

Consistent Assignment in Nursing Homes

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Objectives:

- o Level of consistent assignment used in nursing homes
- o Opinions of consistent assignment
- o The association of consistent assignment of Nurse Aides (NAs) with quality of care and quality of life of nursing home residents is discussed.



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Significance:

- o Interest in staffing characteristics in nursing homes.
- o No empirical study has examined whether consistent assignment is associated with quality of care.
- o Has become a preferred practice with no empirical justification.
- o Opportunity to further understand the staffing quality relationship.



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Definitions:

- o *Consistent assignment* is defined as “the same caregivers consistently caring for the same residents almost every time they are on duty” (Care Practice Work Place Practice Environment, 2010).
- o Synonymous terms include primary or permanent assignment.



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Introduction:

- o Research Sponsor
 - o The Commonwealth Fund
 - o Staff Assist
 - o <http://www.crhc.pitt.edu/StaffAssist/>
 - o Agency for Healthcare Research and Quality (AHRQ)
 - o No Commercial Interests



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Introduction:

- What to expect
 - Research (what we know about your current abilities with Quality / Consistent Assignment)
 - Format (information)
 - No formula
 - No prescription
 - Some advice
 - AND Thank You!
 - >20,000 surveys (15 years)



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Does Poor Quality Exist?

Star Tribune

94 % of nursing homes cited as deficient.

Los Angeles Times

Care Home Problems Blamed on Staffing

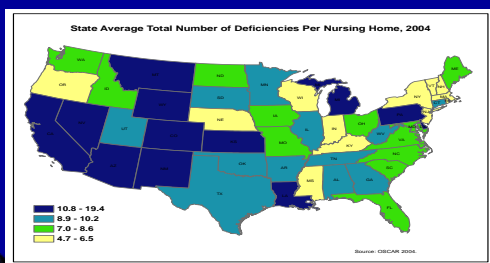
The New York Times

Serious Deficiencies in NHs Are Often Missed, Report Says

Pittsburgh Post-Gazette

90 Percent of Nursing Homes Cited for Violations

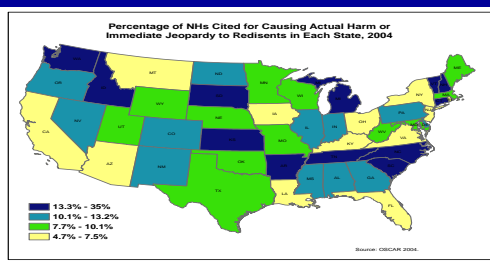
Does Poor Quality Exist?



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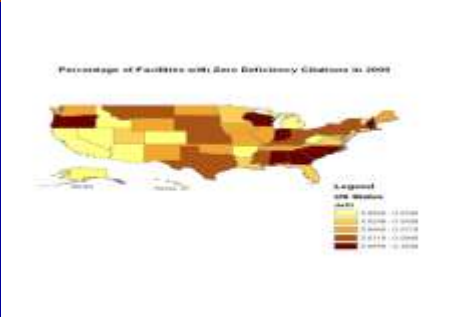
Does Poor Quality Exist?



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Does Poor Quality Exist?



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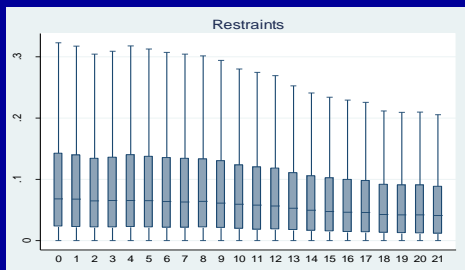
Can Nursing Homes Improve Quality?

Quality is never an accident. It is always the result of intelligent effort. (John Ruskin)

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Can Nursing Homes Improve Quality?

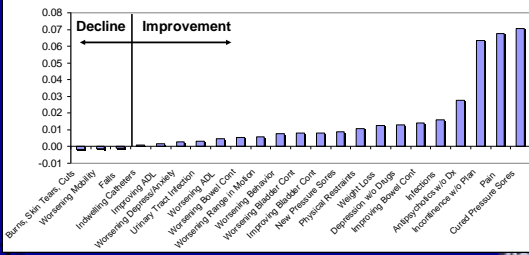


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Can Nursing Homes Improve Quality?

Total Improvement in Risk-Adjusted QIs (July 2004 - Dec 2006)



Introduction:

- o **Consistent assignment can improve care?**
 - o **Benefits of consistent assignment are that:**
 - o **NAs are more satisfied (reduces turnover / absenteeism)**
 - o **Family are more satisfied**
 - o **Residents are more satisfied**
 - o **Improves quality of care.**

Introduction:

TABLE: Summary of Studies of Consistent Assignment Examining Benefits to Residents/Family

Author(s)	Sample	Findings
Campbell (1985)	One NH	Improvements in opinions of care delivered and professional nursing practice
Patchner (1993) care	Two NHs	Improved overall quality of
Teresi et al. (1993)	Two NHs	1. Positive resident satisfaction with CRA (6-month rate); 2. Positive resident satisfaction with care (6-month rate)

Introduction:

TABLE: Summary of Studies of Consistent Assignment Examining **Benefits for Staff**

Author(s)	Sample	Findings
Campbell (1985)	One NH	Improvements in relationships with others and professional nursing practice
Teresi et al. (1993)	Two NHs	1. Staff had a positive attitude to CRA (6-month rate); 2. No impact on staff morale (6-month rate)
Burgio et al. (2004) Gruss et al. (2004)	Four NHs One NH	Positive Job Satisfaction Index Scores CNA empowerment
Temkin-Greener et al. (2009)	149 NHs	1. 40% of direct care workers had primary assignment; 2. Associated ($p=.1$) with prevalence of daily care teams



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Introduction:

2006 National Survey of NH Staff Satisfaction

Completed by 106,858 employees in 1,933 SNFs
Overall satisfaction =
16% excellent
39% fair/poor



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Introduction:

TABLE: Summary of Studies of Consistent Assignment Examining **Staff Turnover / Absenteeism**

Author(s)	Sample	Findings
Campbell (1985)	One NH	Turnover was reduced by 29%
Patchner (1993)	Two NHs	Lower turnover and absenteeism
Farrell & Frank (2007)	One NH	1. CNA turnover declined from 94% to 38%; 2. RN/LPN turnover declined from 43% to 11%; 3. Call-offs declined by 40%



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Introduction:

TABLE: Summary of Studies of Consistent Assignment Examining Resident Outcomes

Author(s)	Sample	Findings
Campbell (1985) Patchner (1993)	One NH Two NHs	75% reduction in pressure ulcers Decrease resident behavior problems (physical aggression, verbal abuse, resisting treatment, breaking the rules)
Burgio et al. (2004)	Four NHs	1. Positive Personal Appearance and Hand Hygiene Index Scores; 2. Positive Affect Rating Scale; 3. Positive Mini-Mental State Examination; 4. Positive Barthel Self-Care Rating Scale; 5. Improved Medications Scores Falls declined by 20%
QualityNet (2006) Farrell & Frank (2007)	One NH One NH	1. High risk pressure ulcers declined from 25% to 11%; 2. Low risk pressure ulcers declined from 4.5% to 0%

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Introduction:

- Advancing Excellence in America's Nursing Homes Campaign goals and objectives promotes NA consistent assignment. (www.nhqualitycampaign.org/files).
- State Quality Improvement Organizations have recommended use of NA consistent assignment.
- Proponents of culture change promote NA consistent assignment including, the Green House Model, Pioneer network, Action Pact Inc., Wellspring approaches, Paraprofessional Healthcare Institute, and the Eden Alternative.
- Many state Offices of Health Facilities and Certification (e.g., CA, DE, OH, PA, RI, IL, CA; table is available from authors) promote NA consistent assignment.
- Centers for Medicare and Medicaid Services (CMS) promote NA consistent assignment.

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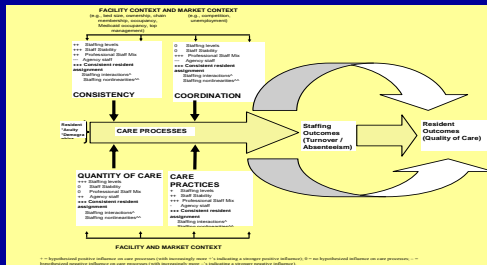
Introduction:

STATE	CA DEFINITION	%	SUCCESS STORY
Alabama	Consistent assignment (sometimes called primary or permanent assignment) refers to the same caregivers (RN's, LPN's, C.N.A.'s) consistently caring for the same residents almost (80% of their shifts) every time they are on duty. The opposite of consistent assignment is the practice of rotating staff from one group of residents to the next after a certain period of time (weekly, monthly or quarterly). Facilities who have adopted consistent assignment never rotate their staff.	N/A	Use RI model
Alaska	Nursing homes will try to minimize staff unit rotation.	N/A	N/A
Arizona	N/A	N/A	N/A
Arkansas	The same caregiver (such as RNs, LPNs, and CNAs) take care of the same resident most of the time - ideally 80% of each shift for each caregiver.	80	N/A
California (A)	N/A	N/A	N/A
California (B)	Regularly cared for by the same caregiver.	N/A	N/A
Colorado	N/A	N/A	N/A
Connecticut	N/A	N/A	N/A

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But it Makes Sense?:

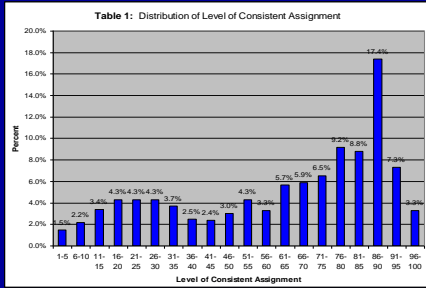


Author(s)	Definition of Consistent Assignment (CA)	Level to achieve CA	Sample
Campbell (1985)	"The delivery of comprehensive, coordinated, continuous, individualized patient care through the professional nurse who has autonomy, accountability and authority on a 24-hour basis"	None	One NH
Henry (1990)	"Modified primary nursing, where permanent RN nursing assistant teams are accountable to a permanent patient assignment"	None	N/A
Fitchner (1993)	"Assigning nursing aides to specific patients, whom they work with each day on a permanent basis"	None	Two NHs
Teresi et al. (1993)	"Continuously until death, transfer, or such unusual circumstances as a request by attendant family or resident for reassignment"	None	Two NHs
Burgis et al. (2004)	"Continuously assigning individual CNAs to specific residents"	None	4 NHs
Crosset et al. (2004)	"Permanently assigned CNA for each long-term resident"	None	One NH
Health Services Advisory Group (2004)	"Same caregivers (RNs, LPNs, CNAs) consistently caring for the same residents almost 80% of their shifts every time they are on duty"	80%	NA
Advancing Excellence (2006)	"A resident receives care from the same nursing assistants 85% of the time"	85%	None
QualityNet (2006)	"Same caregivers (RNs, LPNs, CNAs) consistently caring for the same residents almost 80% of their shifts every time they are on duty"	80%	One NH
California HealthCare Foundation (2007)	"Same caregivers (RNs, LPNs, CNAs) to care for the same nursing home residents every day"	None	None
Farrell (2007)	"Consistently assigning the same caregivers to the same nursing home residents every day"	None	None
Farrell & Frank (2007)	"A staffing model in which patients are cared for each and every day by the same staff members"	None	One NH
Quality Partners of RI (2007)	"Same caregivers (RNs, LPNs, CNAs) consistently caring for the same residents almost 80% of their shifts every time they are on duty"	80%	None
Fahnen, Straker, & Manning (2009)	"Nursing home staff members, particularly certified nurse aides, are assigned to the same residents on most shifts"	None	None
Tanaka-Groves et al. (2009)	"Staff work consistently with the same residents"	None	149 NHs

Design:

- Data used came from a survey of nursing home administrators, the Online Survey Certification and Reporting data, and the Area Resource File.
- The information including consistent assignment and staffing variables of Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and NAs were measured in 2007, and come from 3,941 facilities.
- Negative binomial regression and multivariate logistic regression models.

Results (Study 1):



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Results (Study 1):

Variable	Percent (n)
Use of consistent assignment (yes)	68% (2,678)
<i>If using consistent assignment:</i>	
Average level of consistent assignment for Nurse Aides ^a	62%
<i>Distribution of average levels of consistent assignment:</i>	
Facilities with 1-33% consistent assignment of Nurse Aides	19% [†] (509)
Facilities with 34-66% consistent assignment of Nurse Aides	52% [†] (857)
Facilities with 67-100% consistent assignment of Nurse Aides	49% [†] (1,312)
<i>Distribution of average levels of consistent assignment at recommended level:</i>	
Facilities with ≥85% consistent assignment of Nurse Aides	28% (749)

^a Calculated by facilities using the methodology distributed by Quality Partners of Rhode Island (2007).
[†] These measures do not equal 100% due to rounding error.
 Overall sample size = 3,941 nursing homes.

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Results (Study 1):

	Resident Quality of Life deficiency citations (Incident Rate Ratio, [95%CI])	Staffing Quality of Life deficiency citations (Incident Rate Ratio, [95%CI])	Life deficiency citations (Incident Rate Ratio, [95%CI])	Facility Quality of Life deficiency citations (Incident Rate Ratio, [95%CI])	Quality of Care (AOR [95%CI])	J, K, or L deficiency citations (AOR [95%CI])
Staffing Characteristics:						
Consistent assignment (≤85% vs. None)	0.82** (0.78-0.98)	0.84** (0.81-0.97)	0.96** (0.93-0.98)	0.97** (0.94-0.98)	0.92** (0.87-1.07)	0.92** (0.87-1.07)
Consistent assignment (≥85% vs. None)	0.98** (0.76-0.98)	0.95** (0.91-0.96)	0.98** (0.93-1.01)	0.92** (0.88-1.00)	0.97** (0.92-1.11)	0.97** (0.92-1.11)
RN staffing	0.98** (0.82-0.93)	0.94** (0.86-1.01)	0.89** (0.82-0.99)	0.93** (0.89-1.02)	0.97** (0.90-0.99)	0.97** (0.90-0.99)
LPN staffing	1.11 (0.93-1.14)	0.83 (0.78-1.01)	0.89 (0.78-1.02)	0.77 (0.68-1.00)	0.96 (0.74-1.09)	0.96 (0.74-1.09)
NA staffing	0.92** (0.83-0.97)	0.98** (0.89-0.98)	0.89 (0.78-1.01)	0.91 (0.81-1.05)	0.98** (0.90-0.99)	0.98** (0.90-0.99)
Staff mix	0.92** (0.86-0.94)	0.98** (0.90-0.99)	0.90** (0.82-0.97)	0.98** (0.91-0.94)	0.95** (0.91-0.98)	0.95** (0.91-0.98)
RN turnover	1.02 (1.00-1.09)	1.19** (1.05-1.26)	1.02 (0.97-1.07)	0.98 (0.94-1.06)	0.91 (0.87-1.01)	0.91 (0.87-1.01)
LPN turnover	1.13** (1.07-1.19)	1.16** (1.08-1.19)	0.97** (0.85-0.99)	1.05 (0.94-1.09)	1.03 (0.97-1.11)	1.03 (0.97-1.11)
NA turnover	1.11** (1.01-1.15)	1.12** (1.03-1.21)	1.01** (0.90-1.09)	1.03** (0.91-1.09)	1.07 (0.98-1.14)	1.07 (0.98-1.14)
RN agency	0.96 (0.91-1.06)	0.75 (0.68-1.16)	1.01** (1.00-1.09)	1.05** (1.00-1.11)	1.09 (0.98-1.15)	1.09 (0.98-1.15)
LPN agency	1.20 (0.99-1.25)	0.53** (0.48-1.29)	1.07** (1.02-1.13)	1.11** (1.07-1.21)	1.13** (1.08-1.15)	1.13** (1.08-1.15)
Pseudo-R ²	0.27	0.31	0.26	0.25	0.17	0.17

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Discussion (Study 1):

- Our findings that a beneficial association of consistent assignment with deficiency citations exists may provide some further momentum to implementation of consistent assignment
 - In turn may enable the use of other culture change practices.
 - Improve overall quality of care of nursing homes.



Limitations (Study 1):

- Not able to determine whether the reported use of NA consistent assignment is desirable from an administrative view of the nursing home (e.g. turnover and absenteeism).
- Not able to determine whether recommended levels of NA consistent assignment are not achieved because of various barriers in doing so. These barriers could include reluctance from NAs (for example).
- Not able to examine how consistent assignment improves quality of care.
- Analysis relies solely on deficiency citations. A future, more refined analysis could examine the Quality Measures reported in Nursing Home Compare.



Results (Study 2):

Staffing Characteristics	Logistic Regression AOR (95% CI)	Turnover		Absenteeism	
		Turnover	Turnover	Absenteeism	Absenteeism
		(Low vs. Moderate)	(High vs. Moderate)	(Low vs. Moderate)	(High vs. Moderate)
Consistent assignment (=>85% vs. None)	1.32 (1.10-1.34)**	0.78 (0.60-0.92)**	1.28 (1.05-1.32)**	0.91 (0.82-0.98)*	
RN staffing (per 10% increase)	1.04 (1.00-1.10)**	0.98 (0.95-1.20)	1.09 (1.02-1.17)**	0.93 (0.84-0.97)**	
LPN staffing (per 10% increase)	0.99 (0.99-1.01)	0.93 (0.91-0.99)*	1.11 (1.08-1.19)*	0.98 (0.95-1.05)	
NA staffing (per 10% increase)	1.17 (1.05-1.22)**	0.92 (0.80-1.00)**	1.22 (1.05-1.28)**	0.97 (0.87-0.99)*	
Staff mix (per 10% increase)	1.07 (1.01-1.19)*	0.99 (0.85-1.01)	0.90 (0.78-1.01)	0.94 (0.89-0.97)**	
RN turnover (per 10% decrease)	1.21 (1.06-1.34)**	0.94 (0.79-0.99)*	1.04 (1.01-1.11)*	1.08 (0.87-1.11)	
LPN turnover (per 10% decrease)	0.92 (0.80-1.07)	1.00 (0.83-1.10)	0.99 (0.89-1.03)	1.05 (0.91-1.15)	
NA turnover (per 10% decrease)	-	-	1.12 (1.03-1.21)**	0.75 (0.72-0.89)**	
RN agency (per 10% decrease)	1.84 (0.99-1.21)	0.90 (0.72-0.96)*	1.08 (1.07-1.22)*	0.95 (0.85-1.10)	
LPN agency (per 10% decrease)	1.04 (0.82-1.05)	0.87 (0.56-1.15)	1.02 (1.00-1.45)	0.98 (0.93-1.02)	
NA agency (per 10% decrease)	1.23 (1.06-1.39)**	1.21 (1.06-1.34)**	1.14 (1.02-1.19)**	0.88 (0.79-1.00)*	



Limitations (Study 1):

- Not able to determine whether the reported use of NA consistent assignment is desirable from an administrative view of the nursing home (e.g. turnover and absenteeism).
- Not able to determine whether recommended levels of NA consistent assignment are not achieved because of various barriers in doing so. These barriers could include reluctance from NAs (for example).
- Not able to examine how consistent assignment improves quality of care.
- Analysis relies solely on deficiency citations. A future, more refined analysis could examine the Quality Measures reported in Nursing Home Compare.



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Results (Study 3):

	(1)	(2)	(3)
	QM2 Percent With Moderate to Severe Pain (LSR)	QM3 Percent Low-Risk Residents With Pressure Sores (LSR)	QM4 Percent High-Risk Residents With Pressure Sores (LSR)
Independent Variables of Interest			
Consistent assignment (-0.55 vs. None)	0.001 (0.001)	0.004 (0.001)	0.002 (0.001)
RN Turnover	0.001 (0.001)	0.004** (0.001)	0.002** (0.001)
LPN Turnover	0.006** (0.002)	0.015*** (0.004)	0.013*** (0.004)
NA Turnover	0.005*** (0.001)	0.007*** (0.001)	0.0022* (0.001)

Consistent assignment was associated with 10 of the 14 quality indicators

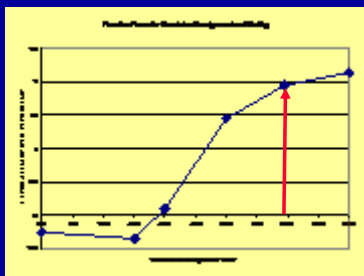


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Results (Study 3):



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The Quality Porcupine



Summary:

- Consistent assignment has developed as a preferred practice in nursing homes based on little empirical evidence. The findings presented here provide some tentative justification for the use of this staffing practice for Nurse Aides.

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Care-giving challenge scale – 1 to 5
Listen for variation of the individual rating

CNAs select their assignment
Sum total from scale - not the number of elders
Re-visit frequently

David Farrell, MSW, LNHA

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