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Culture Change in Nursing Homes: What Is the Role of Nursing Home Resources?

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Abstract

Quality of care has been a long-standing issue in US nursing homes. The culture change movement attempts to transition nursing homes from health care institutions to person-centered homes. While the adoption of culture change has been spreading across nursing homes, barriers to adoption persist. Nursing homes that disproportionately serve minority residents may have additional challenges implementing culture change compared with other facilities due to limited financial and staffing resources. The objective of this study was to examine how nursing home characteristics are associated with culture change adoption in Central Florida nursing homes. This cross-sectional study included 81 directors of nursing (DONs) who completed the Artifacts of Culture Change survey. In addition, nursing home organizational data were obtained from the Certification and Survey Provider Enhanced Reports (CASPER). A logistic regression was conducted to examine the relationship between high culture change adoption and nursing home characteristics. The overall adoption of culture change scores in Central Florida nursing homes was low. Nevertheless, there was variability across nursing homes in the adoption of culture change. High culture change adoption was associated with nursing homes having lower proportions of Medicaid residents.

Keywords

nursing homes, disparities, culture change, artifacts of culture change, Medicaid, cross-sectional

What do we already know about this topic?
Culture change adoption is occurring across nursing homes in the United States.
How does your research contribute to the field?
This research identifies factors that may facilitate or hinder culture change adoption in US nursing homes.
What are your research's implications toward theory, practice, or policy?
Higher Medicaid reimbursements may encourage nursing homes to adopt culture change practices, along with a focus on leadership and training.

Introduction

Quality of care, including the presence of racial/ethnic disparities in quality of care, has been a persistent issue in long-term care settings.[1-5] While disparities in nursing homes persist, all residents are entitled to a high standard of care. The culture change movement is a possible opportunity to reduce racial/ethnic disparities in nursing homes.

The "culture change" movement aims to transition nursing homes from institutions to homes for residents that improve the quality of care and quality of life of residents. The philosophy of the culture change movement embraces the person-centered concept, while also supporting the improvement of work conditions for staff.[6] Key principles of the culture change movement include resident-directed care and activities; home environment; relationships with staff, family, residents, and community; staff empowerment; collaborative and decentralized management; and measurement-based Continuous quality improvement (CQI) process.[7]

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While more rigorous research is needed on culture change efforts,[8-10] prior studies have documented the benefits of culture change. For example, culture change has been associated with higher levels of quality of resident care and life and greater family satisfaction.[10-12] The implementation of culture change is growing across nursing homes in the United States. In 2007, 31% of nursing homes were culture change adopters (defined as nursing homes that perceive culture change as defining their facility completely or for the most part).[13] Although the prevalence of culture change is growing across nursing homes, barriers to implementation continue to persist.[14-16]

Previous studies have examined the relationship between nursing home characteristics and the adoption of culture change.[17-20] A major factor reported in a few studies as contributing to culture change adoption is payer mix and reimbursement. Nursing homes that rely heavily on Medicaid may have limited financial resources,[21] which can limit the adoption of innovations as Medicaid reimbursement is typically lower than private-pay reimbursements. Consequently, Medicaid-reliant nursing homes or resource-constrained nursing homes may have challenges implementing culture change practices. Prior culture change research indicates nursing homes with higher Medicaid reimbursement had a more home-like environment.[17,18] Grabowski et al. found nursing homes with fewer Medicaid and Medicare residents were able to implement culture change.[19] Lepore et al. indicated nursing homes with higher proportions of Medicare residents were willing to implement environment culture change practices.[20] While previous studies have examined the relationship between nursing home characteristics and the adoption of culture change, few have used a comprehensive measure to assess culture change. Furthermore, additional research is needed to understand the role of nursing home structural characteristics on the barriers or facilitators of adopting culture change.[18,22] The purpose of this study is to examine how nursing home organizational characteristics, in particular the proportion of Medicaid residents, are associated with culture change adoption

Conceptual Framework

Resource dependence theory posits organizations need to acquire and maintain resources to survive within their environment. Organizations will exchange with other organizations to ensure the continuation of needed resources. As such, managers will take into account resources when making organizational decisions.[23] Medicaid is a significant payer of nursing home care, with Medicaid nursing home residents accounting for 51% of the total expenditures for long-term services and support.[24] Consequently, Medicaid reimbursement policies and rates can have a significant influence on management decisions. Previous literature indicates Medicaid reimbursement and policies are associated with differences in culture change adoption.[17,18] In addition, culture change adoption was more likely to occur in nursing homes with fewer Medicaid residents.[19] In addition to the descriptive statistics, this study tested correlations between the cultural change domains and the proportion of Medicaid residents. Finally, the study tested the hypothesis that nursing homes with lower proportions of Medicaid residents will have high culture change adoption.

Methods

Design

This cross-sectional study examined the adoption of culture change in Central Florida nursing homes, which included 17 counties in Florida. Central Florida nursing homes that participated in this study were similar to nonparticipating nursing homes in regard to occupancy rates. Nursing homes that participated in the study were slightly smaller (average beds 115) compared with nursing homes that did not participate in the study (average beds 121). Nursing homes that participated in the study had 16% Medicare and 49% Medicaid residents compared with a slightly higher 22% Medicare and 54% Medicaid for nonparticipating nursing homes. The percentage of chain-affiliated nursing homes was higher for participating nursing homes (73%) compared with nonparticipating nursing homes (66%). In addition, the percentage of for-profit nursing homes was slightly higher for participating nursing homes (72%) compared with nonparticipating nursing homes (69%).

Sample

Purposive sampling was used to identify directors of nursing (DONs) in Central Florida nursing homes (N = 270). Nursing home DONs were contacted by mail, e-mail, and telephone about participating in the study. DONs who selected to participate in the study were provided an e-mail with the informed consent form and a secure link to the Artifacts of Culture Change survey. DONs from Florida nursing homes completed the Artifacts of Culture Change survey online between March 2014 and March 2015. The response rate for this study was 30.0% for DONs (n = 81). The Institutional Review Board at the University of Central Florida approved this research.

Data. This study merged 2014 data from the Certification and Survey Provider Enhanced Reports (CASPER) and Artifacts of Culture Change survey data using the names and addresses of nursing homes. CASPER data were used to obtain information on nursing home characteristics, such as staffing, ownership, and chain affiliation. Surveyors evaluate nursing homes' structural features to ensure that minimum standards are being met.[25] This information is routinely collected through the Medicare and Medicaid certification process by state licensure and certification agencies. As a part of the recertification process for nursing homes, the data are updated annually.

Culture change adoption was measured using the Artifacts of Culture Change instrument. The Artifacts of Culture Change instrument was developed in 2001 by the Centers for Medicare and Medicaid Services.[26] In addition, an online version of this instrument is supported by the National

Table 1. Descriptive Statistics of Nursing Home (NH) Sample (n = 81).

Variables	Mean (SD)/ frequency (%)
NH characteristics	
Total beds	115.11 (38.6)
Occupancy rate	88.1 (9.5)
Payer mix	
% Medicare	16.1 (10.4)
% Medicaid	48.7 (19.5)
Ownership[a]	
For-profit	71.6
Not-for-profit	28.4
Chain affiliation[a]	
Yes	72.8
No	27.2
Culture change adoption[a]	
NHs with low-medium culture change adoption (0-305)	61 (75%)
NHs with high culture change adoption (≥306)	20 (25%)

[a]Categorical variables have frequencies and percentages.

Pioneer Network, a national organization that advocates for person-directed care, which allows nursing homes to assess their level of culture change adoption and benchmark those changes within their facility and with other facilities. While various measures have been developed to evaluate nursing home culture change, instruments vary in their degrees of validity and provide limited evidence of reliability.[26] Although the Artifacts of Culture Change instrument has similar limitations to these instruments, it is a comprehensive measure to assess culture change in nursing homes.

Measures

Artifacts of Culture Change Instrument. The Artifacts of Culture Change is a questionnaire consisting of 79 items that include 6 domains: care practices, environment, family and community practices, leadership, workplace practices, and staffing outcomes and occupancy. Care practices describe person-centered practices that can be adopted by nursing homes. The environment artifact relates to the physical renovations made to the nursing home to create a more homelike environment. Family and community practices describe engagement activities for residents with family members and community members. Leadership includes the ability to listen and honor all individuals in the organization. The workplace practices include staff practices that promote staff empowerment and person-centered care.[27] Because DONs were answering the survey and may not have known details about staffing information and occupancy rates, we excluded the staffing outcomes and occupancy practices.

The total points of the Artifacts of Culture Change instrument consist of 515 points across the 5 domains. For each domain, item values were summed to create care practices, environment, family and community, leadership, and workplace practice domain scores with total possible scores of 70, 320, 30, 25, and 70, respectively. The environment domain accounted for the majority of the points on the Artifacts of Culture Change instrument (320 points of the total 515 points), as such, the domains were reweighted to make all the domains equal to 103 points. The 103 points were obtained by dividing the total score of 515 by the 5 domains.

In addition, an overall culture change score was created by summing the scores for all 5 domains for each nursing home. The culture change measure was categorized into 2 categories based on the analysis of culture change adoption of facilities for this study, with 75% of nursing homes representing facilities with low-medium culture change adoption (culture change adoption score between 0 and 305) and 25% of nursing home representing facilities with high culture change adoption (culture change adoption score ≥306).

Nursing Home Characteristics

Nursing home characteristics information was obtained from the CASPER data. These variables included the percent of Medicaid residents, the percent of Medicare residents, total beds, occupancy rate, ownership, and chain affiliation. Percent Medicaid was measured as the proportion of facility residents whose primary support was Medicaid. The percent of Medicare residents was measured as the proportion of facility residents whose primary support was Medicare. Total beds were the number of beds reported annually in a facility. Occupancy rate was the number of occupied beds in the facility divided by the total number of beds. Nursing home ownership was described as for-profit or not-for-profit. Nursing homes were also described as having a chain affiliation or not having a chain affiliation.

Analysis. The internal consistency of the Artifacts of Culture Change instrument was examined using Cronbach alpha statistics for this nursing home population. The internal consistency for the adapted Artifacts of Culture Change instrument was high ($\alpha = 0.79$), and the internal consistency for the domains was low to moderate, ranging from $\alpha = 0.42$ to $\alpha = 64$ (Table 2).

Univariate analyses were conducted to describe nursing home characteristics and culture change adoption. Means and standard deviations of the Artifacts of Culture Change instrument and its domains were calculated to describe the overall adoption of culture change. Correlations were conducted between the culture change domains and the proportion of Medicaid residents. A logistic regression was conducted to examine the association between high culture change adoption and nursing home characteristics.

Results. Table 1 provides descriptive statistics of the sample. Eighty-one nursing home DONs completed the Artifacts of Culture Change survey. The majority of nursing homes were

Table 2. Artifacts Culture Change Domain Scores and Reliability (n = 81).

	No. of items	Total possible score	Mean score (SD)	Range (Minimum-maximum)	Cronbach alpha
Culture change overall	66	515	212.3 (68.7)	65-363	0.79
Domains					
Care (eg, Residents can get a bath/shower anytime they like; "I" format care plans, in the voice of the resident and in first person, are used; and Waking time/bedtimes chosen by residents)	14	103	56.2 (16.3)	20-91	0.62
Environment (eg, Percent of residents who live in households that are self-contained with full kitchen, living room, and dining room; Percent of residents in private rooms; and No traditional nurses' stations or traditional nurses' stations have been removed)	27	103	27.3 (14.2)	3-84	0.64
Family & community (eg, Regularly scheduled intergenerational program in which children customarily interact with residents; Home makes space available for community groups to meet in home with residents welcome to attend; and Private guestroom available for visitors at no, or minimal cost for overnight stays)	6	103	39.1 (23.9)	0-96	0.58
Leadership (eg, CNAs attend resident care conferences; Community Meetings are held on a regular basis bringing staff, residents, and families together as a community; and Residents or family members serve on home quality assessment and assurance [QAA, QI, CQI, QA] committee)	5	103	44.7 (26.9)	0-91	0.47
Workplace (eg, Registered nurses consistently work with the residents of the same neighborhood/household/unit (with no rotation); LPNs consistently work with the residents of the same neighborhood/household/unit (with no rotation); and CNAs consistently work with the residents of the same neighborhood/household/unit (with no rotation))	14	103	44.8 (16.1)	0-96	0.62

CNAs: Certified Nursing Assistants; QAA: Quality Assessment and Assurance; QI: Quality Improvement; LPNs: Licensed Practical Nurse.

Table 3. Correlation Between Culture Change Domains and Percent of Medicaid Residents (n = 81).

Variables	Care	Environment	Family & community	Leadership	Workplace	Percent Medicaid
Care	1.00	0.44***	0.48***	0.20	0.41***	−0.27**
Environment	0.44***	1.00	0.53***	0.33**	0.49***	−0.49***
Family & community	0.48***	0.53***	1.00	0.18	0.35**	−0.32**
Leadership	0.20	0.33**	0.18	1.00	0.44***	0.05
Workplace	0.41***	0.49***	0.35**	0.44***	1.00	−0.14
Percent Medicaid	−0.27**	−0.49***	−0.32**	0.05	−0.14	1.00

*$P < .05$. **$P < .01$. ***$P < .001$.

for-profit and had a chain affiliation. Seventy-five percent of nursing homes were categorized as low-medium culture change adopters and 25% of nursing homes were high culture change adopters.

Table 2 describes the adoption of culture change overall and by domains among Central Florida nursing homes. Overall, the rate of culture change adoption among nursing homes was low, with a culture change mean score of 212 out of a total of 515 points. Care practices on average were adopted more often compared with other domains, while environment practices were the least adopted among nursing homes. The range of scores indicates extreme variability in the adoption of culture change across nursing homes.

Table 3 shows correlations between the proportion of Medicaid residents in nursing homes and the Artifacts of Culture Change domains. The proportion of Medicaid residents in nursing homes was negatively associated with the care, environment, and family and community domains; these findings were statistically significant.

Table 4 presents the relationship between nursing homes with high culture change adoption and nursing home characteristic. Nursing homes with high culture change adoption

Table 4. Odds Ratio of High Culture Change Adoption Relative to Nursing Home (NH) Characteristics (n = 81 NHs).

	Odds ratio (confidence intervals)	*P* value
NH characteristics		
Total beds	0.99 (0.98-1.01)	.75
Occupancy rate	1.07 (0.99-1.17)	.08
Payer status		
Percent Medicaid	**0.97 (0.93-1.00)**	**.05**
Percent Medicare	1.02 (0.97-1.01)	.36
Ownership		.50
Not-for-profit	1.56 (0.43-5.63)	
For-profit (reference)		
Chain-affiliated		.87
Yes	0.89 (0.21-3.77)	
No (reference)		

*$P < .05$. **$P < .01$. ***$P < .001$.

had fewer Medicaid residents (odds ratio = 0.97, confidence interval = 0.93-1.00). Not-for-profit nursing homes and facilities with higher proportions of Medicare residents were associated with greater odds of having high culture change adoption; however, these findings were not significant.

Discussion

The adoption of culture change in nursing homes requires facilities to have resources to invest in meaningful adoption of practices.[28] Consequently, Medicaid-reliant nursing homes may have difficulty implementing culture change practices.[18] As hypothesized, nursing homes with fewer proportions of Medicaid residents were high culture change adopters.[18]

The nursing home industry has been described as a 2-tier system, with the lower-tier consisting of Medicaid-reliant nursing homes. Medicaid-reliant nursing homes disproportionately serve Black residents, and they are associated with lower quality of care.[21,29] These nursing homes may lack the resources to attract and maintain leadership and staff that are able to implement policies, like culture change.[30] Findings from this study indicate culture adoption occurred less often in nursing homes with higher proportions of Medicaid residents. Racial/ethnic disparities may be exacerbated as the care gap widens between nursing homes that adopt culture change practices and those that have challenges adopting culture change practices.

Prior research suggests culture change has several benefits for residents.[10-12,31,32] Furthermore, recent Centers for Medicare and Medicaid Services (CMS) regulations that will be implemented over a 3-year period from 2017 to 2019 (The Final Rule for "Reform of Requirements for Long-term Care Facilities") emphasize improving person-centered care by explicitly ensuring that the residents' choices are incorporated into the plan of care. To the extent that all residents may not have access to nursing homes adopting culture change, providers and policy makers will need to consider strategies that ensure culture change adoption is promoted across a wider distribution of nursing homes. Medicaid reimbursement policies could be a possible approach to encourage culture change adoption in nursing homes. Higher Medicaid reimbursement was associated with adoption of home-like practices in nursing homes.[17,18] Nevertheless, an increase in Medicaid reimbursement may not be sufficient to encourage culture change adoption, specifically among resource-constrained nursing homes. Strategies that focus on management practices and leadership will also be needed to improve the uptake of culture change across various nursing homes.[30]

The findings from this study are limited to providing associations between nursing home organizational characteristics and the adoption of culture change. Furthermore, these findings may not be generalizable to other nursing homes. While this study assessed how nursing home characteristics were associated with culture change adoption, resident and/or market factors were not included in this study. Future studies should incorporate these characteristics to investigate their impact on culture change adoption in nursing homes. The information collected for the Artifacts of Culture Change measure was self-reported by the DONs and subject to social desirability bias. In addition, responses from other staff may have differed from DONs if they participated in the study. The Artifacts of Culture Change measure does not assess all domains of person-centered care that may be important for nursing homes to adopt, such as resident to staff interactions. While face and content validity have been established for the Artifacts of Culture Change survey, no information has been provided on the reliability of the overall culture change measure and its domains.[26] Nonetheless, the Artifacts of Culture Change survey is currently the primary tool used in Veterans Affairs (VA) nursing homes to assess culture change adoption.

Conclusion

The implementation and adoption of culture change in nursing homes will require providers and policy makers to develop various strategies that promote adoption of culture change practices. Nursing home resources are associated with a facilities' ability to implement culture change practices. Resource-deprived nursing homes may encounter additional challenges to implement culture change due to limited resources to adopt and sustain culture change over time. Innovative strategies may be necessary to facilitate the uptake of culture change practices for resource-deprived nursing homes, such as paid training using civil monetary penalty funds or training using change agents from high-performing nursing homes.

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