharmacist. Creating Home in the Nursing Home II: A National Symposium on Culture Change and the Food and Dining Requirements. Retrieved June 19th, 2011, from http://www.pioneernetwork.net/Data/Documents/CreatingHomeOnline/Paper-HydeandOgden.pdf

- Kaldy, Joanne. (2011, June). The Ties that Bind: Consistent assignment gives residents a sense of security, family. *Provider*, 23-35.
- Koren, M.J. (2010) Person-centered Care for Nursing Home Residents: The Culture Change Movement. *Health Affairs*, 29 (2), 1-6.
- LaPorte, Meg. (2010, August). Providers Revamp Dining to Please the Palette. Provider, 21-30.
- Leible, K. and Wayne, M. (2010). The Role of the Physician's Order. Creating Home in the Nursing Home II: A National Symposium on Culture Change and the Food and Dining Requirements. Retrieved June 19th, 2011, from http://www.pioneernetwork.net/Data/Documents/CreatingHomeOnline/Paper-WayneandLeible.pdf
- Miller, S., Miller, E., Hye-Young, J. Sterns, S. Clark, M. & Moore, V. (2010). Nursing Home Culture Change Movement as Viewed by Long-Term Care Specialists. *Medical Care Research and Review Supplement*, 67(4), 65S-81S.
- Pioneer Network. (2011). Positive Outcomes of Culture Change. The Case for Adoption. *Tools for Change: Pioneer Network, 1 (2),1-6.* Retrieved June 19th, 2011, from http://www.pioneernetwork.net/Data/Documents/Tools%20for%20Change-Adoption%20v3.pdf
- Pioneer Network/Hartford Institute for Geriatric Nursing. (2010). Nurse Competencies for Nursing Home Culture Change. Retrieved June 19th, 2011, from http://www.pioneernetwork.net/Data/Documents/TenCompetenciesReport0510.pdf
- Remsburg, Robin. Home-style Dining Interventions in Nursing Homes: Implications for Practice. Creating Home in the Nursing Home II: A National Symposium on Culture Change and the Food and Dining Requirements.Retrieved June 19th, 2011, from: http://www.pioneernetwork.net/Data/Documents/CreatingHomeOnline/Paper-Remsburg.pdf
- Rubertino, F., Lubin, S., Krushkem C. & Hyde, D. (2011). The Eden Alternative Journey: Impacting the MDS 3.0 and QIS Process. Eden Alternative. Retrieved June 19, 2011 from http://www.socomds.com/assets/Home/culture/edenmds3_0-qisprocessv2_for_website.pdf
- Shura, R., Siders, R., & Dannefer, D. (2011) Culture Change in Long-Term Care: Participatory Action Research and the Role of the Resident. *The Gerontologist*, 51 (2), 212-225.
- Tellis-Nayak, V. (2010, December). Nursing Homes: In the eye of the beholder: Residents, families and surveyors weigh in. Long-Term Living, 59 (12): 28-31.