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Workforce Policy and Care Quality in English Long-term Elder Care

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ABSTRACT

In this article, we explore workforce policy and its potential to improve care quality in English long-term elder care. Using large, secondary sector datasets, we analyze relationships between care quality and the skill development practices prescribed by workforce policy, care quality, and a wider set of employment practices. We demonstrate that the latter is more likely to improve care quality than skill development alone. We further demonstrate that both skill development/care quality and employment practice/care quality relationships are stronger in the statutory than the independent sector. Our findings challenge the effectiveness of workforce policy in two ways. First, it may be too narrowly focused on skill development at the expense of wider employment practice. Second, it may not be effective in improving care quality when outsourcing care ostensibly to improve it leads, particularly in the independent sector, to cost-based commissioning that mitigates against robust employment practice.

KEYWORDS

Care quality; employment; social care

Increased life expectancy has created a global elderly population that is now the largest in human history (UN, 2013). Demand for long-term elder care has, in tandem, grown exponentially, with many neoliberal market economies adopting new public management (NPM) approaches to its delivery (Nisbet, 2017). In essence, NPM promotes market-based mechanisms premised on private sector principles of efficiency and outcomes in delivery of public services (Goldfinch & Wallis, 2010). Accordingly, governments purchase elder-care from the private or voluntary sectors using market mechanisms that emphasize cost-control, competition, and quality (Nisbet, 2017). In this article, we focus on long-term elder care in England, where it is termed “adult social care” (ASC) and describes the provision of personal care, protection, or social support to some of society’s most vulnerable adults in either their own homes or residential facilities (Gray & Birrell, 2013).

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In England, in accordance with NPM principles, most ASC is funded by the state and purchased by local authorities from the independent sector (Means, 2012). This mirrors arrangements in the United States, where around three quarters of long-term care services are funded by Medicaid and other public sources, though delivered by largely private providers (Nisbet, 2017). Similar policy approaches are evident in other neoliberal regimes, such as Australia (Harley, Allen, & Sargent, 2007), Canada (Cunningham, Baines, & Charlesworth, 2014), and Japan (Broadbent, 2014). However, there is growing recognition of NPM's failure to deliver high quality care, not least given budgetary constraints in austere times (Nisbet, 2017). In England, claims abound of a crisis in ASC, amid a number of high-profile scandals over care failures (e.g., Kingsmill, 2014). Dignity of older people is compromised, as is the effective operation of hospital systems when insufficient, good-quality longer-term care is available (e.g., Wainwright, 2017).

In this article, we argue that lack of an adequate, skilled labor supply is central to these care failures (Cavendish, 2013). The rapid growth in demand for elder care noted above has been accompanied by increased demand for care workers, termed "aides" in the United States (Nisbet, 2017). In a NPM regime, most are based in independent-sector organizations (Howes, 2014), where the state has limited control over employment practice—how workers are recruited, paid, trained, and otherwise managed, and its attempts to assure an adequate, skilled labor supply are at arm's length via policy interventions. In England, this policy has focused on skills development (including induction, training, and vocational qualifications (e.g., DH, 2009; SfC, 2011)). This prioritizing of workforce development reflects a government philosophy based on strategic human resource management (SHRM) principles (Gospel & Lewis, 2011): good employment practice is desirable both in its own right and because positive worker outcomes benefit end-users via improved care quality (Bach & Kessler, 2011). Yet SHRM advocates for a broad set of employment practice to deliver these benefits, not simply workforce development, and in England policy is silent on wider employment practice, which is often poor (Cunningham, 2008). For example, care workers are subject to low pay (Nisbet, 2017), have insecure jobs, and lack working time flexibility (Rubery & Urwin, 2011). Far from a skilled and adequate labor supply, recruitment and retention of ASC workers in England are widely acknowledged to be "in crisis" (Rubery et al., 2011), which calls workforce policy's effectiveness into question. We suggest that this is problematic for delivery of high quality care and demonstrate here that, while policy-driven skills development has a role to play in improving care quality, wider (good) employment practice underpins better quality care. We further demonstrate significant variation

in employment practice and care quality across the statutory and independent sectors.

Our research makes an important contribution in providing a unique quantitative examination of employment practice/care quality relationships in ASC, drawing our data from two English secondary ASC datasets. Our findings lend support to existing research which demonstrates positive relationships between employment practice and care quality (Grimshaw et al., 2015). Our study is situated in what is typically considered to be a low-skilled sector (Rainbird et al., 2011) with basic employment practice (Rubery et al., 2013) and delivery of minimum requirements rather than more sophisticated practices, such as work-life balance. Its insights may thus inform understanding of low-skilled work more generally, which is important given its growth globally. Our analysis leads us to challenge the effectiveness of workforce policy where it prescribes only skill development and argue that, in remaining silent on wider employment practice, it is too narrowly focused to effect the required improvements in care quality. We further question NPM principles that suggest that commissioning of care from the independent sector will improve its quality, particularly given the implications of cost-based commissioning for employment practice in the independent sector.

In what follows, we first discuss the English ASC context and then literature on employment practice, synthesizing these to establish our research hypotheses. We next present our methods and findings before discussing our research outcomes and drawing conclusions as to their implications for the likely effectiveness of workforce policy in improving care quality.

The English ASC context

Since the 1980s, New Public Management (NPM) principles have dominated public sector reform in many liberal market economies, including the United States (Nisbet, 2017) and England (Goldfinch & Wallis, 2010). State provision of services has been reduced, replaced by more marketized forms of relationship in which services are outsourced to the independent (both private and voluntary) sector (Cunningham, 2008). The dominant logic embraces a business model where commercial practices are presumed to be more cost efficient and deliver better quality services (Schmid, 2003). In England, local authorities purchase over 80% of ASC from the independent sector (Cunningham et al., 2014), which comprises more than 40,000 mainly small, private, and voluntary sector organizations (Eborall et al., 2010). During a long period of austerity and underfunding, however, the commissioning process has been subject to much criticism (Kingsmill, 2014). For example, that commissioning is activity- rather than outcomes-

based; that, as the major purchaser of older people's care, local authorities have created a monopsony which enables them to drive down pricing (Cavendish, 2013); and that commissioning is more cost- than quality-focused (UKHCA, 2012). This has had negative implications for care quality and protection of vulnerable adults has emerged as a key concern for social care policy and is prominent in regulatory frameworks (Means, 2012). This has created a preoccupation with targets and audit (Hood & Dixon, 2013), centered on the National Minimum Standards (NMS) of care delivery. These were first introduced in the Care Standards Act (2000), later the Health and Social Care Act (2008) and then the Care Act (2014), and constitute an outcomes-based approach (Newman et al., 2008) that relies on NMSs as intermediate quality indicators. The 38 NMSs assess patient involvement and information, personalized care treatment and support, safeguarding and safety, effective staffing and quality, and management. They are audited by the Care Quality Commission (CQC, also established by the 2000 Act) and inspection scores are afforded to all care providers. As such, they provide an evaluation of care quality (Gospel & Lewis, 2011) and inform service user choice (Bach & Kessler, 2011). While there is some criticism of the bureaucratic nature of the NMS, they are the widely established measure of long-term elder care quality in England.

As noted at the outset, efforts to assure high quality care are also delivered via workforce policy that promotes development and upskilling (e.g., Cavendish, 2013; Kingsmill, 2014). Policy is premised upon SHRM principles that advocate good employment practice as a means to achieve superior performance (e.g., DH, 2009; SfC, 2011). Gospel and Lewis (2011, p. 606) describe this approach as unique in British history:

One way of conceptualizing the “whole systems” approach introduced by the 2000 Act, therefore, is as an attempt to establish in the social care sector a high-skills equilibrium, in which a well-trained workforce is managed by means of a complementary set of HR practices so as to deliver high-quality care.

Here the whole systems approach refers to SHRM principles (explained in more detail in the subsequent section) that combine synergistic sets of employment practices for maximum performance benefits (Wright & McMahan, 2011). Workforce policy addresses skill development practices and exhorts (but does not regulate) the adoption of complementary practices such as high pay, secure employment, and flexible working in order to create the adequate, skilled workforce essential for delivery of high-quality care.

Workforce policy is supported by Skills for Care (SfC, part of the Sector Skills Council for social care in England), with emphasis on skill development via a training and qualifications framework. This ensures both delivery of induction training, which has been mandatory since 2005 (SfC,

2010), and support for achievement of (a minimum of) Level 2 vocational qualifications (SfC/SfH, 2013), initially National Vocational Qualifications and latterly Health and Social Care Diplomas. The Cavendish Review (2013) continued this emphasis on skill development to improve care quality. Wider development initiatives have also included apprenticeships and calls for career progression opportunities (Kingsmill, 2014).

As noted above, workforce policy prescribes only skill development practices (Gospel & Thompson, 2003), and does not address Gospel and Lewis's (2011) "complementary" employment practice. It simply notes the need for commissioning practice that supports fair terms and conditions of employment (DH, 2009). Gray and Birrell (2013) question whether policy's rhetoric on the need for a well-trained, skilled workforce can be effective in the face of failure to prescribe wider employment practice. This is an important issue not addressed in current ASC workforce research, and we shall return to it later in developing our hypotheses.

Employment practice in ASC

Here we briefly discuss SHRM principles, the theoretical basis for presuming that good employment practice will be associated with high care quality. These principles support the employment practices and performance measures included in this study and we synthesize these with research on the ASC workforce to establish our hypotheses. SHRM posits that workers provide the mechanism for sustained competitive advantage and superior organizational performance (Wright & McMahan, 2011), here, high-quality care. This is premised on a mutual gains scenario in which good employment practice promotes and reconciles organizational and worker interests and creates performance benefits for both (Avgar et al., 2011). The link between employment practice and organizational performance has been researched extensively with increasing acceptance of the relationship, as explored in a recent special issue of *Human Resource Management Journal* (Boxall et al., 2016), an academic journal presenting high quality employment research. SHRM underpins policy's prioritizing of investment in workforce development (Newman et al., 2008) and reflects government philosophy across both the health and social care sectors that good treatment of workers is desirable both in its own right and because positive worker outcomes benefit end-users via improved care quality (Bach & Kessler, 2011).

While SHRM is premised on the application of a synergistic set of employment practices, there is debate over what constitutes the set (Boxall et al., 2016). We adopt policy's premise that certain (skill development) practices will be performance enhancing (DH, 2009). We also follow Gospel

and Lewis (2011) who suggest that “complementary HR practices” are required as part of the whole systems approach, necessitating a decision as to which to include. Training and development, employment security and internal labour markets and pay are typically included in SHRM sets of employment practices (Harley et al., 2007). More recent studies have also included flexibility and performance management (Boxall & Macky, 2007) and, as we note above, career development is important in ASC (Cavendish, 2013). In our analysis, we added the complementary employment practices of pay, employment security, and flexibility to skill development. Secondary dataset constraints prevented inclusion of performance appraisal and career development. Nevertheless, we argue that our set includes most of the typical complementary practices and provides a robust basis for analysis of employment practice/care quality relationships. There is, however, currently limited SHRM research in low-pay, low-skilled service sectors, such as ASC (Batt & Banerjee, 2012), and Batt (2002) argues that SHRM principles are most effective in high-value sectors where skilled workers engage in complex service provision. Similar outcomes may not be achieved in jobs that are low-skilled, routine, and unrewarding (Berg & Frost, 2005), and employment practice is basic (Rubery et al., 2015). There is little recognition of these constraints in either policy documents (Rubery & Urwin, 2011) or government-commissioned reviews (e.g., Cavendish, 2013). Yet context-appropriate, even if basic, employment practice can benefit workers. For example, ASC workers may welcome opportunities to acquire (low-level) vocational qualifications, given the gendered and typically poorly educated nature of the workforce (Kaine, 2012). Further, ASC work does not fully reflect the conventional characterizations of low-skilled service work (Rainbird et al., 2011): it is complex and relational in nature, which may create a greater propensity for employment practice to influence care quality (Hussein et al., 2009). Our research creates an important evidence base and we now consider the ASC research base for our employment practices.

In ASC, workforce policy prescribes induction training and acquisition of vocational qualifications (hereafter, “prescribed practice”). We adopt these, as is typical, as proxies for skill development (Grugulis & Stoyanova, 2011). Since 2005, all newly appointed care workers have been required to undertake induction training (SfC, 2010). All care workers also have to work toward Health and Social Care Diplomas Level 2 (initially, National Vocational Qualifications Level 2) or equivalent. Half of all care workers in any care provider must hold this qualification (DH, 2009). This requires a marked shift from 2000, when 80% of the social care workforce had no qualifications (Gospel & Lewis, 2011). There is thus heavy reliance on induction and vocational qualifications as mechanisms to upskill the

workforce. The effectiveness of vocational qualifications, however, may be questionable as their competence focus may simply lead to accreditation of existing behaviors (Grugulis, 2003). Level 2 is also modest, equating to school-leaving qualification at age 16 in England (Cameron & Phillips, 2003). Gospel and Lewis (2011), however, present findings that post-date changes intended to deliver greater rigor in vocational qualifications and suggest that they can be a genuine vehicle for skill development. Other work also links acquisition of qualifications to care quality (Eborall, 2011). Following SHRM theory, despite somewhat limited sectoral evidence, workforce policy is thus predicated upon an assumption that skills development improves care quality.

In line with Gospel and Lewis's (2011) "whole systems" approach and wider strategic HRM principles (Wright & McMahon, 2011), complementary employment practice (hereafter, "complementary practice") is also central to improving care quality. The sector's capacity to deliver effective complementary practice is, however, questionable particularly given its weak regulation (Kingsmill, 2014). Pay rates reflect the National Minimum Wage (NMW) or less (Bessa et al., 2013), and are suppressed by commissioning processes. For example, local authorities rates do not allow payment for time spent in training, and recent confirmation that domiciliary care workers should be paid for traveling time has been largely ignored (Unison, 2014). Nonstandard employment relationships also prevail with the widespread use of zero-hour and other insecure contracts (Rubery et al., 2015), and working time flexibility for worker benefit (e.g., term-time only or compressed working weeks) is limited with a poor work/home equilibrium (Rubery & Urwin, 2011). As Kingsmill (2014, p. 9) notes, "poor working conditions often go hand in hand with poor quality of care." There may then be limited optimism that level of complementary practice needed to improve care quality exists.

Allied to employment practice are other sector outcomes that influence care quality. Here we consider recruitment, retention, and Investor-in-People accreditation. As we noted at the outset, recruitment and retention are problematic in ASC. Recruitment difficulties can be measured via number of vacancies in the sector (CFWI, 2011) and retention via labor turnover figures (Eborall et al., 2010). Both are influenced by employment practice (Rubery et al., 2011), for example, training and flexibility reduce labor turnover (Avgar et al., 2011; CFWI, 2011; Selden et al., 2013), and low pay increases turnover and vacancy levels (Cavendish, 2013). In respect of labor turnover and vacancies, we might expect negative relationships between these measures and care quality (Avgar et al., 2011), particularly given their negative impact on care continuity (Eborall et al., 2010): the care worker from whom an older person receives care may be subject to

constant change. Investors in People (IIP) is a UK scheme which evaluates whether an organization adopts a strategic approach to managing training (Rainbird et al., 2011). “IIP-recognized” refers to accredited organizations and might be expected to result from adoption of workforce policy. Given IIP’s aim to improve performance nationally (Stewart & Sambrook, 2012), a positive relationship might be expected between IIP-recognition and care quality, although we note criticisms of its bureaucratic emphasis and lack of impact on skill development (Grugulis & Bevitt, 2002).

Our research explores relationships between care quality and both employment practice (prescribed and complementary) and recruitment, retention, and IIP-status. This raises the question of how to assess care quality as, in SHRM research, performance measures vary and typically include profit, turnover, and market share. Yet in small, independent ASC providers, these data are difficult, if not impossible, to obtain, and do not, in any case, directly address the elder person’s experience. As outlined earlier, in England care quality is evaluated via a set of National Minimum Standards (NMS) (Gospel & Lewis, 2011) and CQC inspection outcomes against these are made available publicly to inform service user choice (Bach & Kessler, 2011). We use the NMS data to measure care quality and performance against these should, in line with SHRM theory, improve where care workers are well-trained, fairly paid, have secure employment, access to flexible working, where vacancies and turnover are low, and IIP-recognition is secured.

Drawing on the above, we hypothesize:

H1: Higher uptake of prescribed practices (induction training and vocational qualifications) together with more positive recruitment, retention, and IIP-status outcomes will significantly predict higher NMS scores.

H2: Higher uptake of prescribed practices plus better complementary practices (pay, employment status, and flexibility) together with more positive recruitment, retention, and IIP-status outcomes will significantly predict greater higher NMS scores than prescribed practices alone.

We also explore sectoral effects. While most ASC has been outsourced to the private and voluntary sectors, a small proportion continues to be delivered in the statutory sector where more favorable employment practice is applied by the state as a model employer (Gould Williams, 2004). This stands in stark contrast to the independent sector where commissioning processes have delivered inadequate and insecure funding and exerted downwards pressure on terms and conditions (Rubery et al., 2013), driving a “race to the bottom” (Cunningham, 2008, p. 1033). As already noted, pay is low and employment insecure. Independent care providers’ primary concern is to ensure regulatory compliance rather than adopting SHRM principles to embed employment practice that serves to improve care quality

(Rubery et al., 2013). While it should be noted that cost pressures are also experienced in the statutory sector (Rubery et al., 2013), their dominance in the independent sector means that NPM's rhetoric of delivering improved care quality via its independent sector provision has not translated in practice.

We hypothesize:

H3: There will be higher uptake of prescribed practices (induction training and vocational qualifications) and more favorable recruitment, retention, and IIP-status outcomes that significantly predict higher NMS scores in the statutory sector compared to the private and voluntary sectors.

H4: There will be higher uptake of prescribed practices plus better complementary practices (pay, employment status, and flexibility) and more favorable recruitment, retention, and IIP-status outcomes that significantly predict higher NMS scores than prescribed practices alone in the statutory sector compared to the private and voluntary sectors.

Methods and data

Our analysis draws on two secondary quantitative ASC datasets: the SfC National Minimum Dataset-Social Care (NMDS-SC) and a Care Quality Commission (CQC) dataset of inspection scores against the Older People National Minimum Standards (NMS) of care quality. NMDS-SC provides an information base on employment practice and outcomes for the little-understood ASC sector. Care-providing organizations enter data online into the NMDS-SC, and completion rates are in excess of 50% of providers (CfWI, 2011). The NMDS-SC comprises two data subsets: organization data and individual worker data. Organization data include variables that measure type of establishment; IIP status; number of staff; number of vacancies and number of staff ceasing employment. Individual worker data include individual demographic information; job demographic information including pay and benefits; employment and working arrangements; and induction training and qualification status. We integrated the organization and worker subsets in SPSS, aggregating individual worker data to organization level. We focused our analyses on care workers and senior care workers, as this is the largest group and the primary focus of workforce policy. Our sample was further limited to those working in residential care/nursing homes and domiciliary care agencies providing services to older people, as care of older people is our particular interest—and is also the most complete data category. The CQC dataset records inspection outcome scores against NMS indicators for all CQC-registered care providers. Linking organizations via a unique identifier, we merged the composite NMDS-SC dataset with the CQC dataset in SPSS. Where significant data was missing

Table 1. Size of establishment by sector.

	<i>Full data set (%)</i>			<i>Post listwise deletion (%)</i>		
	<i>Statutory</i>	<i>Private</i>	<i>Voluntary</i>	<i>Statutory</i>	<i>Private</i>	<i>Voluntary</i>
1–49	86.4	83.1	87.4	70.0	63.0	54.1
50–259	12.7	16.4	12.1	30	36.9	45.9
250+	0.9	0.5	0.5	0	0.1	0
Total	100	100	100	100	100	100

at worker level when merged, listwise deletion was favored over imputation techniques, drawing on Allison (2014), who suggests that listwise deletion can have particular benefits over imputation techniques especially with a large sample where the statistical power for the inferential tests is not compromised. Typically, listwise deletion proceeds only if data are missing at random and thereby provides a representative sample. The final dataset comprised 4,384 organizations from a total of 17,763 and 134,000 individuals from a total of 370,063. We provide an overview of sector and size for the original versus final dataset (see Table 1) illustrating that the proportions are broadly comparable across both, albeit medium-sized firms are somewhat overrepresented after listwise deletion.

However, recent research has suggested that factors other than representativeness are important (Bartlett et al., 2014). Allison (2014) and Bartlett et al. (2014) argue that for regression testing, if data are missing on predictor variables rather than the dependent variable then listwise deletion can produce less biased results than imputation techniques. In our data, all establishments had an NMS score, so missing data were evident at the predictor level and not the dependent variable level, thereby making it an appropriate methodology.

We note the complexities of working with large, secondary datasets where data is subject to interpretation in data filtering and cleaning (Bollier, 2012), and we explore associated limitations below. We argue here, however, that the insights offered by analysis of this unique dataset are valuable in developing understanding of employment practice/care quality relationships in ASC.

Variables and measures

The datasets offered objective measures which are recommended over subjective ones (Whyman et al., 2015). We recoded data into categorical variables other than pay (a continuous scale) to meet the criteria for linear hierarchical regression analysis (Cohen et al., 2003). Employment practices constitute the first independent variables in our model and are drawn from individual worker NMDS-SC data (an analytical file user guide is available at <https://www.nmds-sc-online.org.uk/research>). The five variables comprise induction training; vocational qualifications (prescribed practices); employment status;

flexible working; and average hourly pay (complementary practices). Where the raw data was multicategorical, we recoded it into dichotomous variables using binary coding so that variables were comparable and weighted consistently. For “induction training,” we excluded the 25% of the sample who responded n/a, having been in post prior to its becoming mandatory in 2005 and coded 0 = in progress, 1 = completed. For vocational qualifications, we grouped NVQ2/3 together and coded 0 = not recorded, 1 = completed NVQ2/3. For employment status, we grouped “temporary/casual” and “bank” and “other” together and coded 0 = nonpermanent, 1 = permanent. For flexibility, we grouped practices offered for worker-benefit, e.g., flextime, term-time only, vacation only, home working, and compressed the working week (and excluded zero hours which is for employer-benefit), and coded 0 = no flexibility, 1 = flexibility. Use of dichotomous variables met the requirements for linear regression analysis in that codes became numerically directional (e.g., YES to provision of flexible working was “better” than NO; completing qualifications was “better” than not).

Recruitment, retention, and IIP-status constitute the second independent variables and are drawn from organizational NMDS-SC data. The three variables comprise: IIP status (dichotomous variable, 0 = not IIP recognized, 1 = IIP recognized); labor turnover (categorical 1–5 scale; reverse coded); and vacancies (categorical 1–5 scale; reverse coded). For labor turnover and vacancies, original categories that represented a range of responses (e.g., 1–3 vacancies, 4–6 vacancies etc.) were reverse recoded on a categorical scale from 1 to 5, so a score of 5 represents the lowest category of vacancies and labor turnover.

The dependent variable is care quality using NMS score from the CQC dataset (1–4 scale; 1 = standards “not met” to 4 = standards “exceeded”). An aggregate mean of NMS scores was derived by combining each of the 38 separate Older People performance indicators, which were equally weighted, as reflecting their usage by CQC inspection regimes. A Cronbach’s α of 0.74 reliability coefficient was satisfactory. All variables underwent tests of assumption to meet the criteria for linear regression analyses. Any variables that violated these assumptions were log-transformed (Emerson, 1983). This applied to age (a control variable), average hourly pay, and NMS performance. Log transformation seeks to reduce the degree of skewness and eliminate extreme outliers in order to normalize errors. This type of centering and scaling is commonplace before regression takes place and reduces the potential for multicollinearity (Keene, 2005).

Analyses and results

The descriptive statistics reflect a mixed picture of employment practice (Table 2). Ninety percent of workers had completed induction training with

Table 2. Descriptive statistics: Employment practices and NMS score.

Variable	Sector = All			Sector = Statutory			Sector = Private			Sector = Voluntary		
	In progress	Completed		In progress	Completed		In progress	Completed		In progress	Completed	
Induction Training	10.9%	89.1%		9.0%	91.0%		11.3%	88.7%		10.0%	90.0%	
Qualifications	Not recorded	NVQ 2&3		Not recorded	NVQ 2&3		Not recorded	NVQ 2&3		Not recorded	NVQ 2&3	
Average hourly pay	70.9% M	29.1% SD		74.10% M	25.90% SD		69.50% M	30.50% SD		76.60% M	23.40% SD	
Employment status	6.763	0.936		6.691	0.740		6.714	0.910		7.142	1.085	
Flexible working	7.4%	92.6%		11.1%	88.9%		6.3%	93.7%		10.5%	89.5%	
	No flexible working	Flexible working		No flexible working	Flexible working		No flexible working	Flexible working		No flexible working	Flexible working	
NMS Score	77.6% M	22.4% SD		67.5% M	32.5% SD		76.9% M	23.1% SD		88.1% M	11.9% SD	
	2.760	0.424		2.877	0.243		2.643	0.447		2.879	0.300	

broadly similar patterns across all sectors. Less than 30% held NVQ2/3, and qualification rates were highest in the private sector. Seventy percent were working toward NVQ2/3, which may reflect substantial labor turnover (Kingsmill, 2014). The basic average hourly pay rate was higher than the NMW rate but low compared to median pay rates (LPC, 2010). Voluntary sector averages were highest, statutory lowest, and those holding NVQ3 earned 28p per hour more than workers holding NVQ2, evidencing some skill/pay links (pace Rubery & Urwin, 2011). The overwhelming majority were permanently employed, the highest levels being in the private sector. This does not depict highly insecure employment conditions, although organizations may have favored permanent workers in NMDS-SC completions. Flexible working was limited, albeit most widely available in the statutory sector. In summary, induction training and employment security were evidenced, but NVQ acquisition and pay were low and flexibility limited. There were some variations in these patterns by sector but these were not consistent, and no particular sector performed better than another across most or all employment practices.

We conducted hierarchical linear regression analyses, which are most suitable to our continuous and categorical/dichotomous predictor/independent variables and continuous dependent variable and allowed us to explore direction of influence. Correlations between the variables were largely significant (Table 3).

The results of two hierarchical regression models were also significant (Tables 4 and 5). All analyses controlled for gender, age, size of organization at step one. Data were then entered into the model in line with our hypotheses. All variables entered into regression analyses were assessed for multicollinearity, and results indicated regression could proceed; that is, none of our included variables was excluded from the analysis on the grounds of multicollinearity.

Model 1 comprised only induction and qualifications; Model 2 comprised all employment practices. This allowed for comparison of the impact of only skill development compared to a wider group of employment practices on care quality. We added in recruitment, retention, and IIP-status in both models at step 3 to additionally assess their influence on NMS score. Separate analysis for statutory, private, and voluntary sectors was also conducted for each model.

Model 1 evidenced significant relationships between both induction and qualifications independently and all employment practices combined with recruitment, retention, IIP-status, and NMS score (Table 4). Significant models for the sample as a whole emerge along with significant models for each sector. For the regression analysis with all sectors included, a significant model emerged with a statistically significant change in R^2 between

Table 3. Means, standard deviations, and correlations.

Variable	M	SD	1	2	3	4	5	6	7	8	9	
1. Induction training	0.890	0.312	—									
2. Qualifications achieved	0.290	0.454	0.144**	—								
3. Average hourly pay	6.763	0.936	0.013	0.034**	—							
4. Employment status	0.930	0.262	0.050**	0.072**	-0.109**	—						
5. Flexible working	0.220	0.417	-0.019*	0.002	0.002	0.010	—					
6. Labor turnover	3.200	1.460	0.055**	0.023**	-0.046**	0.040**	0.116**	—				
7. Vacancies	4.710	0.617	0.018*	0.095**	-0.101**	0.007	0.102**	0.180**	—			
8. IIP Status	0.380	0.485	0.023**	-0.004	-0.009	-0.024**	-0.110**	-0.057**	-0.006	—		
9. NMS performance score	2.760	0.424	0.070**	0.032**	0.058**	-0.025**	0.016**	-0.037**	0.113**	0.118**	—	

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 4. Hierarchical regression analyses: Development practices only (Model 1).

	<i>All Sectors</i>	<i>Sector = Statutory</i>	<i>Sector = Private</i>	<i>Sector = Voluntary</i>
Step 1 (Controls)				
Gender	0.026***	0.025	0.026***	0.019
Age	0.008	-0.009	-0.002	-0.011
Size of establishment	0.183***	0.142*	0.086***	0.764***
R^2	0.025***	0.027***	0.025***	0.081***
F	271.081	16.216	212.142	131.593
Step 2 (Development practices)				
Qualifications	0.042***	-0.014	0.044***	0.048***
Induction training	0.043***	0.385***	0.033***	-0.033**
R^2	0.029***	0.173***	0.029***	0.084***
ΔR^2	0.004***	0.147***	0.003***	0.003***
F	211.061	75.503	160.568	91.236
Step 3 (Proximal performance measures)				
IIP status	0.097***	-0.093***	0.084***	-0.075***
Vacancies	0.075***	-0.166***	0.119***	0.020
Labour turnover	0.031***	0.239***	-0.078***	0.059***
R^2	0.043***	0.241***	0.052***	0.093***
ΔR^2	0.014***	0.068***	0.023***	0.009***
F	212.905	78.125	199.104	68.243
n	134506	12204	103378	18924

Notes: Reporting the standardized beta coefficient. Standard errors available upon request.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Note that R^2 at each step is incremental and only the additional variables included at each step are reported.

each step, accounting for 4% of the variance at step three. Statistical variance in this context refers to the variance in the regression model. Analysis of variance is used in regression to help account for a fluctuation (variation) in an outcome variable, in this case our NMS scores, as a function of the influence of our predictor/independent variables. Variance as a statistical notion here accounts for how far a set of numbers are spread out from their average (mean). In our regression, the adjusted R^2 is the measure of variance in the model. Given that the models are significant, we can assert that the reported adjusted R^2 s reflect the percentage of variance in NMS score as a product of our predictor variables (Achen, 1982). Variance differed, however, across the individual models. A Chow test (following the UNIANOVA procedure in SPSS) was conducted to assess whether the differences in R^2 across sectors were significant. A significant result emerged ($F = 993.8$, $df = 1$, $p < 0.001$) indicating that sectoral differences in R^2 for our models were apparent. For the statutory sector, a much higher proportion of the variance in NMS performance score was identified in the final step of the model (24%). Similarly, for the voluntary sector, 9% of the variance was accounted for and the private sector analysis accounted for 5% of the variance. Hypotheses H1 and H3 are supported.

Model 2 evidenced significant relationships between both prescribed and complementary practice independently *and* prescribed practice and complementary practice combined with recruitment, retention, IIP-status, and

Table 5. Hierarchical regression analyses: All employment practices (Model 2).

	<i>All sectors</i>	<i>Sector = Statutory</i>	<i>Sector = Private</i>	<i>Sector = Voluntary</i>
Step 1 (Controls)				
Gender	0.040***	0.073	0.044***	0.033
Age	-0.012	-0.003	-0.013	-0.009
Size of establishment	0.177**	-1.671***	0.027	1.073***
R^2	0.014***	0.165***	0.020***	0.195***
F	60.628	24.588	67.477	146.558
Step 2 (Employment practices)				
Pay	0.024**	-0.265***	0.020*	0.261***
Qualifications	0.020**	0.008	0.025**	0.032
Induction training	0.059***	0.402***	0.038***	-0.038*
Flexible working	0.031***	0.059	0.029***	0.094***
Employment status	-0.015*	-0.083**	-0.001	0.036*
R^2	0.020***	0.484***	0.023***	0.263***
ΔR^2	0.006***	0.322***	0.004***	0.069***
F	37.961	50.810	35.508	96.306
Step 3 (Proximal performance measures)				
IIP status	0.068***	-0.065*	0.074***	-0.27
Vacancies	0.140***	0.183***	0.192***	0.208***
Labor turnover	-0.041***	-0.287***	-0.061***	-0.049*
R^2	0.043***	0.548***	0.064***	0.299***
ΔR^2	0.024***	0.065***	0.041***	0.037***
F	63.607	49.150	75.543	86.402
n	134506	12204	103378	18924

Notes: Reporting the standardized beta coefficient. Standard errors available upon request.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Note that R^2 at each step is incremental and only the additional variables included at each step are reported.

NMS score (Table 5). Significant models for the sample as a whole again emerge plus significant models for sector. For the regression analysis with all sectors included, a significant model emerged with a statistically significant change in R^2 between each step, accounting for 4% of the variance at step three. For the statutory sector however, a much higher proportion of the variance in NMS performance score was identified in the final step of the model (55%). Similarly, for the voluntary sector, 30% of the variance was accounted for and the private sector analysis accounted for 6% of the variance. Hypotheses H2 and H4 are supported.

In terms of the individual predictors within each step, there is a relatively consistent pattern in the overall results. For induction and qualifications only and for all employment practices, all variables have a significant and (mainly) positive impact on NMS scores. The exceptions are employment status and labor turnover in the second model which are significantly but negatively related to the NMS score. The patterns are, however, more complex by individual sector and we discuss these further below. Here, we note that nonsignificant predictors by sector comprise: qualifications for the statutory ($b = 0.008$, $p > 0.05$) and voluntary ($b = 0.032$, $p > 0.05$) sectors; flexible working for the statutory sector ($b = 0.059$, $p > 0.05$); employment status for the private sector ($b = -0.001$, $p > 0.05$); and IIP status for the voluntary sector ($b = -0.27$, $p > 0.05$).

Before proceeding to discussion of significant findings, we acknowledge a number of limitations of our work. There were two particular concerns in respect of the secondary datasets: first, we had no control over data collection, entry, or quality; second, our analysis is constrained by the variables, and some typical SHRM practices are missing. Yet we used respected sector datasets (CfWI, 2011), which gave us “the capacity to collect and analyze data with an unprecedented breadth and depth and scale” (Lazer et al., 2009, p. 722). We have followed others who have used and aggregated public data that are available relatively quickly after collection (e.g., Avgar et al., 2011). We argue for the likely robustness of the data given its widespread adoption in modeling the sector:

The current [NMDS-SC] coverage allows for generalisation following sampling, and in workforce planning terms can provide excellent information about services, their capacity, worker demographics and current levels of skill mix (CfWI, 2011, p. 3).

Finally, we recognize that adopting CQC inspection data as a measure of organizational performance may be contested. Nevertheless, these inspection data provide a national measure of care quality (Gospel & Lewis, 2011) which is intended to inform service user choice (Bach & Kessler, 2011). Despite inevitable limitations, we argue that our research presents a novel and insightful analysis of employment practice and care quality in ASC.

Discussion

Here we discuss the significant regression findings and examine our models' collective worth in assessing the impact of employment practices on care quality. We consider first prescribed practices contained in both regression models, induction training, and vocational qualifications. Our analysis indicates a mainly positive all-sector relationship between these skill development practices and care quality. There were high levels of engagement with induction training and, in the statutory and private sectors, significant positive relationships with NMS score. This suggests policy is appropriate in prescribing induction training that supports skill development and improves performance (Stewart & Sambrook, 2012). Vocational qualification acquisition was much lower, at around 30%, but positive relationships to NMS score across all sectors were evident. Workforce policy premised on vocational qualifications appears to drive skill development (Gospel & Lewis, 2011) and thus has potential to improve care quality. However, their low acquisition undermines this and suggests that relatively little progress in workforce upskilling has been made since the 2000 Act. Policy, however effectively designed, may be compromised by poor implementation, which calls into question skills initiatives at the individual level as a mechanism to deliver improved performance (Keep & Mayhew, 2010).

Turning to complementary practices, all-sector relationships were again positive and significant for pay and flexibility, though negative and significant for employment status. Taking first employment status, there were high levels of permanent employment and little evidence of instability (contra Grimshaw & Carroll, 2002). Employment status was, however, significantly and negatively related to care quality at both all-sector and statutory sector levels. One possible explanation is that workers on insecure contracts strove to do well to gain permanent employment. Future research should investigate this further. Second, pay was low (Eborall et al., 2010) yet significantly positively predictive of NMS score (other than in the statutory sector) and higher pay was associated with better care outcomes. Finally, flexible working across all sectors was significantly positively predictive of NMS scores (per Avgar et al., 2011). This presents an opportunity, given its limited offer. In summary, complementary practices were mainly significantly and positively related to NMS score at the all-sector level, despite some mixed sectoral patterns that require further exploration. This may challenge workforce policy's narrow focus on skill development: both higher pay and better working-time flexibility appear to improve care quality but, in the absence of associated policy or regulation, few care providers offer employment practice to reap these benefits.

Our analysis further explored the impact of employment practice and recruitment, retention and IIP-status in combination on the NMS score. For the most part, their addition had a positive and significant impact. Taking first IIP, there was a significant and positive impact at the all-sector level that suggests that it leads to performance improvements (Stewart & Sambrook, 2012). IIP-recognition varied widely across sectors, however, and had a positive and significant impact only in the private sector. This may indicate that it is a key differentiator here as few private care providers are IIP-recognized. Given that fewer than 40% of all organizations were IIP-recognized, this could be a worthwhile future focus for workforce policy. Second, labor turnover had a significant positive relationship to the NMS score in Model 1 but not Model 2, which is inconsistent and requires further exploration. Finally, vacancies evidenced consistent significant relationships to NMS score: fewer vacancies drives higher care quality. Effective employment practice appears to be central to securing these performance gains (Avgar et al., 2011).

Finally, we consider the explanatory properties of our regression models. Prescribed practices significantly predict NMS score (Model 1). However, prescribed and complementary practices in combination (Model 2) explain a greater proportion of variance in NMS score than prescribed practices alone. This appears to counter arguments that employment practice/quality relationships do not hold in low-skilled sectors (Batt, 2002). The proportion

of variance explained increases from Model 1 to 2 at both the all-sector and individual sector level which is a powerful finding: wider employment practice appears to be more effective in improving care quality than skill development alone. In summary, our findings provide support for ASC policy's emphasis on skill development but demonstrate that this is, in isolation, less effective than a wider set of employment practices.

In terms of sectoral variation, our findings are equally powerful. While both models are significant across all sectors, the proportion of variance explained is relatively small (around 4%). The variances differ markedly by sector, however, with Model 2 explaining 55% of the variance in the statutory sector and 30% and 6% in the voluntary and private sectors respectively. Similar patterns are seen, though with more modest variances, in Model 1. While the findings are complex, the cost-driven commissioning of outsourced care may offer an explanation. The negative implications of commissioning for employment practice have been identified in both the private (Rubery et al., 2013) and voluntary sectors (Cunningham, 2008; Grimshaw et al., 2015), while the statutory sector retains (to some extent) public-sector terms and conditions. Independent providers may focus on compliance with prescribed practices rather than their adoption to improve care quality (Rubery et al., 2013). More robust practice here may reap the rewards of better care quality. Yet our findings support the assertion of Cunningham et al. (2014) that NPM's emphasis on cost-saving via independent sector commissioning renders unlikely good employment practice across ASC (Rubery et al., 2013). This appears to run counter to workforce policy's aim of improving care quality.

Conclusions

Our findings indicate that good employment practice in ASC is somewhat limited, albeit perhaps more prevalent than much sector research suggests (Rubery & Urwin, 2011). However, as SHRM theory would lead us to expect (Wright & McMahon, 2011), where good practice exists, clear relationships are evidenced with improved care quality: skill development is significantly predictive of better care quality and this improves further when combined with complementary employment practice. Our findings have important implications in providing support for a workforce policy framework predicated on skill development to deliver workforce investment and ensure high quality care (DH, 2009), notwithstanding the basic level of such skill development (Cameron & Phillips, 2003). Yet acquisition of vocational qualifications remains low, which could relate to funding constraints (Jones, 2014), and high levels of labor turnover that mean that many care workers start but relatively few complete these qualifications. This

challenges the extent to which skill development can deliver substantial improvements in care quality. Our findings also indicate a clear role for complementary employment practice in improving care quality, yet call into question the capacity of ASC providers to deliver a “whole systems approach” (Gospel & Lewis, 2011, p. 606). Our findings suggest that workforce policy needs both to be more widely drawn to address complementary employment practice and more effectively implemented to ensure wide uptake. Further, our findings demonstrate that employment practice/care quality relationships are stronger in the statutory than the independent sector. This may result from outsourcing and commissioning practice: the statutory sector retains, to some extent, better employment practice than the independent sector. Here, cost pressures mitigate against adoption of good complementary practice (Cunningham et al., 2014) and prescribed practice may simply become another requirement within a cost-driven system rather than an opportunity to create a high performance workplace (Rubery et al., 2013).

Our research makes an important contribution to understanding employment practice/care quality relationships in ASC. Current workforce policy (DH, 2009) and reviews aimed at improving care quality (Cavendish, 2013; Kingsmill, 2014) lack a robust evidence base. In demonstrating positive employment practice/care quality relationships, we provide support for workforce policy’s premise in SHRM that investment in people provides the basis for enhanced performance (Wright & McMahon, 2011). While this has been largely established in high-skilled, high-wage sectors (Boxall et al., 2016), its effectiveness in low-skilled, low-wage sectors that compete on cost has been questioned (Batt & Banerjee, 2012). Our findings give grounds for optimism that good employment practice positively influences care quality, even where pay and skill levels are (relatively) low (contra Batt, 2002). This has wider implications given the growth of low-skilled work both nationally and internationally. It may, however, be that ASC is not a typical low-skilled sector (Rainbird et al., 2011) and that its relational nature supports investment in workers being repaid by better care delivery. Further research is required to explore the likelihood of positive outcomes from workforce investment in more typical low-skilled sectors.

Our analysis calls into question the effectiveness of workforce policy in enhancing care quality. Workforce policy is heavily reliant on induction training and vocational qualifications as up-skilling mechanisms. While we demonstrate that both enhance care quality, we do not have evidence, despite regulation, high levels of vocational qualification acquisition. Increased funding and a more stable workforce is required to enable regulation to succeed in creating the skilled labor supply essential to high quality care. Yet workforce policy focuses primarily on skill development as a panacea to

improved care quality (e.g., the National Minimum Training Standards, SfC/SfH, 2013), and is supported in this by national reviews of ASC quality (Cavendish, 2013; Kingsmill, 2014). We argue that policy's focus on skill development is too narrow, given our findings that wider employment practice more effectively enhances care quality. However regulation is weak (Kingsmill, 2014), and given the external commissioning of ASC provision, workforce policy can only encourage independent providers to deliver fair terms and conditions of employment (DH, 2009). Underfunding and cost-based commissioning mitigate against this (Cunningham, 2008; Grimshaw et al., 2015). However, there is increasing recognition of the need for better complementary employment practice. Kingsmill (2014), for example, argues for enforcement of NMW and the banning of zero-hours contracts. Cavendish (2013) suggests payment of the living wage and better career pathways. Yet both stop short of calling for regulation, with Kingsmill (2014) simply arguing for CQC inspection to enforce current legal minimums and prevent the worst excesses of exploitation. We argue that more widely drawn, rigorous workforce policy that supports uptake of current prescribed practices and includes complementary employment practice to support these is required to substantially improve care quality.

Finally, our analysis evidences the implications of NPM regimes for care quality and offers support to Knapp et al. (2001), who have argued that the success of English social care policy in enhancing care quality may be inhibited by market-like arrangements. Indeed, we demonstrate more positive outcomes in the statutory than the independent sector. External service provision does not always achieve the envisaged improvements (Schmid, 2003; Kordasiewicz & Sadura, 2016), and when care is delivered in the independent sector, cost-based commissioning mitigates against good employment practice (Cunningham et al., 2014; Grimshaw et al., 2015) and ultimately care quality. Yet in a policy context in which neoliberal principles are deeply embedded, we do not envisage a move away from NPM, market-based approaches, and a return to the statutory provision of ASC.

Then how can care quality be improved? To reduce a cost emphasis, Cavendish (2013) recommends a shift to local authority commissioning based on outcomes rather than activities. We argue that this, alone, is unlikely to be sufficient in the face of public sector financial constraints and associated Local Authority budget cuts. We support Kingsmill (2014) in calling for better funding of ASC and the integration of health and social care budgets. While complex, combining health and social care could both achieve financial efficiencies and (crucially) lead to care work being more highly valued in the longer term. It could also throw into sharp relief differing regulatory/policy approaches across the two sectors and bring pressure to bear for better terms and conditions in ASC. As we note above, this

should be supported by regulation of complementary employment practice: additional funding alone is insufficient, as Grimshaw et al. (2015) recently evidenced that in a market-based regime, only 14p of every extra pound spent went to improve care worker pay. Regulation is necessary to ensure that any funding increases flow to where needed: improvement of care worker terms and conditions. We acknowledge the potential cost of this and the complexity of demonstrating return given the difficulty of attaching a financial value to care quality. However, we argue that the benefits of dignity for the elderly, a better employment deal for care workers that supports their recruitment and retention, and a more effective health system not overwhelmed by the demands of elder-care that could be better met elsewhere justify the cost of increased regulation that delivers better employment practice.

Our research has important implications for practitioners that run counter to some who currently argue that SHRM approaches will not be effective in low-skilled sectors (Batt, 2002). We demonstrate that good employment practice improves performance outcomes—here, care quality. Social care providers should design and deliver employment practice that attracts, develops, and retains the required skilled ASC workforce, affording particular attention to development, pay, employment security, and work-life balance.

In conclusion, workforce policy's effectiveness in delivering improved care quality is likely to be comprised by both its narrow focus on skill development that fails to regulate other important employment practices and cost-based commissioning that militates more generally against robust employment practice. Policy-makers must address these tensions if workforce policy is to succeed in creating a high-skilled workforce capable of delivering high quality care. These are important issues not just in England but internationally given the global growth in elderly populations and the long-term elder care challenges being experienced in NPM-driven liberal market economies across the world (e.g., Broadbent, 2014; Nisbet, 2017).

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