



Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/83187/>

Version: Submitted Version

Article:

Burns, D., Killett, A., Hyde, P. et al. (2013) How organizational factors interact to influence the quality of care of older people in the care home sector. *Journal of Health Services Research and Policy*, 18 (1). Suppl . 14 - 22 . ISSN: 1355-8196

10.177/1355819613476016

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

How organizational factors interact to influence the quality of care of older people in the care home sector

Anne Killett, Paula Hyde, Diane Burns, Richard Gray, and Fiona Poland

Abstract

Objectives:

To examine how organizational factors affect good care and mistreatment of older people in care homes.

Methods:

Eight residential care homes for older people (including private sector, local authority and NHS providers) took part in a participatory observation-based study of organizational factors affecting care quality.

Results

Grouping organisational factors into infrastructure, management and procedures, staffing, resident population characteristics and culture we show the context sensitive nature of interactions between these factors. These interactions could enhance care quality where factors combined positively. Conversely, they could amplify difficulties where one factor came to undermine another, thereby limiting care quality.

Conclusions

This analysis provides empirical insights into how and why similar sector-wide changes to care provision have differential effects at the care home level. It indicates the situated and unpredictable ways in which organizational factors interact, implying the need for locally contextualised quality assessment and improvement actions.

Introduction

Understanding the prevention of mistreatment (abuse, neglect and loss of dignity) of older people in institutional settings is proving challenging ^(1, 2) with its prevalence argued to be as high as 24% ^(2, 3). Research on reducing mistreatment has mainly focused on associations between mistreatment and discrete, individualised factors, such as carer skills and training ⁽⁴⁾ with few studies of organizational factors which might persistently underpin mistreatment. ^(2, 5)

This study focused on the organizational dynamics affecting care quality in residential care homes in the United Kingdom. As a precursor to the field study, a structured review of the literature (including nine investigation reports into mistreatment of older people) identified five organizational factors associated with mistreatment. Broadly, these related to infrastructure, management and procedures, staffing, resident population characteristics and culture.

With regard to infrastructure, the following problems were identified; overcrowding, lack of equipment and poor physical environments have been associated with mistreatment. ⁽⁶⁾

Examination of coroners' reports on deaths of elderly nursing home residents identified unchanged bed-linen, strong odours of urine or faeces and food hygiene issues as markers ⁽⁷⁾.

Management and procedures were implicated with inquiries regularly highlighting both poor leadership and inadequate policies ⁽⁸⁻¹⁰⁾ alongside overly bureaucratic and instructive management styles ⁽¹¹⁾ as contributing to mistreatment. A recent study in Finland demonstrated how routinised care of older people detracted from care quality ⁽¹²⁾.

Staffing experiences affect performance. Breen *et al.* ⁽¹³⁾ linked performance of nursing homes to the performance of staff arguing that staff mix, remuneration and nursing home resources have an impact on the motivation and self-esteem of staff. Buzgova *et al.* ⁽⁵⁾ found associations between mistreatment and staff dissatisfaction with their working environment, inadequate training and burnout.

Changes in the characteristics of the resident population had a significant effect on the nature of care. One investigation into mistreatment in a UK nursing home ⁽¹⁴⁾ found that an increase in the proportion of residents with high levels of need led to poor care. It has been argued that under-resourcing for care of people with needs resulting from dementia is a ‘structural cause of neglect in German nursing homes’⁽¹⁵⁾ (p15). Physical abuse of older people resident in nursing homes has been associated with cognitive and behavioural difficulties and previous victimisation.⁽²⁾ Residents can also be at risk of abuse by other residents ^(16, 17).

The importance of organizational culture for promoting or undermining care quality has also been demonstrated. ⁽¹⁾ Closed, inward-looking cultures with few new ideas or expectations have been a feature of abusive care systems. ^(6, 11, 18) UK investigations highlighted both geographical and organizational isolation and restructuring, unrealistic targets and threatened closure as associated with cultures of mistreatment in health and social care settings ^(14, 19).

Such evidence suggests that the interaction between organisational factors rather than the presence of any one organisational factor will distinctively influence the experience of institutional care. We briefly describe our study method then provide empirical examples to indicate how these organizational factors interact in care homes and consequent effects on care quality.

Methods

Beyond identifying organizational factors commonly associated with mistreatment, the study sought to understand how these factors affected care quality. Observation methods linked to a participatory approach were used to ensure that the concerns and experiences of those most centrally affected, older people in residential care, would be systematically reflected throughout the project, from development to data collection and analysis. ⁽²⁰⁾ Older people involved in researching were over 60 years old and either had direct personal experience of the residential care, or shared characteristics of people needing such care. Older people were involved in three ways: as expert consultants on an advisory panel, as peer researchers who co-collected and co-analysed data with the university-based researchers, and as key informants with unique perspectives about their care and treatment within the sample of care homes. The panel consisted of 5 older people living in care homes and 4 family carers of older people living in care homes. Peer researchers (older people with experience of supporting relatives or others living in institutional care) were trained in research skills and supported to take part in data collection, analysis and findings development. The training focused on practical research skills; interviewing, non-participant observation and data analysis, informed by the peer researchers' perspectives and priorities. Sessions were interactive, encouraging peer researchers to draw on their own experience. Peer researchers were financially reimbursed. This participatory organisational research approach facilitated expression from multiple viewpoints (20). For example, in relation to the use of hoists, four competing viewpoints coexisted; residents disliked the use of hoists because of discomfort and cost to dignity while relatives believed that hoists protected the residents from falls. In contrast, care staff thought they could protect against back injuries and managers thought they provided protection against litigation. Incorporating these competing viewpoints helped promote a deeper understanding of the co-production of care quality ⁽²¹⁾ through comparative

analysis of eight case studies. ⁽²²⁾ The eight residential care homes were purposively selected for their contrasting socio-economic situation (deprivation, affluence, ethnic diversity/homogeneity, urban/rural), and organizational arrangements (size, ownership, type of care, funding, inspection report rating and resident population). Table 1 shows the characteristics of the care homes.

[INSERT TABLE 1 ABOUT HERE]

Primary research was conducted between November 2009 and May 2011. It included observations by university-based and peer researchers of the organizational infrastructure, environment and the lived experience of staff and residents alongside interviews with staff, residents and relatives. Institutional documents, such as policies and protocols, were analysed. Each case study was carried out over a period of 4-6 weeks. Observations were written in field notes and interviews digitally recorded. Data was transcribed and indexed for analysis. Iterative early analysis was integral to data collection and reflective notes were recorded and indexed. Initial within-case analysis followed, involving peer researchers and the university based researchers using both inductive, thematic analysis and deductive analysis. The deductive analysis examined data relating to the five organizational factors. The inductive analysis began with 2 peer researchers and 1 university researcher carrying out a thematic analysis of interview transcripts from the first two case studies. The resulting themes were used in regular meetings of the university researchers to analyse further transcripts, deepening and further defining the themes. Propositions were developed which guided data collection in subsequent case studies. This process was repeated through the series of case studies and ‘recursive cycling’ used to test propositions by comparing to data in other case studies in a cyclical fashion. ⁽²²⁾

Ethical review of the study was provided by the National Research Ethics Service 09/HO306/63. The care setting was the home of the residents and the work place of the staff, so it was particularly important that on-site research activity was only carried out with consent of those whose lives and work would be affected. Consent was negotiated with all residents, relatives and staff members observed or interviewed. In order to include people with cognitive impairment as a result of dementia in the research it was designed to comply with Mental Capacity Act (MCA, 2005). Consent (or advice, MCA) was obtained for 167 people to be observed, 147 people gave consent and were interviewed.

Results

Interactions between organizational factors were examined with respect to care from the perspective of the residents. Rather than imposing external measures of care quality, resident-centred, contextualised definitions of the care experience were prioritised. The study revealed how organizational factors interacted to create unique systems within which good quality care might be compromised: similar organizational factors did not necessarily have the same effect. For example, the use of agency staff in one home brought expertise and experience (Poppy Fields) while in another home it added to the work load of regular staff (Crocus Row). We begin by outlining care quality from residents' perspectives before illustrating how changes to organizational factors could interact to destabilise or stabilise care quality.

Care quality from residents' perspective

Care quality was ordered into a specific hierarchy: First, *feelings of safety and security* were of paramount importance. Residents wanted to be sure they would not be moved from their

care home (e.g. for financial reasons) and expressed fears of residents' and staff behaviour. Such concerns had a direct bearing on the choices made by residents about how to address any worries about their care. Second, *managing toilet needs* was a consistent and pressing concern. Despite considerable attention to this task, there remained significant anxiety for residents, as a result of delays in getting to the toilet, at several sites. Third, the importance of *meaningful relationships* was emphasised by residents who were upset at being talked down to or having a 'goodnight' go unanswered by staff. Residents also emphasised the importance of maintaining relationships beyond the care home. Relationships with other residents were also important. Where these aspects of life were successfully addressed, the possibility of more active engagement both in the home and outside came to the fore as important and valued parts of the experience of care.

Organizational factors at work - destabilisation

Variation in care experiences in care homes was not explained by the presence or absence of single organizational factors. Rather, each factor could magnify or cancel out positive or negative effects of other factors. The following examples demonstrate how interactions between staffing and other factors affected care quality.

Daisy Court operated 'for profit' and provided residential care to 60 people. A pared-down staff-resident ratio was achieved through a twelve hour shift rota without staff overlap between shifts. Handover was based mainly on written records of care. Staff were tired at the end of the long shifts and any face-to-face handover that did take place was unpaid. There was a high workload and limited time to communicate between staff, '*You don't go to the care files. They're locked in the office and you have to sort of go straight to what you're doing*' (Jane, Care Assistant, Daisy Court). Staff cared for different groups of residents on each shift:

'...you don't know whether you're coming or going because you don't get [the rota] until right last minute and so you can't turn your life around...' (Kelly, Care Assistant)

While this allowed flexibility in the face of staffing shortages it contributed to reduced access to vital information about residents. As a result, residents went without essential mobility aids, a resident had a second fall as she was given the wrong footwear. Instances of neglect were reported, but staff lacked confidence in the efficacy of the manager. Turnover of staff and management was high and problems in recruiting staff seemed to contribute to the manager's reluctance to challenge staff. Training in dementia care, was available but there was difficulty getting staff to attend even mandatory training.

Nevertheless, staff were caring at times;

'Janet she is second to none she is and how she puts my mum, how she baths her, it is its remarkable' (Sophie, daughter of a resident, Daisy Court).

And;

'...they give you that little tiny bit more attention, you know, so it's more like family, it's lovely, I don't feel as if I'm a nuisance to them.' (Lilly, Resident)

However, there were aspects of care that were worrying;

'Well this lady that got me ready last night when I was in bed I thought to meself she's frightened me because she was so abrupt I don't mean anything wrong but she was so abrupt and I thought I'm frightened of her.' (Lilly, Resident)

It was also clear that her choices were constrained;

'..I wished I could get up [at 5.30] but they're all so busy you see at that time, [they] can't can't see to you.... it's a long time it's just I'm desperate to go to the toilet of course you

know because I've been in bed since 8 o'clock or half past eight so it's a long night... 'til next morning' (Lilly, Resident)

Good care was fragmentary, with poor care experiences in evidence. Positive organizational elements which included; a number of highly skilled and motivated staff, potentially strong community links, clear policies and access to training were not effective. Staff were frustrated about instances of poor care and tended to either focus on the good quality work they personally could do, challenging management to bring about change or become hardened to some practices, not recognise that they were at times providing poor care.

It could be argued that leadership was problematic element in this example, yet, replacement in isolation did not provide a solution; there had been regular, recent managerial replacements. There were inherent tensions in the managerial role, which on the one hand, required clinical and care leadership within company policies on staff ratios and shifts, and on the other, required commercial enterprise in selling bed space.

Crocus Row provided a useful comparator, in which limitations in infrastructure, rather than recruitment and company-set establishment levels, adversely affected staffing. Crocus Row was a care home in the public sector, which had changed eligibility to include people with complex physical needs. The subsequent building alterations had design faults. En-suite toilets were not accessible for residents' assisted use and there were insufficient rooms in which hoists could be used. As the needs of residents changed more quickly than the overall infrastructure could be adapted, some residents with high levels of physical needs lived in non-adapted rooms. Care staff therefore had to assist with transfers of residents into and out of bed where hoists would not fit under the bed. There were a number of staff on sick leave with work-related physical injury. Staff were being asked to cover the shifts of staff on sick leave and as the work demands rose they were becoming more tired and prone to injury

themselves. The home used agency staff but these were not well-integrated into the work team. The high turnover in agency staff increased the workload for regular staff as new employees relied on regular staff members to show them stored equipment and to answer questions about individual residents' needs.

Meeting the changing resident population needs in a constrained physical environment increased the pressure on care staff, resulting in staffing shortages and use of agency staff which in turn impacted on care. Here, however, the impact on care was not as wide spread or as negative as in Daisy Court. The presence of a core group of staff acted to improve care. Residents expressed a sense of control over their care. *'I talk to my carer about what I need and she does it for me.'* (Robert, Resident).

The resident-centred ethos and stable core group of staff acted as a stabilising force in the system to limit the negative effects of poor infrastructure and resulting staffing problems.

Organizational factors at work - stabilisation

Organizational factors also interacted to produce stabilising effects on care quality. For example, Sunny Rose, provided care in an old building which, while attractive, offered marked environmental constraints: narrow corridors and steps that were difficult for some residents to negotiate. To manage risks of falling, rules about carers assisting residents' mobility had been developed and as a consequence, at times of peak need, residents might have to wait for a long time:

'The two care assistants approached the resident saying her name and saying 'ready', 'are you ready to go to bed'. The resident said, 'I have been ready for so long, I have been waiting an age I have'. The care workers then pointed out to her that she was asked an hour earlier if

she wanted to go to bed and she said no, because she wanted to have a drink.’ (Field Note, Sunny Rose).

This exchange illustrates not only the frustration of waiting for help, but also the tendency for staff to assert their definitions and shift responsibility onto the resident. Another resident, however, had been able to raise his concern with the staff: An 86 year old man who had lived in two care homes previously described his needs for sensitivity in personal care:

‘when I first came, I’d press my bell and nothing would happen, 20 minutes say, half an hour’ (Sidney, Resident). The staff and the resident had been able to find a way to address his concerns, even though the ratio of staff members to residents on shift was one of the lowest in the study. This was helped by a culture supporting openness in dealing with problems:

‘we have had somebody that didn’t want ... help ... even though they really needed it, but that was talked very closely with the family and the doctor.... there was an action plan to how to deal with it so you knew what you were doing’ (Alex, Care Assistant)

Shifts were arranged with a higher staff ratio in the morning when the demands were highest. At those times, managers and domestic staff also provided direct care work. The staff team was close-knit and loyal with high retention. Although the home was in a small town in a rural area where there could be potential recruitment challenges, the innovative support for new young members of staff to study for basic educational qualifications was part of workforce development and created positive employer/employee relationships. The owner-manager was involved in the day-to-day running of the home, and was also able to take decisions quickly and independently.

Meeting the physical needs of individuals in a dignified way was given priority in this home. A proposition from the early analysis was that there was a staff norm that to care you had to

be always visibly active. High workloads, routine-led care and an emphasis on physical care were countered by good team relations, an involved manager, clear and well-followed policies and procedures for staff supervision and a culture of openness for dealing with concerns. Close personal involvement generated high levels of motivation and shared sense of purpose which could then shape certain challenging elements, such as constraints in the built environment, staff resident ratio and workforce availability. This created a robust system in which the care experience was consistent and largely positive.

Organizational factors at work – stabilizing/de-stabilizing

A further case study showed how different organizational factors, in combination, might stabilise care in one area and destabilise in another.. Tulip Grange, like Sunny Rose, was in a converted old building. Here, however, there had been frequent changes of ownership and manager. The building and grounds appeared unkempt. Residents could not access the garden because of broken locks on doors, lack of suitable paving and shortage of staff time. The carpet in the main lounge area, although regularly cleaned, was soiled and the researchers noted there was frequently an unpleasant odour.

‘Smell of urine, in the lounge and hall. A visitor mentioned this to the deputy manager and was told this was the drains. To me this was a different smell.’ (Field Note, Tulip Grange)

The number of residents was currently below the capacity and registration of the care home, raising questions of financial viability for the home. The home was struggling to deal with staff shortages arising from difficulty recruiting staff in the rural area.

‘Conversation in senior’s office, planning the staff rota.....Deputy manager said she was having difficulty completing the rota for the four weeks ahead. New staff were coming into roles but they would have to work with four other care staff on each shift to start with... The

deputy manager asked the senior if she would do an extra shift in the following week, which would make a 55 hour week. The senior agreed, but said she did not want to be in the senior role for all of those shifts as she said she would be too tired and did not want to be responsible for the medication when she was that tired. The carer was in the middle of working a 55 hour week. All three then talked about how tired they felt. (Field Note, Tulip Grange)

The leadership of an energetic and committed young manager was encouraging changes to address issues of concern raised in recent CQC inspections. She engendered a sense of loyalty among the staff and, with the deputy manager, had established a direct and open style of communication in which care staff were both supported but also challenged:

'You heard me joke with her earlier I could just I could go into her office and talk about anything with her literally and she'd be there to listen and help me with it any way she could' (Raymond, Care Assistant).

The sense of responsibility for residents felt by the staff seemed to be unacknowledged and unsupported by the owning company, as evident in cuts to the food budget and restrictions in available funds to pay for routine maintenance (including, for example, to repair a grill for preparing food). Residents' experiences often appeared highly constrained, with a lack of activity and lack of access to communal rooms inside the home and to the outside. Detailed attention to certain needs was lacking e.g. around needs for finger food.

'...they said they would start giving her finger food which seems to be the same thing but without gravy..... there's a nice cooked meal and it looked very nutritious but it's not what Pam will eat so invariably you have to sit through an hour of agony.' (Myra, daughter of a resident)

The staff group was energised by a shared sense of purpose in showing outsiders that the home had improved following the last CQC inspection. They supported each other through joking between staff, however, this spilt at times into ‘jollyng’ of residents that was somewhat depersonalising. The few more experienced staff were working long hours. Here, compared with Daisy Court, a change of manager had produced positive innovations but these interventions did not seem sufficient to positively change all aspects of the care experience. Written records of care had been criticised in inspection and this was accorded a high priority. A relative commented that ‘*money, imagination and the time spent writing care plans I think*’ (Sara, daughter-in-law of a resident) limited the meaningful activity for residents. Concerns identified in regulatory inspections were being addressed, but there was a sense that the ‘means’ (care plans as a tool for good care) had become the ‘end’ as completing the care plans became the object of the task, with residents becoming incidental to their completion.

Discussion and conclusion

The interaction of similar organizational factors could have distinct effects in different settings. While a change of manager in Daisy Court did little to unify disparate factors, in Tulip Grange the new manager-staff relationship re-fuelled energies and built a sense of common purpose. In contrast to Sunny Rose and Crocus Row, however, the new relationships and common purpose were not sufficient to surmount infrastructure challenges. While the built environment affected the staff work in Sunny Rose and Crocus Row, the culture, ethos and scope of the manager’s role mediated this impact differently within in each home.

To date, there has been little exploration of this dynamic interaction between organizational factors. Individual organisational factors have been shown by research drawing on US government databases and questionnaires to be associated with mistreatment of older people

in institutional settings^(2, 23, 24). However, finding out about the presence or absence of particular organizational factors will not elaborate the care experience in a particular setting. Also, importantly, it may provide little insight into whether an apparently sound care setting is robust and able to adapt and withstand changes and challenges, or whether the care provided will be vulnerable to seemingly incidental changes. As such, care homes are operating as complex, open systems⁽²⁵⁾.

This analysis provides a means of thinking systemically about particular organizational interactions in care settings moving beyond providing a prioritised list of organizational factors, that by their individual presence or absence in particular situations, might flag up concerns about quality of care, risk of mistreatment, or might evidence solutions. Instead the approach taken here suggests that relevant systems are emergent and that the dynamic interplay of factors can therefore reproduce identifiable patterns of practices, in ways that do not immediately present themselves to individual participants' perceptions⁽²⁶⁾, but rather to the kind of analysis which we have provided.

The analysis also demonstrates that straight forward zero- sum assertions about organisational factors, such as that use of agency staff will have a negative impact on care, or that leadership training will have a positive impact on care, are unlikely to illuminate. This can suggest that proposed corrective actions may therefore need to be directed not towards single individuals or features but as situated, context-aware and -responsive measures to address relevant relational issues. Our research may therefore provide the basis for offering sensitising guides (see Table 2) to enable organisations, commissioners and regulators to attend to wider clusters of factors than they may have previously done in encouraging quality respectful practice in care homes provision. Interactive and reflective processes are most likely to help staff, managers and regulators to identify and recognise institutional abuse. Staff, residents and relatives could make a greater contribution, helping identify key

organisational dynamics pertinent to the experience of care in any particular care home setting.

1. Tadd W, Hillman A, Calnan M, Calnan S, Read S, Bayer A. From Right place – Wrong person, to Right place – Right person: dignified care for older people. *Journal of Health Services Research & Policy*. 2012 April 1, 2012;17(suppl 2):30-6.
2. Schiamberg LB, Oehmke J, Zhang Z, et al. Physical Abuse of Older Adults in Nursing Homes: A Random Sample Survey of Adults With an Elderly Family Member in a Nursing Home. *J Elder Abuse Negl*. 2011 24(1):65-83.
3. Cooper C, Selwood A, Livingston G. The prevalence of elder abuse and neglect: a systematic review. *Age Ageing*. 2008 37(2):151-60.
4. Connor T, Prokhorov A, Page C, Fang Y, Xiao Y, Post L. Impairment and Abuse of Elderly by Staff in Long Term Care in Michigan: Evidence From Structural Equation Modelling. *J Interpers Violence*. 2011;26(1).
5. Buzgova R, Ivanova K. Elder abuse and mistreatment in residential settings. *Nurs Ethics*. 2009 Jan;16(1):110-26. PubMed PMID: 19103695. Epub 2008/12/24. eng.
6. Wiener C, Kayser-Jones J. The uneasy fate of nursing home residents: an organizational-interaction perspective. *Sociology of Health and Illness*. 1990;12:20.
7. Lindbloom E, Brandt J, Hawes C, et al. The Role of Forensic Science in Identification of Mistreatment Deaths in Long-Term Care Facilities. Washington, DC: National Institute of Justice,, 2005 Contract No.: NCJ 209334.
8. Portsmouth Healthcare NHS Trust at Gosport War Memorial Hospital. London: Commission for Health Improvement, 2002.
9. Joint investigation into the provision of services for people with learning difficulties at Cornwall Partnership Trust. London: Healthcare Commission, 2006.

10. Investigation into the service for people with learning disabilities provided by Sutton and Merton Primary Care Trust London: Healthcare Commission, 2007.
11. Wardhaugh J, Wilding P. Towards an explanation of the corruption of care. *Critical social policy*. 1993;13(27):27.
12. Teeri S, Leino-Kilpi H, Välimäki M. Long-term nursing care of elderly people: identifying ethically problematic experiences among patients, relatives and nurses in Finland. *Nurs Ethics*. 2006;13(2):13.
13. Breen GM, Matusitz J, Wan TT. The use of public policy analysis to enhance the Nursing Home Reform Act of 1987. *Soc Work Health Care*. 2009 Jul;48(5):505-18. PubMed PMID: 19806710. Pubmed Central PMCID: 2760046. Epub 2009/10/08. eng.
14. Lea Cross Nursing Home. Commission of Investigation, 2009.
15. Goergen T. A multi-method study on elder abuse and neglect in nursing homes. *The Journal of Adult Protection*. 2004;6(3):10.
16. Rosen T, Pillemer K, Lachs MS. Resident-to resident aggression in long-term care facilities: An understudied problem. *Aggression and Violent Behaviour* 2008;13:77-87.
17. Rosen T, Lachs MS, Pillemer K. Sexual aggression between residents in nursing homes: literature synthesis of an underrecognized problem. *J Am Geriatr Soc*. 2010 Oct;58(10):1970-9. PubMed PMID: 20840462. Epub 2010/09/16. eng.
18. Jones C, White J. 'It's time it ended and yet I hesitate, I hesitate to end it': The emotional world of an old people's home. *Journal of social work practice*. 2008;22(3):329-43.
19. Investigation into the North Lakeland NHS Trust. London: Commission for Health Improvement, 2000.
20. Burns D, Hyde P, Killett A, Poland F, Gray R. Participatory organisational research: Examining voice in the co-production of knowledge. *British journal of management*. in press.
21. Hyde P, Davies H. Service design, culture and performance in health services: consumers as co-producers. *Human Relations*. 2004;57(11):1407-26.

22. Eisenhardt KM, Graebner ME. Theory Building From Cases: Opportunities and Challenges. *Acad Manage J.* 2007 Feb;50(1):25-32. PubMed PMID: ISI:000244976900004. English.
23. Shinan-Altman S, Cohen M. Nursing aides' attitudes to elder abuse in nursing homes: the effect of work stressors and burnout. *Gerontologist.* 2009 Oct;49(5):674-84. PubMed PMID: 19574544. Epub 2009/07/04. eng.
24. Phillips LR, Guo G. Mistreatment in Assisted Living Facilities: Complaints, Substantiations, and Risk Factors. *Gerontologist.* 2011 June 1, 2011;51(3):343-53.
25. Forbes-Thompson S, Leiker T, Bleich MR. High-performing and low-performing nursing homes: A view from complexity science. *Health Care Management Review.* 2007;32(4):341-51
10.1097/01.HMR.0000296789.39128.f6.
26. Paley J. The appropriation of complexity theory in health care. *Journal of Health Services Research & Policy.* 2010 January 1, 2010;15(1):59-61.

Table 1: Characteristics of the care homes in the sample of case studies

Long term care setting	Type of care home	Characteristics	Hours of observation	Consenting participants	Number of interviews				
					Resident	Relative	Staff	Visitor to home in professional capacity	Peer researcher interviewer
Sunny Rose	Independent sector, single owner	Rural location, residential care, generic registration	40	25	7	3	10	1	None
Poppy Fields	Voluntary sector group	Town location, residential care, generic registration	40	38	12	4	16	1	2 resident
Sunflower Place	NHS provider	City location, continuing care, dementia specialist	35	15	None	2	14	1	5 staff
Lily Park	Public sector group provider	City location, specialist residential dementia care	31	21	1	1	11	0	2 resident
Crocus Row	Public sector group provider	City location, residential care, generic registration	26		4	1			
Iris House	Public sector group provider	City location, residential care	45	18	8	1	9	0	1 relative 2 resident
Daisy Court	Corporate provider chain	Urban location, residential care with nursing	48	25	6	3	12	0	2 resident
Tulip Grange	Corporate provider chain	Rural location, residential care, dementia	29	25	None	5	14	0	2 relative
Total			294	167	38	20	86	3	16

Table 2 of indicative sensitising questions to guide situated analysis of interaction of organisational factors

<p><i>Organizational infrastructure, e.g. physical environment, type of provision</i></p>	<ul style="list-style-type: none"> • How are residents using the environment? • In what ways and to what extent does the infrastructure relate to the aims of the care home? • Are there means for identifying infrastructure problems? • In what ways can infrastructure problems be dealt with? • What organizational supports are available to maintain an appropriate physical environment?
<p><i>Management and procedures</i></p>	<ul style="list-style-type: none"> • What are the arrangements for developing and adapting procedures? • How many managers have been in post in recent years? • In what ways is leadership exercised? • What are the values underpinning care?
<p><i>Skills mix, training and numbers of staff</i></p>	<ul style="list-style-type: none"> • How is staff mobility affecting care? • How does staff mobility support transitions (e.g. between shifts – handovers, from established to new members of staff)? • How does the care provider maintain a fit between resident population needs and staff numbers/skill mix (e.g. staff ‘bank’ system, on-going training and recruitment, careful admissions policy)?
<p><i>Resident population:</i></p>	<ul style="list-style-type: none"> • How far do all residents have similar needs (for example needs for high support for physical care, help with orientation to time and place) or a wide range of disparate needs? • In what way are changing needs of the population of residents kept under review? • How is the resident population changing in the home over time? For example have there been any changes in registration? Have there been any changes in funding arrangements of the resident population? As residents’ needs change which residents (in terms of needs) are moving on and which residents are staying?

	<ul style="list-style-type: none"> • How are different people's needs for different types of support and activity balanced?
<p><i>Combined factors, e.g. culture of a home, routines:</i></p>	<ul style="list-style-type: none"> • In what ways can mistakes be talked about and what means are in place to understand them? • In what ways do the culture, ethos and routines of the home place value on specific aspects of care? • In what ways do the culture, ethos and routines of the home order residents' and staff priorities for providing care? • How does the way the home is presented (e.g. 'a home from home') shape what is valued as good care?