Managing Racial Diversity: Matching Internal Strategies to Environmental Needs

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Evidence for Practice:

- Matching internal management strategies with environmental demands can help buffer challenges in delivering public services.
- Practitioners should be cognizant of strategies to better serve diverse clientele in an increasingly multicultural society.
- A mismatch between strategy and cultural context can undermine organizational performance.

Key Words: Public Management, Performance, Managerial Strategy, Race, Diversity, Nursing Home.

Word Count: 11531 (All Inclusive)

BIOGRAPHIES

Professor Anna Amirkhanyan's research focuses on public and nonprofit management, organizational performance, public-private differences, and citizen participation. Her articles have been published in various outlets such as the Journal of Public Administration Research and Theory, Public Administration Review, the Journal of Policy Analysis and Management and Voluntary Sector Quarterly, and others. Professor Amirkhanyan's recent book "Citizen Participation in the Age of Contracting: When Service Delivery Trumps Democracy" explores citizen participation in the context complex services delivery structures.

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ABSTRACT

While demographic diversity has been of paramount concern to researchers and practitioners in public management, studies exploring managerial strategies to capitalize on and respond to the needs of diverse client populations are scarce. This paper examines strategies for managing diversity as a way to buffer environmental challenges in service delivery and performance as a result of heterogeneous clientele demands. Our findings suggest that administrators prioritize diversity efforts when faced with higher levels of regulatory violations (a performance measure). A higher percentage of black residents is associated with lower service quality. However, the effect of managerial strategies for diversity on performance is conditioned by the racial composition of the clients: as the percentage of black nursing home residents increases, diversity management efforts are associated with a lower number of regulatory violations. Similarly, at higher levels of racial heterogeneity, diversity management efforts are associated with fewer regulatory violations.

INTRODUCTION

The issue of demographic diversity, both internal and external to organizations, has been of paramount concern to both researchers and practitioners in public management. Effectively addressing the additional, and sometimes conflicting, needs of a diverse population adds an another challenge to the already complex task of managing public organizations. Reflecting the racial, gender, and socioeconomic profile of the citizens they serve, organizations with diverse leadership and staff in secondary and higher education, law enforcement, and other fields have been shown to be more effective at achieving their goals and making decisions that are responsive to the needs of their clients (Hong 2016; Keiser et al. 2002; Meier & Stewart 1992; Meier 1993; Pitts 2007; Marvel & Resh 2015; Roch et al. 2010; Selden 1997). Diversity management has emerged as a strategy to nurture the capabilities of heterogeneous groups and to create an inclusive, open and productive work environment. In theory and practice, diversity is a multifaceted concept and includes recruitment and outreach, building cultural awareness, and promoting pragmatic management policy within organizations (Pitts 2006). Separate from managing diversity within an organization, organizations must also manage and address diversity among their clients.

Studies on strategic management assume managers "set a direction for collective effort, help focus that effort toward desired goals, and promote consistency in managerial actions over time and across parts of the organization" (Boyne and Walker 2010, S186). In order to address heterogeneous demands which may lead to organizational complexities, managers must adopt and implement strategies to buffer these challenges in service delivery. This use of managerial strategies for client and environmental diversity is most common to the field of education (Ayscue 2016; Brown 2003; Larson 2016), yet is largely absent in general public administration

research. This absence of scholarship is puzzling because management strategies are likely to be critical when dealing with an increasingly diverse clientele and aiming at sustaining or improving organizational performance. The objective of this paper is to explore the implications of strategic management for diversity and its conditional relationship with buffering challenges in service delivery.

This study examines managing for diversity in the context of governmental, nonprofit and for-profit U.S. nursing homes. The prominence of diversity is pronounced in the field of health and human services, in general, and in residential settings, in particular, where client welfare is a function of the clients' "low tech, high touch" interactions with professional service providers. In the context of health, disability or personal care, the behavioral norms, values, customs, experiences and expectations of the persons involved are likely to affect the process and the outcomes of service delivery. This study uses a hybrid data set that combines archival data on performance collected by the Centers for Medicare and Medicaid Services (CMS, n.d.a) with a recent Texas A&M University (TAMU) Nursing Home Administrators' (NHA) Survey of management practices, as well as Brown University data capturing nursing home clients' demographic characteristics. Such combinations of self-reported and archival information are frequently used in the public management literature (Boyne, Meier, O'Toole and Walker 2006; Meier and O'Toole 2013).

In the next section, we review the literature on diversity management in public administration and elaborate on the relevance of diversity in the context of long-term care organizations. We then introduce the empirical setting, present results, and discuss the theoretical and substantive implications of our findings.

MANAGEMENT AND DIVERSITY

Public administration has long been concerned with issues of equity and representation in the public service. Sabharwal et al. (2016) identify three streams of public administration research in this area. Starting with Kingsley (1944), the first subset of studies focuses on elitism and commitment to democratic representation in the professional bureaucracy. Building on Kingsley's work, Krislov (1974) and Mosher (1982) link representation with organizational outcomes arguing that a representative bureaucracy ought to be responsive to and act in the interests of those represented. The third and most recent body of scholarship focuses on the management strategies that proliferated after the adoption of Equal Employment Opportunity (EEO) and Affirmative Action (AA) policies. This scholarship can be referred to as diversity management, or more specifically, *managing for diversity*. While EEO and AA established important guidelines regarding representation and access for minority bureaucrats, the legal framework of compliance for EEO or AA (Sabharwal et al. 2006) barely scratches the surface in the ways that diversity can be used to enhance organizational performance. In essence, managing for diversity focuses on everyday processes and strategies involving leadership, staff, and the clients to maximize the programs' ability take advantage of diversity within the organization and potentially to serve a diverse clientele. Of particular importance in this article is the idea of managing for diversity as a strategy public organizations use to buffer challenges in the external environment of the organization.

In an organizational setting, heterogeneity can have several dimensions ranging from gender, age, and sexual orientation to racial and ethnic diversity both among organizational employees and its clients. Much of the voluminous and expansive diversity management research focuses on the relationship between managers, personnel, and service delivery outcomes (e.g. Pitts 2005, 2009; Choi and Rainey 2010; Choi 2013; Moon 2016). Existing studies link

diversity management to work group performance, job satisfaction, workforce stability, and organizational performance (Anderson and Moynihan 2016; Ashikali and Groeneveld 2013; Choi 2009; Choi and Rainey 2010; Horwitz and Horwitz 2007; Moon 2016; Pitts 2005: Richard 2000). This research agenda has grown in large part as a response to the normative implications of diversity (Wise and Tschirhart 2002). Since the 1990s, diversity management practices have been hypothesized to enhance operations and service delivery and create organizational environments where the input and participation of diverse staff and clients could be used to achieve organizational goals (Thomas 1990). Underlying this body of literature is the assumption that managers can use diversity within their organizations as a way to achieve positive results. Building on this, we expect that these same strategies can be used for diversity on the front lines of the organization, particularly for diversity among organizational clients. Certainly, diversity management practices targeting racially heterogeneous managers and employees can be expected to benefit not only internal organizational climate and operations, but also translate into benefits for organizational clients. Additionally, many internal strategies of managing diversity among organizational employees are likely to be a part of broader diversity management regimes also concerned with the needs of diverse client groups. While our understanding of diversity management practices targeting racially heterogeneous managers and employees is well informed by the literature, little research considers the effects of diversity practices specifically aimed at benefiting organizational clients.

Some past studies have used measures of clients' racial diversity as a control variable and found that they were linked to a higher prevalence of perceived diversity management practices (Pitts et al. 2010, Johansen and Zhu 2016). For managers, a racially diverse clientele may signal complexity in the environment. Exploring the external factors affecting organizations is in line

with recent calls to give greater attention to how external context matters (O'Toole and Meier 2015). Public management scholars have focused on how the external environment constrains organizations and affects managerial decision making in public service organizations (Akkerman and Torenvlied 2011; Johansen and Zhu 2014). The dimensions of race and ethnicity are likely environmental sources of complexity which affect managerial decisions because communities with more diverse populations have more heterogeneous demands on public service (Kim 2015). These challenges may lead to difficulty in identifying and responding to divergent preferences (Boaden and Alford 1969) and, thus, negatively affect performance (Andrews et al. 2005). When organizations serve a diverse clientele with greater variation in needs and expectations in service delivery, managers need to adapt to maintain efficiency and effectiveness in their organizations. Managing for diversity by linking internal strategies to external demands may help exploit this complexity for organizational success (e.g. O'Toole and Meier 1999). Given the importance of street-level interactions between employees and the diverse clientele in shaping the effective delivery of services to the public, prioritizing certain staff characteristics and incentivizing certain staff behaviors may be an important part of the how managers use strategic management as a way to cope with environmental complexity. Indeed, research in social service and public health suggests that diversity management is a strategy used to improve communication and trust with clients (Oberfield 2015; Siv and Winchester 2014).

STRATEGY, DIVERSITY, AND MANAGING THE ENVIRONMENT

Managerial strategies can be simply defined as managers' systematic responses to constraints and opportunities (Bryson 2011; Miles & Snow 1978; Donaldson 1995). Strategies vary across organizations, but a commonality between different forms of managerial strategy is that they seek to match the internal capacities of the organization with the organizational

environment, which in turn shapes the impact of internal and external constraints on organizational performance (Boyne and Walker 2010). Indeed, managerial strategies offer a way for organizations to adjust the relationship between the organization and environment, contingent upon the internal organizational structures fitting the strategy in order to be successful (Miles & Snow 1978). While we are not particularly interested in the role of the classic typology of "prospector," "reactor," and "defender" strategies, we suspect that managers adopt strategies to deal with diversity in ways that match the internal structure of the organization with demands from the environment. High levels of racial diversity in the clientele may encourage managers to integrate activities and functions in the agency towards a "strategic agenda" addressing these challenges (Poister and Streib 1999). Given the limited research on managerial strategy and environmental pressures in the general public administration literature (see Boyne and Walker 2010; Meier et al. 2010), we turn to examples from public education for explicit examples of strategic management for racial diversity.

In the field of public education, diversity received considerable attention due to demographic shifts and the need to address the issues rising from greater racial and cultural heterogeneity in schools. Research suggests that high school administrators have adapted to diversity by encouraging diverse student programs, modifying curriculum, facilitating a more inclusive school climate, and offering training programs for teachers and staff (Ayscue 2016). A variety of professional development programs for predominately black schools suggest substantial discretion in designing these diversity programs (Larson 2016). Brown (2003) finds that teachers who use culturally responsive strategies such as demonstrating care for minority students, acting with authority, and communicating in culturally acceptable ways establish more productive learning environments. Schools also implement programs to address students'

performance gaps by increasing support for struggling minority students and creating other race-conscious programs (Ayscue 2016).

On the other hand, some schools have made entrance to advanced classes less steep, which may discourage teachers or create racialized perceptions of minority students (Frankenberg, Ayscue, and Tyler 2016) [1]. As a result of increasing diversity, some schools compete for more affluent students as a way to "combat their reputation as a 'ghetto school'" (Frankenberg, Ayscue, and Tyler 2016, 400). In sum, the literature points to two separate conclusions regarding strategy and performance. First, managerial strategies matching the internal characteristics of the organization to the environment can positively affect performance. Second, when managers adopt a strategy incongruent with the environment, they may create a mismatch which presents problems for organizational performance.

Identifying additional contexts beyond public education where managerial strategies address heterogeneous clientele is an important area for research in public administration, and can be expanded to areas where demographic shifts have required managers to address changes and challenges in service delivery. One of these contexts – the field of chronic care services – may offer generalizable insights into the relationship between management strategy and client diversity that affect social welfare organizations providing direct services to clients.

CLIENT DIVERSITY IN LONG TERM CARE

By 2030, 20 percent of the U.S. population is projected to be 65 or older, a 7 percentage point increase from 2010 figures (Ortman, Velkoff, and Hogan 2014). Within this group, racial and ethnic minorities will account for nearly 30 percent of the nursing home eligible population (Administration on Aging 2015). Accordingly, the nursing home eligible population will increase in the aggregate and become more diverse. Despite a history of lower minority usage of

nursing homes, the recent racial demographic shifts produced changes in utilization rates and will likely continue to increase minority presence in nursing homes (Salive et al. 1993, Thomeer, Mudrazija, and Angel 2015). Over the past several decades, the largest increases in nursing home demographics have been among elderly Hispanic, African American, and Asian residents (Feng et al. 2011). As the nursing home resident population in the U.S. becomes increasingly diverse, ensuring high quality of care that satisfies the needs of these diverse clients remains a challenge. Despite rigorous regulatory efforts, and lower performance deficiencies overall, disparities in access, treatment, and quality persist for many minority clients and in facilities with a larger concentration of minority residents (Chisholm et al. 2013; Li et al. 2015; Smith et al. 2007, 2008; Mor et al. 2004). Furthermore, a large body of research finds significant differences between white residents and minority residents in receiving preventative care such as medication, vaccination, and pain management (Allsworth et al. 2005, Spooner et al. 2001; Christian 2003; Quilliam and Lapane 2001; Akincigil et al. 2012; Luo et al. 2014). If our understanding of the relationship between racial composition and nursing home performance is correct, we expect that racial diversity and the presence of large ethnic minority populations place heterogeneous demands on the nursing staff and the processes of the facility which then affects the quality of service (e.g. Andrews et al. 2005; Boaden and Alford 1969; Kim 2015). Thus, we expect that larger minority populations will be associated with decreased organizational performance (Hypothesis 1a). We also expect that more racial heterogeneity will be associated with decreased organizational performance (Hypothesis1b).

Among other factors, ineffective multicultural organizational policies and challenges with the provider-patient are two possible explanations for the identified disparities. Betancourt et al. (2003) find that structural barriers, such as inadequate interpretation services, can lead to

dissatisfaction, lower levels of comprehension, lower levels of compliance, and an overall lower quality of care for non-English speaking residents. While language is a salient barrier for those involved in the delivery of chronic care, it only affects a subset of the residents. Other barriers such as the historic legacy of segregation and exclusion to health care systems have been argued to affect black residents' interactions in the facility (Brotman 2003; Yi and Cai 2014). Some also argue that cultural and social roles shape how beliefs and customs may influence individual and group behavior (Dilworth-Anderson et al. 2005; Goodenough 1999) which may affect the ability of nursing staff to meaningfully connect with minority residents. Additionally, prejudicial barriers from either the staff or the resident can create social distance in how patient care is managed (Gran and Wellin 1992). In delivering quality nursing care, consistent leadership from administrators and the use of group processes have been found to be important organizational attributes that translate into good performance (Rantz et al. 2004; Rittle 2015; Williamson 2007).

An important function of management is linking internal strategies to the external environment (Boyne and Walker 2010). Managers who link appropriate internal strategies and expectations to the clientele they serve likely contribute to group processes which allow for appropriate care across racial and ethnic demographics. Indeed, this calls for greater attention to managerial responses to the service environment. Given the literature on strategic management and diversity, we expect that managerial efforts cognizant of the service environment will be non-negligible. Thus, we expect that organizations which adopt diversity strategies will decrease the negative effect of the racial composition on performance (Hypothesis 2).

In the twenty-first century, alternatives to nursing home care are increasingly common, such as home health agencies or assisted living facilities. The latter predominately target suburban white communities with higher levels of education, income, and private insurance

options (Stevenson and Grabowski 2010). Socioeconomic factors (Friedman et al. 2005), access to fewer resources for health services (Andersen et al. 1983), and historic discrimination may explain some of the disparities in residency rates in assisted living facilities. Given the racial gaps in access to alternative care facilities and the increasing diversity of residents in nursing homes, it is critical to explore how diversity management strategies influence performance in nursing homes given the larger presence of minority residents.

METHODS

Data

We use a hybrid dataset with information from four different sources. First, Nursing Home Compare (NHC), a national dataset maintained by the Centers for Medicare and Medicaid Services (CMS, n.d.a), includes state agencies' records and evaluation of all Medicare or Medicaid certified skilled nursing facilities in the US. The NHC is an unbalanced, facility-level panel dataset. The latest record contains information collected during the most recent inspection period as of January 2016 (i.e., with inspections conducted 9-15 months before 1/2016), and an earlier record contains information collected during the most recent inspection period as of January 2014 (i.e., 9-15 months before 1/14). The data include facility characteristics, such as ownership, size, occupancy, hospital affiliation, staffing, as well as information on the number of health violations identified by state inspectors during a given inspection cycle.

Second, the 2013 TAMU Nursing Home Administrator Survey [2] targeted a random sample of 1,000 nonprofit and 1,000 for-profit nursing homes, and all government run nursing homes nationwide (n=903) (Compton, Calderon & Meier, 2013). Respondents from the survey were nursing home administrators. The year of the survey (2013) matches with the earliest wave from the NHC dataset, used here as pre-test (9-15 months prior to January, 2014). In three

waves, a total of 725 responses were received, with a 25% response rate. Six duplicate surveys were removed [3] resulting in the final sample of 717 nursing facilities.

Third, the Shaping Long-Term Care in America Project by the Brown University Center for Gerontology and Healthcare Research (LTCFocus) contains detailed resident data from the Minimum Data Set (MDS). The MDS includes data self-reported by nursing homes to the Centers for Medicare and Medicaid Services on clinical assessments of all residents in those facilities [4]. Finally, the Area Health Resource Files (AHRF), collected by the U.S. Bureau of Health Professionals, includes data on county-level demographic and socio-economic information. Using these four data sets allows us to diminish common source bias: our variables on nursing home quality and other attributes are based on annual state inspections, data on managerial strategies and the prevalence of minority groups are self-reported by nursing home administrators, and the contextual variables come from a government archival dataset (Meier and O'Toole 2013).

Dependent Variable: **Service Quality**

As an archival measure of nursing home quality, we use the *total number of health deficiencies*, which captures the regulatory deficiencies identified either during a standard nursing home inspection or as a result of a formally verified complaint. While theoretically the number of deficiencies can range between 0 and 180 (reflecting the total possible number of violations), most facilities receive a modest number of citations. In our data, violations assigned during the considered period range from 0 to 33, with the mean of 5.77. Research in health and nursing home care has made extensive use of health deficiencies as a measure of nursing home quality, generally considering it to be a valid, reliable, and comprehensive measure (Amirkhanyan et al. 2017; Amirkhanyan, Meier, and O'Toole 2017; Harrington et al., 1998;

Mullan and Harrington 2001; O'Neill et al. 2003). Health deficiencies are related to any of the eight categories of performance in nursing facilities: quality of care, resident behavior and facility practices, resident assessment, resident rights, physical environment, dietary services, pharmacy services, and administration and regulation. Below are a few examples of specific regulatory requirements used by state inspectors (for a complete listing see CMS 2015):

> "The resident has the right to be free of interference, coercion, discrimination, and reprisal from the facility in exercising his or her rights."
>
> "A resident who enters the facility without an indwelling catheter is not catheterized unless the resident's clinical condition demonstrates that catheterization was necessary."
>
> "The facility must provide clean bed and bath linens that are in good condition"
>
> "A facility with more than 120 beds must employ a qualified social worker on a full-time basis."

Requirements vary greatly in terms of their scope and focus. Their number and diversity makes it difficult for nursing homes to teach their staff "to the test." The variable we use reflects regulatory violations, and, therefore, lower scores are reflective of higher nursing home quality. Clearly, all aspects of service quality captured by this variable, such as clean facilities, nutritious diet, or diligent nursing care, are important for residents of all backgrounds. However, achieving better service quality may be more difficult with diverse clientele because service delivery, in general, and health and human services, in particular, are often a result of co-production.

Residents' engagement – comments, feedback, cooperation, complaints, and information sharing – may vary across race and ethnicity as well as depending on representation among the staff and staff skills in working with diverse clients. These factors may be critical in ensuring good outcomes of nursing home care.

Diversity Management, Race, and Other Independent Variables

We use two items from the TAMU Nursing Home Administrator Survey to capture managerial strategies with respect to diversity. Respondents in the survey were asked whether they strongly agreed (4), agreed (3), disagreed (2) or strongly disagreed (1) with these two statements:

1. *Our staff has a sufficient number of members proficient in the multiple languages our clients require.*
2. *Our management seeks to hire nurses with skills working with a diverse clientele.*

Based on these two items, we created two dummy variables: *multilingual staff*, coded as 1 for those who "strongly agreed," and *hiring staff skilled in diversity* coded as 1 for those who either "agreed" or "strongly agreed" [5].

We measure environmental complexity two ways. First, using the aggregated data from MDS provided by Brown University, we use the percent of clients who are black and the percent of clients who are Latino/a [6]. Although African-Americans and Latino/as represent racial and ethnic minorities, they may present different sets of needs for managers and organizations to meet [7]. Consequently, examining the relationship between hiring strategies and performance outcomes should consider these groups separately. Second, we developed a within-home measure of racial heterogeneity using the Blau dissimilarity index. The Blau index provides a standardized measure of the group differences within an organization that theoretically ranges

from 0, complete homogeneity, to 100, or complete heterogeneity with all subgroups equally balanced. The Blau index is a common measure used by diversity management scholars (see Pitts 2005, Pitts et al. 2010, Choi 2013, Choi and Rainey 2010), but is not free from methodological criticisms. As Rushton (2008) notes, the substantive interpretation of a diversity index does not account for variation amongst group size [8]. Since, the size of individual racial/ethnic groups may matter in the implementation of diversity programs and its relationship to organizational performance, it is important to estimate models which account for both heterogeneity in the service population (see Williams and O'Reilly 1998) and the size of individual racial/ethnic groups and how their presence affects the delivery of programs (Pitts 2010). By capturing multiple conceptualizations of racial demographics, we can arrive at a more accurate relationship between race, managerial strategy, and performance.

To control for nursing home ownership, we use two nominal variables indicating a nursing home's legal ownership status: *nonprofit nursing home* and *public nursing home* (source: NHC) [9]. To control for the variation in other general management strategies, we create three relevant scales based on numerous TAMU NHA Survey items (see Appendix A). Variable *sharing power* measures a nursing home administrator's propensity to involve other organizational and external stakeholders in the decision-making process. Variable *innovation* captures an administrator's propensity to look for and adopt new ideas or practices, and to change along with the environment. Finally, *managing external influences* is a variable measuring strategies related to manager's response to external influences. For all three variables, we combine survey items from Appendix A into factor scores. All regressions also include a lagged dependent variable reflecting the *total number of health deficiencies* identified during the most recent state inspection as of January 2014.

We also control for a number of organizational factors and environmental risks (Smith 2006). We use the *number of certified beds* and the *number of residents* (source: NHC) to measure nursing home size. We measure staffing – total registered nurse, vocational nurse, and nurse aide hours – using t*otal nursing hours per resident per day* (source: NHC). *Percent residents on Medicaid* (from CMS) captures the percentage of "impoverished" nursing home residents whose care is reimbursed by the Medicaid program (as opposed to private insurance, Medicare, or out-of-pocket payment). Two dummy variables (yes=1, no=0) indicate whether a nursing home is *hospital affiliated* or experienced a *change of owner during past 12* months prior to the survey (source: NHC). As a proxy for nursing home's age, we use *years since certification* (source: NHC) [10]. Following Angelelli et al. (2003), Castle (2005), and Grabowski (2001) we use the *Herfindahl Index of competition* to capture the local nursing home market competition. Representing the sum of squared market shares (#beds) for all Medicare and Medicaid certified homes in a county, this index theoretically ranges from 0 to 1 (source: NHC). Finally, three variables describe the external environment based on the AHRF data. *Population density* measures persons per square mile; p*ercent in poverty* and *percent elderly* reflect the percentage of county population below the poverty line and the percentage of county population over 65, respectively.

[Table 1 here]

Table 1 summarizes the analytic sample of nursing homes on observable characteristics, both overall and separately, by ownership status. The first row of table 1 shows that privately owned and managed nursing homes have more deficiencies, on average, than public and nonprofit nursing homes. Private nursing homes also serve a more diverse population, on average, than their public and nonprofit counterparts. Notably, administrators at private nursing

homes are also more likely to report hiring practices focused on skills in working with diversity and less likely to feel they have sufficient multilingual capacity. In the sample overall, blacks and Latino/as are underrepresented relative to their general national non-resident populations. Similarly, the Blau index, with a mean of 15, suggests that many of the nursing homes in the sample are dealing with relatively homogeneous client populations.

[Table 2 here]

Table 2 presents a summary of the sample separated by diversity management strategy. The first row suggests that the performance of nursing homes that focus on hiring staff skilled in working with diverse clients does not differ significantly from those who do not focus on the diversity of the clientele in hiring. There is a small performance gap between nursing home administrators who feel they have sufficient multilingual staff and administrators who do not. Despite the slightly higher number of deficiencies among nursing homes that focus on skills handling diversity and multilingualism among their staff, however, the nursing homes that focus on diversity management strategies in hiring also serve much more diverse clients, on average, than their peer organizations without a focus on diversity management in hiring. We aim to account for these systematic differences in clients served by nursing homes using diversity management strategies to isolate the performance effects attributable to the strategies themselves separately from the performance effects of simply serving diverse clients.

Regressions

In the general form, our regression models are as follows:

$$Q_{2015\text{-}14} = \beta_0 + \beta_1 HSSD_{2013} + \beta_2 MLS_{2013} + \beta_3 B_{2013} + \beta_4 L_{2013} +$$

$$\beta_5\, HSSD_{2013} * B_{2013} + \beta_6\, HSSD_{2013} * L_{2013} + \beta_7\, MLS_{2013} * B_{2013} + \beta_8\, MLS_{2013} * L_{2013} + \beta_9 Q_{2013\text{-}12}$$

$$+ \beta_{10} X + e \quad [11]$$

where Q = nursing home quality, HSSD = hiring staff skilled in diversity, MLS = multilingual staff, B = percent of black clients; L = percent of Latino/a clients; X = control variables.

The dependent variable – our measure of nursing home quality – is from the most recent survey record as of January 1, 2016, pertaining to state surveys conducted in 2015 or late 2014. All nursing home level control variables pertain to one of the previous survey records for these nursing homes – those conducted between 2013 and 2012. Since the TAMU NHA Survey was administered in 2013, all regulation- and management-related independent variables pertain to 2013. Variables from the AHRF, *percent elderly*, *percent in poverty*, *number of home health agencies* and *number of hospices* were available for the year 2011, while *population density*, and *number of hospitals* were from 2010. Intuitively, β_5 through β_8 represent the parameters of primary interest to the study, and capture the differential effect of diversity on performance attributable to the use of management of diversity strategies. If focusing on acquiring multilingual staff or staff skilled at working with diverse clients effectively mitigates the performance effects of serving a diverse clientele, then β_5 through β_8 should be negative and significant.

We report results for several alternative models. We provide results for the OLS with robust standard errors and state fixed effects (FE) to help alleviate the problem of interdependent observations (Gujarati, 1995) and to control for between-state variations in regulation and other factors. For sensitivity analysis, we use the Blau index of diversity in place of *percent black clients* and *percent Latino clients*, as well as its interaction with both measures of diversity management. In Appendices B and C, we also provide results for the Poisson and Negative

Binomial models with state fixed effects due to the nature of the dependent variable – an all-positive count with a positively skewed (Poisson) distribution of deficiencies [12].

RESULTS

[Table 3 here]

Table 3 presents OLS estimates of the effects of both managerial strategies considered by the current study: seeking staff skilled in dealing with diversity and sufficient staffing of multilingual nurses. First, columns 1 through 3 examine the performance effects of having a diverse clientele and specifically targeting staff skilled in serving diverse clients. As previously discussed in the summary of the sample, nursing homes that actively target staff skilled in handling diversity have slightly more deficiencies, but the difference is not statistically significant. Column 1 presents OLS estimates of the separate effects of hiring diversity trained staff and serving diverse clientele while accounting for state fixed effects. As the estimates indicate, on average, the within-state effect of the percent of black clients in a nursing home on health deficiencies is positive and statistically significant. Specifically, a 1 percentage point increase in black nursing home clients corresponds with an increase of 0.05 of a deficiency (S.E.= 0.02, $p < 0.05$). Put in context, a nursing home serving a clientele with the proportion of African American one standard deviation above the sample mean would be expected to have one additional health deficiency, on average. Thus, we find confirmation of Hypothesis 1a. Neither diversity management nor percentage of clients who are Latino/a have an effect on nursing home quality.

In column 2, we add controls for prior performance, nursing home characteristics, and community context, and the direct relationship between African American clientele and performance becomes statistically insignificant. This is likely because previous performance

explains much of the variation in 2014-2015 performance; however, African American clients may be systematically sorted into poor performing nursing homes. Again, management strategies focused on hiring staff skilled in dealing with diverse clients is not statistically significant.

The conditional difference in quality between homes that explicitly consider skills related to working with diverse clients in hiring and homes that do not consider those skills is not statistically significant. However, the importance of this management practice for quality might rise commensurately with client diversity. That is, as more racial and ethnic minorities are served by a nursing home, management strategies that give explicit attention to handling diversity might improve the quality of their nursing homes relative to similarly situated nursing homes that do not. We explicitly test for this possibility in Column 3 by interacting the binary indicator for homes that seek staff skilled in dealing with diversity and the proportion of clients who belong to a racial minority group. Confirming Hypothesis 2, the results suggest that nursing homes that consider skills working with diverse clients in their hiring practices have better performance attributable to increased client diversity than nursing homes that do not explicitly account for potential problems in serving diverse clients. Specifically, the results show that in nursing homes that hire staff skilled at dealing with diversity, an increase in the proportion of black clients is associated with a significant 0.09 decrease in health deficiencies relative to nursing homes that do not hire staff with such skills facing the same increase in black clients (S.E.= 0.04, $p < 0.05$). This differential effect is practically important. For instance, in a home with a proportion of black clientele equal to their general national population proportion, 13 percent, nursing homes that strategically hire staff skilled in handling diversity would be expected to have 1.17 fewer health deficiencies, on average, than nursing homes that do not implement such hiring practices. This difference represents a 20% reduction in deficiencies from the sample mean. The marginal

effect plot in Figure 1 demonstrates that, in homes with approximately 50% or more African American residents, the marginal effect of management strategies is statistically significant and different from zero.

In columns 4 through 6, we conduct a similar analysis on the potential performance effects of sufficient staffing of multilingual nurses. As discussed previously, the ability to communicate clearly and effectively presents an additional challenge to nursing homes when serving more diverse clients. Part of this involves cultural understanding, which might improve when hiring staff trained in handling diversity. Another part of this challenge involves language barriers. Having sufficient multilingual staff should improve performance by allowing staff to more quickly understand and resolve client problems. The difference between homes with sufficient multilingual staff and those without multilingual staff is not statistically significant. Notably, it runs in the opposite direction of the gap in hiring diversity trained staff. Perhaps surprisingly, the results in column 6 (and 7, which includes both independent variables) suggest that sufficient multilingual staffing serving a higher proportion of black clientele is associated with *increases* in deficiencies relative to similar homes *without* sufficient multilingual staffing, and the difference is marginally significant (S.E.= 0.02, $p < 0.10$).

Nursing home clients of different races and ethnicities might systematically sort into different nursing homes, either through historical segregation or self-selection of homes with different characteristics. As a result, considering higher proportions of racial and ethnic minorities alone may not truly capture diversity within nursing homes; the highest ends of these distributions may simply reflect a relatively homogeneous clientele primarily consisting of blacks or Latino/as. We supplement our analysis using a measure of within-nursing home racial heterogeneity, the Blau index, to better capture true diversity in clientele.

[Table 4 here]

Table 4 presents OLS estimates of our model using the Blau index to measure diversity. Columns 1 and 2 are consistent with previous estimates accounting for proportion black and Latino/a clientele. Again, confirming Hypothesis 1b, serving a diverse clientele is associated with an increase in health deficiencies ($b = 0.03$, S.E. $= 0.1$, $p < 0.05$), but this link is related to other factors that separate diverse nursing homes from more homogeneous nursing homes, such as previous performance. Moving to column 3, homes that focus on hiring staff skilled in handling diversity offset the negative effects of greater diversity. Using the sample average of 15.31, a nursing home hiring staff skilled at handling diversity would have 0.92 fewer deficiencies on average than a similar nursing home without diversity focused hiring practices (a 15.9% reduction from the mean deficiency level). Thus, Hypothesis 2 is, once again, confirmed. When observing the marginal effects plot in figure 2, the marginal effect of seeking diverse staff does not become statistically different from zero until homes become more than 50% racially diverse, suggesting that diversity management matters in more heterogeneous contexts. On the other hand, nursing homes with sufficient multilingual nurses do not seem to receive any differential benefit in increased diversity contexts.

DISCUSSION

Together, these results suggest several important implications for organizations serving diverse clients. They demonstrate that more diverse nursing homes tend to have more health deficiencies. Importantly, the challenges of providing care to diverse clientele persist while keeping constant the percentage of clients whose care is paid by the Medicaid program – a common proxy for the clients' affluence and the level of payment received by nursing facilities.

These findings suggest that the nursing homes serving more diverse clientele may be facing higher levels of complexity (including the severity of and the variation in healthcare or socio-emotional needs). Nonetheless, we also find that managing diversity strategically, by hiring staff trained in dealing with diverse clients, can in fact help mitigate some of the challenges of serving diverse clientele. Nursing homes that take client diversity into account while staffing reduce some of the consequences of diversity for organizational performance. The difference was significant both among homes with a higher proportion of black clientele and higher internal racial heterogeneity. Hiring staff skilled at working with diverse clientele may suggest both representation-based strategies – i.e., hiring minority nurses – as well as seeking nurses with training or past experience in working with diverse clients. Regardless of the particular strategy employed, the results provide evidence that managers are able to recognize and assess challenges in the environment and take certain steps in buffering the potential shocks that task difficulty has on organizational performance.

These findings contribute to three bodies of public administration literature. First, they improve our understanding of how managerial strategies influence organizational performance. Diverse clientele may be linked to task difficulty, suggesting that challenges faced by the frontline staff in service delivery can reduce quality. Second, the positive and statistically significant interaction effect of staffing strategy and client diversity likely points to the positive effect of managerial efforts to build capacity to be able to counteract the challenges of serving diverse clientele. Finally, the findings suggest that service delivery organizations use diversity management strategies not only to manage their personnel, but also to buffer the challenges of heterogeneity in the populations they serve.

Our findings also suggest that a mismatch between strategy and cultural context can result in negative consequences. For instance, while the increase in diversity was associated with fewer deficiencies in homes focused on hiring staff trained in handling diversity, the baseline effect of such practices was positive and significant. This suggests that prioritizing staff capable of handling diverse clients in an organization that does *not* serve diverse clients can lead to *more* performance problems. Similarly, staffing multilingual nurses seemed to increase performance problems as the proportion of black clientele increases, perhaps due to an increased likelihood of cultural and linguistic mismatch between multilingual (and, possibly, foreign-born or Latino/a) nurses and black clients. Notably, the estimated effects of the proportion of Latino/a clientele and the interaction effects of the diversity management strategies considered in this study were all imprecisely estimated, possibly due to the underrepresentation of Latino/a serving nursing homes in the sample. However, the point estimates of the interactions terms between the two strategies and the proportion Latino/a move in precisely opposite directions from the interaction terms between the two strategies and proportion black clientele. While these estimates are small and insignificant, they would be consistent with a potential trade-off between these strategies. The trade-off may be particularly relevant to the communities with dynamic demographic profiles. While attempting to retain employees who represent and are responsive to specific racial, religious, or ethnic minority backgrounds of client sub-groups, nursing home administrators are likely facing a moving target and are pressured to adjust their organization's human capital accordingly. The trade-offs may also motivate building our understanding of cultural sensitivity and relevant managerial and human resource strategies in the context of health and human services. Future research with more representative samples should investigate this further.

A key implication of this research concerns the similar substantive impact of diversity strategies conditional upon *both* the percentage of black residents and the racial diversity of the residents. This study is the first to link managerial perceptions of diversity to not only clientele diversity, but also a specific minority group. Explicitly addressing what leads to these similar effects may help bridge two largely independent, but similar, bodies of scholarship: diversity management and representative bureaucracy. This point is relevant to one of the limitations of our paper - the lack of personnel data in the nursing homes under consideration. While this study does not allow us to examine if managing for diversity leads to any particular emphasis in hiring more black nurses to passively represent the black population or a racial mix of nurses to better serve a heterogeneous clientele, we can theorize several conclusions regarding how managerial strategies manifest themselves in the organization. First, the results suggest that actions extended to managing a heterogeneous clientele can affect different racial compositions in the target population. A skillful manager may be able to accurately assess the challenges in the environment and use programs of diversity management to target organization-specific needs in buffering the environment. Perhaps, this extends to efforts towards hiring minority nurses or incorporating culturally competent training. The latter is particularly important in organizations who may face constraints in hiring new personnel from minority groups. If hiring for racial representation presents organizational challenges, implementing programs for diversity management may achieve similar substantive effects in terms of the quality of care. Additional work, in areas that have information on the racial composition of the bureaucracy may advance the micro foundational mechanisms motivating these managerial strategies.

Future research may consider ways that organizational strategies of representation and diversity are similar or different across dimensions of performance. Exploring the patient

satisfaction side of healthcare outcomes may reveal differences (or similarities) in substantive effects on perceptual and archival data. If nurses actively represent minority patients, it is likely that there will be more emphasis on personalized care in a representative home vis-à-vis a home that emphasizes diversity. Representation may have a larger impact on cultural competency due to the shared identity of resident and nurse. Since cultural competency is sensitive to knowledge about a particular race or ethnicity, representative bureaucracy may be an ideal strategy for patient satisfaction. Importantly, our research finds that these strategies are significantly associated with archival measures of performance assigned by third-party inspectors who utilize a fairly standard protocol in their assessments. Clearly, nursing staff's ability to mitigate internal complexities of serving a diverse clientele has a positive effect on the organizational ability to comply with the broader set of health care regulations that go well beyond just satisfying the clients. While we identify that managers use strategies in some way, the "how" question is largely left unanswered in the current study. Nonetheless, managerial strategies of diversity management are used for the purpose of managing task difficulty in the external environment.

Our study has important implications for new research agendas on diversity as a managerial strategy. The traditional theory of diversity management generally concerns personnel management in federal regulatory agencies (e.g. Pitts 2009, Choi and Rainey 2010, Moon 2016), while diversity as a managerial strategy focuses on how managers assess their environments. Organizational outcomes largely depend on the people who are served and the prescience of managers to adapt to new challenges and changes to way public services are delivered. With population change in the United States creating a more racially and ethnically diverse society, all public organizations must invariably respond to changes in their clientele. The way we, as a society and scholars of public management, perceive the delivery of public

services is likely to undergo tremendous change in the coming decades. Demographic research by the Pew Research Center estimates that the white population within the United States will decrease from 62% in 2015 to 46% in 2065 while Hispanic, Black, Asian, and foreign-born populations will all significantly increase (Cohn 2015). In other words, not a single racial or ethnic group will be classified as a majority, instead a diverse and pluralistic society will emerge.

In practice, strategies to manage diversity will become increasingly salient and, in some cases, imperative, as organizations situated in communities that once exhibited stability in the racial composition will face a period of uncertainty and task difficulty as a result of heterogeneous demands on public services. Further effort exploring if managers adopt strategies to respond to diversity and the substantive implications of these strategies is of concern for effective public management and governance. Scholars may find that other areas of service delivery with rich interpersonal communications with clientele such as local police forces, welfare agencies, and hospitals provide additional contexts where managerial strategies are sensitive to changes in the population. Acquiring survey data across these substantive areas may reveal unique ways that managers respond to these changes relative to the type of service they provide, communities they are situated in, and racial composition of the clientele they serve.

NOTES

1. An extensive literature exists on the racial biases in class assignments such as gifted classes (Grissom, Kern and Rodriquez 2015). There is a clear benefit in gaining access to gifted classes and greater equity in assignments to such classes likely counter balances the existing biases in standardized tests and other methods of assessment.
2. Respondents could complete the survey online or on paper.
3. Six duplicate records resulted from respondents' filling out both the online and hard copies of the survey.
4. Resident-level data submitted to the MDS are then aggregated to the facility-level for public distribution.
5. The difference in coding was driven by differences in the distribution of responses. When examining multilingual staff hiring practices, 22 percent of the sample "strongly agreed" that they hired sufficient multilingual staff, which provides adequate sample size for comparing those who are most confident in the multilingual staff coverage and all others. Only 11 percent of the sample reported that they "strongly agreed" that they sought staff skilled in working with diverse clients. Consequently, the lower threshold was used for hiring staff skilled in diversity.
6. The MDS data reported by Brown University contains several nursing homes that report only two of the three racial categories that do not sum to 100. Most nursing homes with complete data within the sample frame of the current study sum to 100 across these three categories in the MDS data. For cases in which one group is missing data, we impute the missing group as the difference between 100 and the sum of the other two groups.

7. While Asians have increased as a percentage of nursing homes residents, no data are available to include them in the analysis.
8. For example, a facility which has 50% white residents, 35% black residents, and 15% Latino residents is observationally equivalent to a facility which has 50% white residents, 15% black residents, and 35% Latino residents. In practice, these mixes may imply different diversity strategies.
9. In all regression models, for-profit ownership is the omitted category.
10. The limitation of this proxy is that some facilities undergo changes associated with a loss and/or reacquisition of certification.
11. The reason for using 2015-2014 or 2013-2012 as a subscript for Nursing Home Compare measures, with the more recent years listed first, is that Nursing Home Compare is an unbalanced data set, and survey inspections occur roughly within 15 months of a given survey file date. The 1/1/2016 Nursing Home Compare file we used included surveys conducted mostly in 2015. Considerably fewer homes had their most recent surveys conducted in 2014. I.e., as of 1/1/16, the most recent survey for most nursing homes was conducted in 2015 and we utilized these records. For a smaller share of nursing homes no surveys were conducted in 2015, so we searched and found their 2014 survey records. In addition, the pre-test wave (1/1/14 NHC File) we created and used includes mostly surveys conducted in 2013. For the homes that were not surveyed in 2013, we used the next most recent survey from 2012.
12. As recommended by Gardner, Mulvey, & Shaw 1995.

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REFERENCES

Administration on Aging. 2015. “A Statistical Profile of Older African Americans”

Akincigil, Ayse, Mark Olfson, Michele Siegel, Karen A. Zurlo, James T. Walkup, and Stephen Crystal. 2012. "Racial and ethnic disparities in depression care in community-dwelling elderly in the United States." *American Journal of Public Health* 102(2): 319-328.

Allsworth, Jenifer E., Rebecca Toppa, Nicole C. Palin, and Kate L. Lapane. 2005. "Racial and ethnic disparities in the pharmacologic management of diabetes mellitus among long-term care facility residents." *Ethn Dis* 15(2): 205-212.

Amirkhanyan, Anna, Kenneth J. Meier, and Laurence J. O’Toole. 2017. "Managing in the Regulatory Thicket: Nursing Homes and Regulatory Competence." *Public Administration Review*, 77 (3): 381–394.

Amirkhanyan, Anna, Kenneth J. Meier, Laurence J. O’Toole, Mueen Dahwe, and Shawn Janzen. 2017. "Management and Performance in U.S. Nursing Homes. " *The Journal of Public Administration Research and Theory.* Advance Access: DOI: https://doi.org/10.1093/jopart/mux003

Andersen, Ronald M., Allan McCutcheon, Lu Ann Aday, Grace Y. Chiu, and Ralph Bell. 1983. "Exploring dimensions of access to medical care." *Health services research* 18(1): 49.

Andrews, Rhys, George A. Boyne, Jennifer Law, and Richard M. Walker. 2005. "External constraints on local service standards: The case of comprehensive performance assessment in English local government." *Public Administration* 83(3): 639-656.

Angelelli, Joseph, Vincent Mor, Orna Intrator**,** Zhanlian Feng, and Jacqueline Zinn. 2003. Oversight of nursing homes: Pruning the tree or just spotting bad apples? *The Gerontologist* 43 (Special Issue II): 67–75.

Ayscue, Jennifer B. 2016. "Promising or Potentially Harmful? Suburban School Responses to Racial Change." *Peabody Journal of Education* 91(3): 326-347.

Berdes, Celia, and John M. Eckert. 2001. "Race relations and caregiving relationships: A qualitative examination of perspectives from residents and nurse's aides in three nursing homes." *Research on Aging* 23(1): 109-126.

Betancourt, Joseph R. 2003. "Cross-cultural medical education: conceptual approaches and frameworks for evaluation." *Academic Medicine* 78(6): 560-569.

Boaden, Noel T., and Robert R. Alford. 1969. "Sources of diversity in English local government decisions." *Public Administration* 47(2): 203-224.

Boyne, George A., Kenneth J. Meier, Laurence J. O'Toole Jr, and Richard M. Walker. 2006. "Public Service Performance." *Perspectives on Measurement and Management*.

Boyne, George, A., and Richard M. Walker. 2010. "Strategic Management and Public Service Performance: The Way Ahead. " *Public Administration Review* 70 (S1): S185-192.

Brotman, Shari. 2003. "The limits of multiculturalism in elder care services." *Journal of Aging Studies* 17(2): 209-229.

Brown, Dave F. 2003. "Urban teachers' use of culturally responsive management strategies." *Theory into Practice* 42(4): 277-282.

Bryson, John M. 2011. *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement*. John Wiley & Sons.

Castle, Nicholas G. 2005. Nursing home closures and quality of care. *Medical Care Research and Review 62* (1): 111–32.

Centers for Medicare and Medicaid Services (n.d.a). About nursing home inspections. Retrieved 4/18/2015 from the web site:

http://www.medicare.gov/NursingHomeCompare/About/Inspections-and-Complaints-Info.html

_____ (2015). *State Operations Manual*. Appendix PP. Rev. 149, 10-09-2015. Retrieved February 1, 2016 from the web site: https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf

Chisholm, Latarsha, Robert Weech-Maldonado, Alex Laberge, Feng-Chang Lin, and Kathryn Hyer. 2013. "Nursing home quality and financial performance: does the racial composition of residents matter?." *Health services research* 48 (6.1): 2060-2080.

Choi, Sungjoo, and Hal G. Rainey. 2010. "Managing diversity in US federal agencies: Effects of diversity and diversity management on employee perceptions of organizational performance." *Public Administration Review* 70(1): 109-121.

Choi, Sungjoo. 2013. "Demographic diversity of managers and employee job satisfaction: Empirical analysis of the federal case." *Review of Public Personnel Administration* 33(3): 275-298.

Christian, Jennifer B., Kate L. Lapane, and Rebecca S. Toppa. 2003. "Racial disparities in receipt of secondary stroke prevention agents among US nursing home residents." *Stroke* 34(11): 2693-2697.

Cohn, D'Vera. 2015. "Future immigration will change the face of America by 2065" *Pew Research Center* http://www.pewresearch.org/fact-tank/2015/10/05/future-immigration-will-change-the-face-of-america-by-2065/.

Compton, Mallory, Polly Calderon, and Kenneth J. Meier. 2013. National Nursing Home Survey. Project for Equity, Representation and Governance, Texas A&M University.

Dilworth-Anderson, Peggye, Beverly H. Brummett, Paula Goodwin, Sharon Wallace Williams, Redford B. Williams, and Ilene C. Siegler. 2005. "Effect of race on cultural justifications for caregiving." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 60(5): S257-S262.

Dilworth-Anderson, Peggye, Ishan Canty Williams, and Brent E. Gibson. 2002. "Issues of race, ethnicity, and culture in caregiving research a 20-year review (1980–2000)." *The Gerontologist* 42(2): 237-272.

Donaldson, Lex. 1995. *American anti-management theories of organization: A critique of paradigm proliferation*. Cambridge University Press.

Dreher, Melanie, and Neil MacNaughton. 2002. "Cultural competence in nursing: foundation or fallacy?." *Nursing outlook* 50(5): 181-186.

Feng, Zhanlian, Mary L. Fennell, Denise A. Tyler, Melissa Clark, and Vincent Mor. 2011. "Growth of racial and ethnic minorities in US nursing homes driven by demographics and possible disparities in options." *Health Affairs* 30(7): 1358-1365.

Frankenberg, Erica, Jennifer B. Ayscue, and Alison C. Tyler. 2016. "Diversifying High Schools in Racially Changing Suburban Districts: Expanding Opportunity, Creating Barriers?." *Peabody Journal of Education* 91(3): 383-403.

Friedman, Susan M., Donald M. Steinwachs, Paul J. Rathouz, Lynda C. Burton, and Dana B. Mukamel. 2005. "Characteristics predicting nursing home admission in the program of all-inclusive care for elderly people." *The Gerontologist* 45(2): 157-166.

Gardner, William, Mulvey, Edward P., and Esther Shaw. 1995. Regression analysis of counts and rates: Poisson, overdispersed Poisson, and negative binomial models. *Psychological Bulletin*, 118(3), 392-404.

Goodenough, Ward H. 1999. *Culture, language, and society*. Menlo Park, CA: Benjamin/Cummings Publication Co.

Grabowski, David C. 2001. Medicaid Reimbursement and the Quality of Nursing Home Care. *Journal of Health Economics* 20(4): 549-569.

Grau, Lois, and Edward Wellin. 1992. "The organizational cultures of nursing homes: influences on responses to external regulatory controls." *Qualitative Health Research* 2(1): 42-60.

Grissom, Jason A., Emily C. Kern, and Luis A. Rodriguez. "The "representative bureaucracy" in education: Educator workforce diversity, policy outputs, and outcomes for disadvantaged students." *Educational Researcher* 44, no. 3 (2015): 185-192.

Gujarati, Damodar N. 1995. Basic econometrics. New York: McGraw-Hill Inc.

Harrington, Charlene, Swan, J.H., Wellin, V, Clemena, W and Carrillo, H. 1998. State Data Book on Long Term Care Program and Market Characteristics. San Francisco: University of California, Department of Social and Behavioral Sciences.

Hong, Sounman. 2016. "Does Increasing Ethnic Representativeness Reduce Police Misconduct?" *Public Administration Review* 77(2): 195-205.

Johansen, Morgen, and Ling Zhu. 2016. "Who Values Diversity? Comparing the Effect of Manager Gender Across the Public, Private, and Nonprofit Sectors." *The American Review of Public Administration* Online first, doi: 10.1177/0275074016634201

Keiser, Lael R., Vicky M. Wilkins, Kenneth J. Meier, and Catherine A. Holland. 2002. "Lipstick and logarithms: Gender, institutional context, and representative bureaucracy." *American Political Science Review* 96(3): 553-564.

Kim, Mirae. 2015. “Socioeconomic Diversity, Political Engagement, and the Diversity of Nonprofit Organizations in U.S. Counties.” *The American Review of Public Administration* 45(4): 402-416.

Kingsley, J. Donald. 1944. *Representative Bureaucracy*. Yellow Springs, OH: Antioch Press.

Krislov, Samuel. 1974. *Representative Bureaucracy*. Prentice-Hall.

Larson, Kristine E. 2016. "Classroom Management Training for Teachers in Urban Environments Serving Predominately African American Students: A Review of the Literature." *The Urban Review* 48(1): 51-72.

Li, Yue, and Xueya Cai. 2014. "Racial and ethnic disparities in social engagement among US nursing home residents." *Medical care* 52(4): 314.

Li, Yue, Charlene Harrington, Helena Temkin-Greener, Kai You, Xueya Cai, Xi Cen, and Dana B. Mukamel. 2015. "Deficiencies In Care At Nursing Homes And Racial/Ethnic Disparities Across Homes Fell, 2006–11." *Health Affairs* 34(7): 1139-1146.

Luo, Huabin, Xinzhi Zhang, Benjamin Cook, Bei Wu, and M. Roy Wilson. 2014. "Racial/ethnic disparities in preventive care practice among US nursing home residents." *Journal of aging and health* 26(4): 519-539.

Marvel, John D., and William G. Resh. 2015. "Bureaucratic discretion, client demographics, and representative bureaucracy." *The American Review of Public Administration* 45(3): 281-310.

Meier, Kenneth J. 1993. "Latinos and representative bureaucracy testing the Thompson and Henderson hypotheses." *Journal of Public Administration Research and Theory* 3(4): 393-414.

Meier, Kenneth J. and Laurence J. O'Toole. 2013. "I Think (I am Doing Well), Therefore, I am: Assessing the Validity of Administrators' Self-assessments of Performance." *International Public Management Journal* 16 (1), 1-27

Meier, Kenneth J., and Joseph Stewart Jr. 1992. "The impact of representative bureaucracies: Educational systems and public policies." *The American Review of Public Administration* 22(3): 157-171.

Meier, Kenneth J., Laurence J. O'Toole, George A. Boyne, Richard M. Walker, Rhys Andrews. 2010. "Alignment and results: Testing the interaction effects of strategy, structure, and environment from Miles and Snow." *Administration & Society* 42 (2): 160-192.

Miles, Raymond E., and Charles C Snow. 1978. *Organizational strategy, structure, and process*. New York: McGraw-Hill.

Moon, Kuk-Kyoung. 2016. "Examining the Relationships Between Diversity and Work Behaviors in US Federal Agencies Does Inclusive Management Make a Difference?." *Review of Public Personnel Administration*: 0734371X16660157.

Mosher, Frederick C. 1982. *Democracy and the public service*. Oxford University Press on Demand.

Mullan, Joseph, and Charlene Harrington. 2001. Nursing home deficiencies in the United States. A confirmatory factor analysis. *Research of Aging, 23,* 503-531.

O'Neill, Ciaran, Charlene Harrington, Martin Kitchener, and Debra Saliba. 2003. Quality of care in nursing homes: An analysis of relationships among profit, quality, and ownership. *Medical Care,* 41(12): 1315-1322.

Ortman, Jennifer M., Victoria A. Velkoff, and Howard Hogan. 2014. "An aging nation: the older population in the United States." *Washington, DC: US Census Bureau*: 25-1140.

O'Toole, Laurence J., and Kenneth J. Meier. 1999. "Modeling the impact of public management: Implications of structural context." *Journal of Public Administration Research and Theory* 9(4): 505-526.

Pitts, David W. 2005. "Diversity, representation, and performance: Evidence about race and ethnicity in public organizations." *Journal of Public Administration Research and Theory* 15(4): 615-631.

Pitts, David W. 2007. “Representative Bureaucracy, Ethnicity, and Public Schools: Examining the Link between Representation and Performance” *Administration & Society* 39(4): 497-526.

Pitts, David W. 2010. "Organizational diversity and public service performance." *Public management and performance: Research directions*: 178-206.

Pitts, David W., Alisa K. Hicklin, Daniel P. Hawes, and Erin Melton. 2010. "What drives the implementation of diversity management programs? Evidence from public organizations." *Journal of Public Administration Research and Theory* 20(4): 867-886.

Pitts, David. 2009. "Diversity management, job satisfaction, and performance: Evidence from US federal agencies." *Public Administration Review* 69(2): 328-338.

Poister, T.H., & Streib, G.D. 1999. "Strategic management in the public sector: Concepts, models, and processes." *Public Productivity & Management Review* 23: 308-325.

Quilliam, Brian J., Kate L. Lapane, Charles B. Eaton, and Vincent Mor. 2001. "Effect of antiplatelet and anticoagulant agents on risk of hospitalization for bleeding among a population of elderly nursing home stroke survivors." *Stroke* 32(10): 2299-2304.

Rantz, Marilyn J., Lanis Hicks, Victoria Grando, Gregory F. Petroski, Richard W. Madsen, David R. Mehr, Vicki Conn et al. 2004. "Nursing home quality, cost, staffing, and staff mix." *The Gerontologist* 44(1): 24-38.

Rittle, Chad. 2015. “Multicultural Nursing: Providing Better Employee Care” *Worplace Health & Safety* 63(12): 532-538.

Roch, Christine H., David W. Pitts, and Ignacio Navarro. 2010. "Representative bureaucracy and policy tools: Ethnicity, student discipline, and representation in public schools." *Administration & Society* 42(1): 38-65.

Rushton, Michael. 2008. "A note on the use and misuse of the racial diversity index." *Policy Studies Journal* 36(3): 445-459.

Sabharwal, Meghna, Helisse Levine, and Maria D’Agostino. 2016. "A Conceptual Content Analysis of 75 Years of Diversity Research in Public Administration." *Review of Public Personnel Administration* :0734371X16671368.

Salive, Marcel E., Karen S. Collins, Daniel J. Foley, and Linda K. George. 1993. "Predictors of nursing home admission in a biracial population." *American Journal of Public Health* 83(12): 1765-1767.

Selden, Sally Coleman. 1997. *The promise of representative bureaucracy: Diversity and responsiveness in a government agency*. ME Sharpe.

Smith, Peter C. 2006. Quantitative approaches towards assessing organizational performance. In *Public Service Performance: Perspectives on Measurement and Management*, ed. George A. Boyne, Kenneth J. Meier, Laurence J. O’Toole, Jr., and Richard M. Walker, 75-91. Cambridge, MA: Cambridge University Press.

Spooner, Joshua J., Kate L. Lapane, Anne L. Hume, Vincent Mor, and Giovanni Gambassi. 2001. "Pharmacologic treatment of diabetes in long-term care." *Journal of clinical epidemiology* 54(5): 525-530.

Stevenson, David G., and David C. Grabowski. 2010. "Sizing Up The Market For Assisted Living." Health Affairs, 29 (1), 35-43.

Thomas, R. Roosevelt. 1990. "From affirmative action to affirming diversity." *Harvard business review* 68(2): 107-117.

Thomeer, Mieke Beth, Stipica Mudrazija, and Jacqueline L. Angel. 2015. "How do race and Hispanic ethnicity affect nursing home admission? Evidence from the Health and Retirement Study." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 70(4): 628-638.

Williamson, Geraldine. 2007. "Providing Leadership in a Culturally Diverse Workplace" *Workplace Health & Safety* 55(8): 329-335.

Wise, Lois Recascino, and Mary Tschirhart. 2000. "Examining empirical evidence on diversity effects: how useful is diversity research for public-sector managers?." *Public Administration Review* 60(5): 386-394.

FIGURES AND TABLES

Table 1. Summary statistics of analytic sample separately by sector

	All	Public	Nonprofit	For-profit
	(1)	(2)	(3)	(4)
# of Health Deficiencies (2014-2015)	5.77	5.55	5.24	6.64**
	(4.69)	(4.22)	(4.33)	(5.46)
Seeks diversity skills	0.70	0.69	0.65	0.78*
Hires multilingual nurses	0.15	0.20	0.12**	0.14*
% clients white	88.38	89.87	93.15**	80.94***
	(17.84)	(17.61)	(11.66)	(21.58)
% clients black	7.36	5.72	4.82	12.28***
	(12.45)	(10.55)	(9.66)	(15.64)
% clients Latino/a	4.20	3.92	2.20*	6.95***
	(10.62)	(10.42)	(5.31)	(14.44)
Blau index	15.31	13.47	10.39**	23.35***
	(18.10)	(17.66)	(14.08)	(20.18)
Public	0.33	1.00	0.00	0.00
Nonprofit	0.37	0.00	1.00	0.00
For-profit	0.30	0.00	0.00	1.00
# of certified beds	104.83	107.55	96.74	111.64
	(72.70)	(84.03)	(64.07)	(68.33)
# of residents	89.57	91.94	84.77	92.75

	(67.49)	(78.13)	(58.40)	(65.02)
Nurse hours per resident per day	4.28	4.45	4.37	3.96
	(0.94)	(0.89)	(0.95)	(0.90)
% residents on Medicaid	58.39	62.61	51.77***	61.76
	(21.49)	(19.12)	(22.91)	(20.32)
Hospital affiliated	0.10	0.18	0.09***	0.01***
Ownership change in last year	0.02	0.01	0.02	0.04*
Years since certification	23.23	24.52	23.23	21.80**
	(12.07)	(12.98)	(11.87)	(11.14)
Population density	0.66	0.24	0.82**	0.92**
	(2.26)	(0.91)	(2.50)	(2.87)
% elderly in county	15.45	16.45	15.44**	14.33***
	(4.11)	(4.23)	(4.18)	(3.59)
% poverty in county	15.45	15.19	14.75	16.59***
	(5.23)	(5.27)	(4.63)	(5.68)
N	665	222	243	200

Note: Standard deviations in parentheses; *** p<0.01, ** p<0.05, * p<0.10 for t-test in difference in means between public sector nursing homes and other sectors.

Table 2. Summary statistics of analytic sample separately by managerial response to diverse clients

	Seeks diversity skills	Does Seeks diversity skills	Multilingual nurses	Does not hire Multilingual
	(1)	(2)	(3)	(4)
# of Health Deficiencies				
(2014-2015)	5.91	5.42	5.64	5.79
	(4.71)	(4.64)	(4.85)	(4.67)
Seeks diversity skills	1.00	0.00	0.72	0.70
Hires multilingual nurses	0.16	0.15	1.00	0.00
% clients white	86.07***	93.83	87.08	88.62
	(19.57)	(11.12)	(18.70)	(17.68)
% clients black	8.86***	3.83	6.74	7.48
	(13.80)	(7.35)	(11.68)	(12.59)
% clients Latino/a	5.04***	2.22	5.98*	3.88
	(11.45)	(8.02)	(12.38)	(10.24)
Blau index	17.84***	9.36	17.03	15.01
	(19.40)	(12.77)	(19.03)	(17.93)
Public	0.33	0.34	0.44**	0.31
Nonprofit	0.34**	0.43	0.29	0.38
For-profit	0.33***	0.22	0.26	0.31
N	467	198	102	563

Note: Standard deviations in parentheses; *** $p<0.01$, ** $p<0.05$, * $p<0.10$ for t-test in difference in means between homes with a management strategy and those without.

Table 3. OLS estimates of effect of diversity management on total number of health deficiencies in 2014-2015

	Seeks diversity skills			Multilingual Nurses			Both
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Seeks diversity skills	0.33	0.34	0.72	-	-	-	0.72
	(0.45)	(0.42)	(0.40)*				(0.40)*
Multilingual nurses	-	-	-	-0.53	-0.24	-0.44	-0.43
				(0.45)	(0.49)	(0.53)	(0.55)
% clients black	0.05	0.03	0.11	0.05	0.03	0.02	0.10
	(0.02)**	(0.02)	(0.05)**	(0.02)**	(0.02)	(0.02)	(0.05)**
% clients Latino/a	0.03	0.02	0.01	0.03	0.02	0.02	0.01
	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)
Diversity * % black	-	-	-0.09	-	-	-	-0.09
			(0.04)**				(0.04)**
Diversity * % Latino/a	-	-	0.01	-	-	-	0.01
			(0.02)				(0.02)
Multilingual * % black	-	-	-	-	-	0.04	0.04

						(0.02)*	(0.03)*
Multilingual * % Latino/a	-	-	-	-	-	-0.01	-0.01
						(0.02)	(0.02)
Controls for 2012-2013 performance	No	Yes	Yes	No	Yes	Yes	Yes
Controls for nursing home X	No	Yes	Yes	No	Yes	Yes	Yes
Controls for county X	No	Yes	Yes	No	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N Observations	665	665	665	665	665	665	665
Adjusted R^2	0.02	0.09	0.09	0.02	0.08	0.08	0.09

Standard errors clustered at the state-level in parentheses; *** p<0.01, ** p<0.05, * p<0.10.

Table 4. OLS estimates of effect of diversity management on total number of health deficiencies using Blau index measure of diversity

	(1)	(2)	(3)
Seeks diversity skills	0.37	0.37	1.02
	(0.43)	(0.41)	(0.39)**
Multilingual nurses	-0.58	-0.23	-0.28
	(0.45)	(0.50)	(0.57)
Blau index	0.03	0.01	0.06
	(0.01)**	(0.01)	(0.02)***
Diversity * Blau	-	-	-0.06
			(0.02)***
Multilingual * Blau	-	-	0.00
			(0.02)
Controls for 2012-2013 performance	No	Yes	Yes
Controls for nursing home X	No	Yes	Yes
Controls for county X	No	Yes	Yes
State FE	Yes	Yes	Yes
N Observations	665	665	665
Adjusted R^2	0.01	0.08	0.09

Standard errors clustered at the state-level in parentheses; *** p<0.01, ** p<0.05, * p<0.10.

Figure 1. Marginal Effect of Seeking Diverse Staff on Total Number of Health Deficiencies

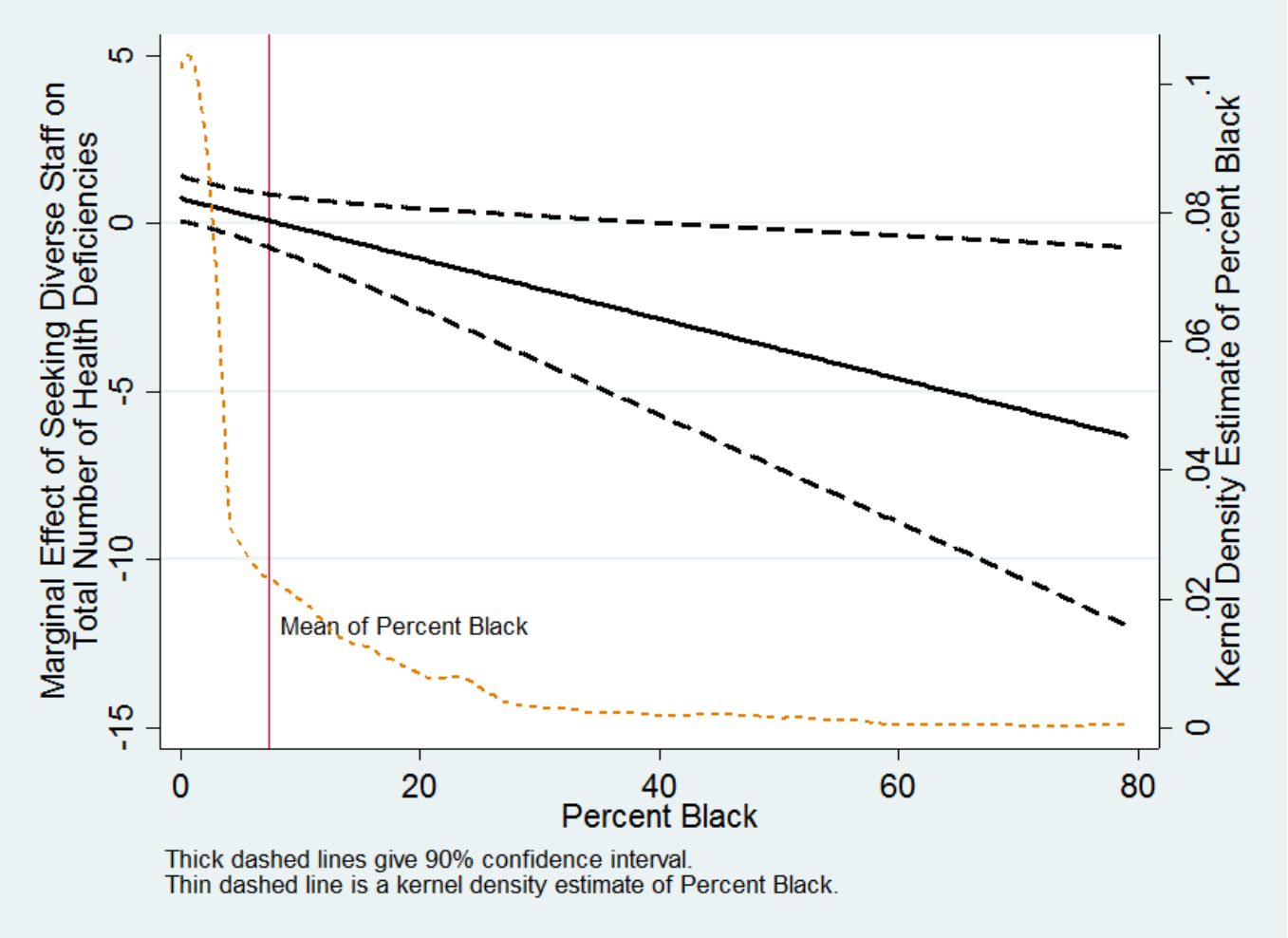
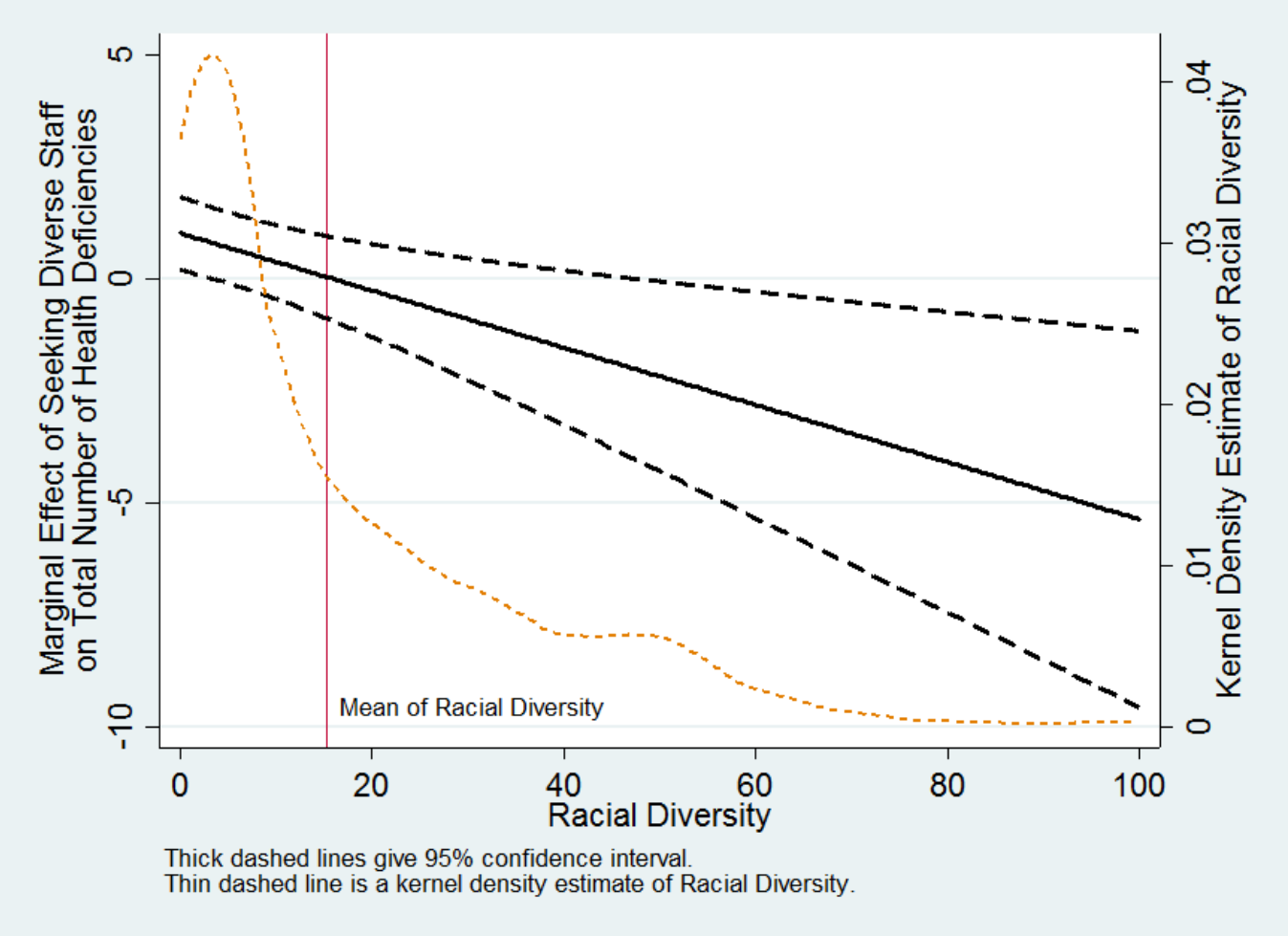


Figure 2. Marginal Effect of Seeking Diverse Staff on Total Number of Deficiencies



Appendix A. Measures of Organizational Management Strategies

Sharing power scale

To what extent do you agree or disagree with the following statements? (Response categories are as follows: strongly agree (4), agree (3), disagree (2) and strongly disagree (1)).

1. I often reconcile disagreements within our nursing home.
2. I involve nursing and other non-managerial staff in my nursing home's decision-making process.
3. Residents' and families' feedback and outcomes are taken into consideration when revising policies.
4. Non-manager feedback is taken into consideration when revising policies.
5. The information I receive from others regarding operations and performance matches my own perceptions.
6. I give my senior staff a great deal of discretion in making decisions.
7. The opinion of the local governing board of this nursing home is always considered in executive decisions.

Innovation scale

To what extent do you agree or disagree with the following statements? (Response categories are as follows: strongly agree (4), agree (3), disagree (2) and strongly disagree (1)).

1. Our nursing home is always among the first to adopt new technology and practices.
2. We continually search for new opportunities to provide services to our community.
3. Our nursing home is always among the first to adopt new ideas and practices.

4. Our nursing home frequently undergoes change.

Managing external influences scale

To what extent do you agree or disagree with the following statements? (Response categories are as follows: strongly agree (4), agree (3), disagree (2) and strongly disagree (1)).

1. My role is to respond to various events and disturbances in the external environment of our nursing home.
2. I always try to limit the influence of external events on the staff and nurses.
3. I strive to control those factors outside the nursing home that could have an effect on my organization.
4. Our nursing home emphasizes the importance of learning from the experience of others.

* * *

Factor analysis information

Factor analysis of these scales suggested a single underlying factor in each, as well as Cronbach's alpha of 0.6 and higher. To maximize our sample size, we imputed the mean for the missing values of all items comprising these three management scales. For three quarters of all items, less than 5% of the sample had missing values, and for the remaining one quarter of all items, between 5 and 12% of the sample had missing values.

Appendix B. Fixed-effect Poisson estimates of the effect of diversity management on total number of health deficiencies in 2014-2015

	(1)	(2)	(3)	(4)
Seeks diversity skills	0.15		0.15	0.20
	(0.07)**		(0.07)*	(0.07)***
% clients black	0.02	0.01	0.02	
	(0.01)***	(0.00)	(0.01)***	
% clients Latino/a	0.00	0.00	0.00	
	(0.00)	(0.00)	(0.00)	
Diversity * % black	-0.02		-0.02	
	(0.01)***		(0.01)***	
Diversity * % Latino/a	0.00		0.00	
	(0.00)		(0.00)	
Multilingual nurses		-0.06	-0.05	-0.03
		(0.09)	(0.10)	(0.10)
Multilingual * % black		0.00	0.01	
		(0.00)	(0.00)	
Multilingual * % Latino/a		-0.00	-0.00	
		(0.00)	(0.00)	
Blau index				0.01
				(0.00)***
Diversity * Blau				-0.01
				(0.00)***

Multilingual * Blau				0.00
				(0.00)
Controls for 2013 performance	Yes	Yes	Yes	Yes
Controls for nursing home X	Yes	Yes	Yes	Yes
Controls for county X	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
N Observations	664	664	664	664

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.10.

Appendix C. Negative binomial estimates of the effect of diversity management on total number of health deficiencies in 2014-2015

	(1)	(2)	(3)	(4)
Seeks diversity skills	0.15		0.15	0.21
	(0.07)**		(0.07)**	(0.07)***
% clients black	0.02	0.01	0.02	
	(0.01)***	(0.00)	(0.01)***	
% clients Latino/a	0.00	0.00	0.00	
	(0.00)	(0.00)	(0.00)	
Diversity * % black	-0.02		-0.02	
	(0.01)**		(0.01)**	
Diversity * % Latino/a	-0.00		0.00	
	(0.00)		(0.00)	
Multilingual nurses		-0.09	-0.08	-0.07
		(0.09)	(0.10)	(0.10)
Multilingual * % black		0.00	0.00	
		(0.00)	(0.00)	
Multilingual * % Latino/a		-0.00	-0.00	
		(0.00)	(0.00)	
Blau index				0.01
				(0.00)***
Diversity * Blau				-0.01
				(0.00)***

Multilingual * Blau				0.00
				(0.00)
Controls for 2013 performance	Yes	Yes	Yes	Yes
Controls for nursing home X	Yes	Yes	Yes	Yes
Controls for county X	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
N Observations	664	664	664	664

Standard errors clustered at the state-level in parentheses; *** p<0.01, ** p<0.05, * p<0.10.