

# Retaining nurses in metropolitan areas: insights from senior nurse and human resource managers

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DRENNAN V.M., HALTER M., GALE J. & HARRIS R. (2016) *Journal of Nursing Management*

## Retaining nurses in metropolitan areas: insights from senior nurse and human resource managers

*Aim* To investigate the views of senior nurse and human resource managers of strategies to retain hospital nurses in a metropolitan area.

*Background* Against a global shortage, retaining nurses is a management imperative for the quality of hospital services.

*Method* Semi-structured interviews, thematically analysed.

*Results* Metropolitan areas have many health organisations in geographical proximity, offering nurses choices in employer and employment. Senior nurse and human resource managers recognised the complexity of factors influencing nurse turnover, including those that 'pulled' nurses out of their jobs to other posts and factors that 'pushed' nurses to leave. Four themes emerged in retaining nurses: strategy and leadership, including analysis of workforce and leavers' data, remuneration, the type of nursing work and career development and the immediate work environment.

*Conclusions* In contexts where multiple organisations compete for nurses, addressing retention through strategic leadership is likely to be important in paying due attention and apportioning resources to effective strategies.

*Implications for nursing management* Aside from good human resource management practices for all, strategies tailored to different segments of the nursing workforce are likely to be important. This metropolitan study suggests attention should be paid to strategies that address remuneration, progressing nursing careers and the immediate work environment.

*Keywords:* human resource managers, metropolitan area, qualitative research, retaining nurses, senior nurses

*Accepted for publication:* 15 April 2016

## Background

All health-care systems rely on their nursing workforce of which there is a global shortage (World Health Organization 2013). In many high and middle

income countries there is not only a current shortage of nurses (Buerhaus *et al.* 2009) but stagnation in the supply of graduates (Canadian Institute for Health Information 2015) and predications of shortages driven by increased demand and retirement rates (Health

Workforce Australia 2012, Juraschek *et al.* 2012). Nurse turnover rates differ between countries, regions and types of nurses (Kovner *et al.* 2014). There is a 40 year history of reviews of the determinants of nurse turnover (Halter *et al.* 2016a) that demonstrate the interlocking range of factors at individual, organisational and the broader socio-economic level (Nei *et al.* 2014).

Policy solutions to shortages address the supply of new entrants and also the retention of nurses (World Health Organization 2015). Good human resource management practices are reported to reduce the rates of voluntary turnover in all types of industries (Jiang *et al.* 2012). However, a review of systematic reviews of interventions aimed at nurse retention found only a small amount of evidence from reviews of a moderate strength of the positive effect of supportive schemes for newly graduating nurses (i.e. at the individual level) and for leadership that creates group cohesion (i.e. at the micro-organisational level) in developed economies (Halter *et al.* 2016b). Against this paucity of empirical evidence, there is a need to draw on the evidence from experience, i.e. the actors within specific types of nurse labour markets, from which to identify and theorise on effective retention interventions in those contexts. There are many studies, including in the current fiscal crisis, which survey front line nurses on intentions to leave their jobs (see for example Leone *et al.* 2015). However, another key set of actors within the nursing labour market are the senior nurse managers and senior human resource managers who have strategic roles at the macro level of organisations for the nursing workforce. Little evidence is available from this level of experts and that which does exist provides insights from rural areas in the United States (Glasser *et al.* 2006) and sub-groups of nurses such as newly graduated nurses in Australia (O'Brien-Pallas *et al.* 2006) and home visiting nurses aged over 50 in the UK (Leese *et al.* 2009). The study reported here addressed this evidence gap in relation to all nurses in the hospital sector in metropolitan areas.

The study addressed the question: what are the strategies that hospital senior staff report to increase nurse retention in the context of the types of factors that influence hospital nurses to leave their jobs in a metropolitan area? It drew on the interpretivist tradition (Silverman 2013) and was framed by theories of choice in labour markets and the factors that push or pull individuals from and to occupations and jobs (Rottenberg 1956). The concept of push and pull factors for nurses in labour markets has been used most

frequently in consideration of international migration (Kline 2003, Kingma 2007).

## The context of nurse employment in the NHS in England

The National Health Service (NHS) in England is a free at the point of care, tax funded system covering the whole population. It employs 353 359 nurses, midwives and health visitors (Health and Social Care Information Centre (HSCIC) 2015a). The largest group within it are nurses, trained to work with adult patients ( $n = 195\,370$ ), employed in hospitals in organisations known as Trusts. In response to recent shortages of nurses (Buchan & Seccombe 2012), the NHS organisation responsible for planning the national nursing workforce increased the commissions for nurse education places, funded a national return to a nursing programme and urged employers to increase nurse retention (Health Education England 2013).

The NHS has a strong suite of human resource practices guided by the NHS Constitution (Department of Health [DoH] 2013) (see Table 1). There is a nationally agreed set of employment terms and conditions (including family friendly policies, flexibility in working patterns and retirement and no tolerance for aggression to staff) and pay scales, including high cost living areas supplements (NHS Staff Council 2015).

**Table 1**

The NHS pledges to staff (Department of Health 2013 Section 4a)

The NHS commits:

- to provide a positive working environment for staff and to promote supportive, open cultures that help staff do their job to the best of their ability (pledge);
- to provide all staff with clear roles and responsibilities and rewarding jobs for teams and individuals that make a difference to patients, their families and carers and communities (pledge);
- to provide all staff with personal development, access to appropriate education and training for their jobs, and line management support to enable them to fulfil their potential (pledge);
- to provide support and opportunities for staff to maintain their health, well-being and safety (pledge);
- to engage staff in decisions that affect them and the services they provide, individually, through representative organisations and through local partnership working arrangements. All staff will be empowered to put forward ways to deliver better and safer services for patients and their families (pledge);
- to have a process for staff to raise an internal grievance (pledge);
- and to encourage and support all staff in raising concerns at the earliest reasonable opportunity about safety, malpractice or wrong doing at work, responding to and, where necessary, investigating the concerns raised and acting consistently with the Public Interest Disclosure Act 1998 (pledge)

There are annual Trust staff surveys about working lives and engagement (Picker Institute/NHS 2014, NHS England 2015).

## Methods

### Setting and sample

The target purposive sample were the 14 Board level Directors of Nursing and Directors of Human Resources in the seven NHS Trusts providing all hospital services in the metropolitan area of South London (resident population of 3 million). The Trusts ranged in size from just under 1000 to over 4000 nurse employees (HSCIC 2015a). The NHS in South London had a nurse turnover rate (i.e. the percentage of people by head count leaving an organisation over a nominated period of time (HSCIC 2014)) in 2014 of 10.2% compared with 8.6% for England (HSCIC 2015b). In the individual Trusts in the sample the annual adult nurse turnover rates ranged from 8 to 21% (data source from Health Education England South London).

These Directors were invited to participate by e-mail. Pressures on the Director's time was acknowledged and if their own participation was not possible they were requested to pass the invitation to a deputy involved in nursing workforce issues.

### Data collection and analysis

Data collection was by semi-structured interviews, conducted face to face or by telephone as preferred, using a topic guide (Silverman 2013). A technique of participant verification of the researcher's understanding within the interview was used (Silverman 2013). Interviews were undertaken in 2015 and were between 25 and 50 minutes in length. With permission, notes or digital recordings were made during the interviews and transcribed, and any identifying features were removed. The data were thematically analysed close to the time of the interview and through an iterative analytical process, themes were tested and sense checked in subsequent interviews (Silverman 2013). The study was reviewed by the University Research Ethics Committee [Reference 09-02-2015].

## Results

Twenty participants from all seven NHS Trusts were interviewed (Table 2). Eight (three women and five men) were Board level Directors of their Trusts and

**Table 2**

Number and type of individual senior manager interviews

	Number	
	Inner London	Outer London
Nurse managers	8	4
Human resource managers	4	4

the remainder (three men and nine women) were either associate directors or in senior management positions. In four Trusts there were more than two participants who were senior managers responsible for either a second hospital site or nursing workforce development.

Many participants commented that it was healthy for nursing to have some turnover:

You want some movement [in the workforce] or you stagnate, for example, you need to be able to bring in the younger ones, with young enthusiasm, ready to replace those retiring,  
senior nurse manager, outer London.

They were, however, also conscious that there was a point at which turnover rates became problematic. They all considered that the overarching cause for current high rates of turnover was the increased demand for nurses in London and beyond as in this exemplar:

Nurses have many choices in what job they do and where they work at the moment,  
senior human resource manager, inner London.

Key demand drivers were identified as: NHS nurse staffing policies (Department of Health 2014, National Institute for Health and Care Excellence 2014), changes in skill mix in health-care teams and expansion of services. Participants described how their organisation was in competition with others for the pool of available nurses, sometimes describing other Trusts as predatory, using terms such as 'poaching our nurses' (senior nurse manager, inner London).

Participants were cognisant of the complexity of factors influencing nurse turnover. In the context of describing retention strategies, participants summarised factors that 'pulled' nurses out of their jobs to other posts and factors that 'pushed' nurses to leave. We discuss these within their views on retention strategies grouped within four themes: strategy and leadership, remuneration and the cost of living, progression of a nursing career and the work environment.

## Strategy and leadership in the retention of nurses

All the participants reported that their Trusts had workforce development strategies with Trust Board level oversight. Some reported strategies specifically for the nursing workforce. Most described the Director of Nursing reporting on nursing workforce to the Trust Board. They described structures within their organisations to coordinate oversight and planning of the total workforce. Often this included a specific recruitment and retention committee with defined work streams – sometimes including one specifically on nursing:

So we have a recruitment and retention committee led by the director of human resources but the issues have become so pressing we've just set up a sub group specifically on nurses

senior nurse manager, outer London.

Most participants discussed the interconnectivity of recruitment activities with retention rates as in this exemplar – ‘good recruitment of the right nurses for the right jobs is the starting point to keeping them’, senior nurse manager, outer London. The Directors of Nursing were reported as the leaders in addressing nursing workforce issues with other senior nurses leading work on some aspect of it. Some Trusts had senior nurse posts working only on recruitment and retention, indicating the significance. One large, inner London Trust had also re-organised its human resource service so there was one team aligned only to nursing. They described this as an asset in developing expertise on human resource issues for the nursing workforce.

Many participants pointed to the need for Board members and managers to understand their nursing workforce trends as part of their awareness of risk to the delivery of services. All Trusts were using some type of exit interview to provide data on reasons for leaving. Some described different ways in which data were being reported to assist managers understand and act on issues: ‘So now we have reporting on reasons for leaving grouped as “happy” and “unhappy” leavers so that we can really pinpoint what else we need to work on as an organisation’, senior human resource manager, inner London.

Another reported set of nursing leadership activities were those that created opportunities for the senior nurses to listen to problems from and engage the frontline nurses in finding solutions.

## Remuneration and the cost of living

All participants pointed to the high cost of living and the lack of affordable housing in London as a major factor in decisions to leave. Remuneration issues that participants reported as important in ‘pulling’ nurses away to other Trusts were: high cost area supplements (HCAS), differently graded posts, higher rates of pay for agency staff. Those participants, with hospitals in lower rate HCAS areas, pointed to the attractiveness of posts in nearby hospitals with the higher rate HCAS: – ‘yes of course that two thousand pound a year difference [the higher rate of HCAS] means a lot in take home pay when it's only a short bus ride difference to another hospital up the road’, senior nurse manager, outer London.

One Trust that had hospital sites which were inside and outside the HCAS higher rate area was reported to have created equity by paying all staff the higher rate.

Career progression linked to higher salaries was an issue discussed by many. One Trust was implementing a salary gradation within the lowest pay band for registered nurses to make their posts more attractive to those with more experience. Differentials between Trusts in grading similar posts, such as clinical nurse specialists, were also discussed. This was thought to pull nurses away from their London Trusts, particularly those nurses with less experience who might be the ‘supply pipeline’ for the senior nurse cohort.

So they are kept at band 5 [the lowest pay band] because they haven't got all the courses the unit [in that Trust] says they have to have for band 6 but they can go out of London and get the same job at band 6 without needing this and that expected here,

senior nurse manager, inner London.

A number of participants discussed the problem of higher rates of pay for temporary nurses, employed through private sector agencies (known as agency nurses in the UK) as a factor pulling their nurses to leave in this exemplar: ‘So anecdotally we've heard that the agency nurses come and talk to their colleagues about their pay and are signing up people with the agencies ... we have a very good in-house bank for nurses but they've seen their numbers drop’, senior human resource manager, outer London.

A number of respondents argued that there should be a sector-wide agreement on a ceiling to be paid for agency staff to manage both the cost for the Trust but also the pull of such salaries to NHS nurses. One local

strategy to counteract this pull was described in one Trust where human resource staff modelled the losses over time (e.g. loss of NHS pension) to nurses if they left the NHS.

Many observed that remuneration was important to address but was only one factor: 'Pay is important but most people don't come into nursing expecting high salaries – they have other motivations', senior nurse manager, outer London.

Consequently, reported solutions were interconnected to the other aspects of nurses' working lives such as career development and working environment.

### Progression of a nursing career

The nurse participants discussed the imperative of retention not just in financial terms but also in terms of building the next cohort of clinical nurse specialists and nurse managers i.e. succession planning. They recognised their nursing workforce as heterogeneous and divided them into sub-groups to discuss the issues. Most commonly they grouped nurses by career stage, i.e. newly qualified, junior ward managers and clinical nurse specialists, and by life stage, i.e. young and at the start of their working careers, having a young family, or close to retirement.

I always think of the nurses in our Trust in different groups as to the issues as to why they leave or stay – like you've got your Band 5 [lowest pay grade for registered nurses] and there is always lots of movement there, particularly from the newly qualified ones finding their place, or those a bit older thinking of families and needing to live somewhere they can afford a family home or be near their families,

senior nurse, inner London.

### *Newly qualified and new to the UK nurses*

The senior nurses were aware of the risks of loss of newly qualified nurses if not supported into the working world of nursing. All participants reported that their Trusts had preceptorship programmes (Nursing & Midwifery Council 2006). The research team noted the variety in length and intensity in these. Senior nurses reported that those new to nursing wanted to gain a range of experience and often moved on quickly from first jobs. One Trust had developed a rotation programme for newly qualified nurses moving to posts in three different specialties within 12 months. The participants reported the scheme as successful.

Many Trusts were described as actively recruiting international nurses. Participants discussed the advantages and disadvantages of such strategies. Many voiced a preference for 'growing our own workforce' human resource manager, inner London. Most had been involved in similar overseas recruitment in the early 2000s: – 'it's a bit *deja-vu* at the moment', senior nurse, inner London. They reported there was a high cost to acclimatising overseas nurses to the UK and the NHS. They pointed to high, and costly, turnover rates in overseas nurses from nearby home countries or where the overseas nurses viewed the recruiting Trust as 'a stepping stone to moving on', (senior nurse, outer London) to an area where there was a larger community of that nationality. Some participants reported that their Trust offered tailored retention support to overseas nurses through group or preceptorship programmes.

### *Experienced nurses*

Senior nurses said that more experienced nurses could be pulled to other Trusts to gain specialty experience. An unintended consequence of recently established pan-metropolis models of provision between hospitals, for example in trauma care, was considered to make some hospitals more attractive and others less: 'I was talking to one of our A & E [accident and emergency] nurses last week who was leaving and saying it was for experience in a unit with the helicopter emergency services ... which we can't offer', senior nurse manager, outer London.

A number of participants described initiatives to increase the attractiveness of their Trust by creating opportunities in different service settings. Examples were given of service division rotation schemes (e.g. in cardiovascular services). Retaining nurses within that Trust, even if in another post, was a valuable objective commented on by many. A number commented that the recruitment processes for nurses had become bureaucratically counterproductive and this needed addressing: 'why should our own nurses have to come to an open recruitment day on their day off along with everyone else?', human resource manager, outer London. Some participants reported new processes to make it easier for their employed nurses to try out and then change posts within the organisation.

All the senior nurse participants viewed offering continuing professional development opportunities, including University courses, as an important strategy for nurse retention. Many of them noted that there was less funding available for this than in previous years. They speculated on the potentially negative

consequences. They also pointed to the management challenges of (a) releasing staff to attend such courses when they had high turnover and vacancy rates and (b) committing to the paid release of staff to attend in a way that was equitable. Most noted that an important management strategy was to ensure visibly equitable treatment of individual nurses and also of all sub-groups, such as those of black and minority ethnic origin. They pointed to the importance of equity in opportunity within the nursing workforce, particularly at times of constrained finance. One senior nurse cited an example where she had funded additional courses for new to the UK nurses and then been criticised by other nurses in her Trust who argued that the new to the UK nurses were receiving preferential treatment at the expense of longstanding NHS nurses.

Retention of experienced nurses and developing them to be managers and senior clinical nurse specialists was discussed by many. The ward manager role was singled out as a critical role which was becoming hard to attract junior nurses to: 'Ward managers – that's a really difficult area to recruit into – million pound budgets, 24 hour responsibility and then they lose money because they don't get the unsocial hours pay', senior nurse, outer London.

A number of Trusts offered targeted leadership and management programmes, which were designed to grow their own pool of nurses to be successors to older, more experienced nurses who were retiring, particularly in management roles. These types of courses were also seen as important in the development of management behaviours that ensured the retention of junior nurses, which is discussed below.

### The work environment and team

All participants recognised the importance of the immediate work environment and team in retaining nurses. Many participants referred to the current high vacancy rates as contributing to a 'vicious circle', human resource manager, outer London. This 'vicious circle' was the scenario where vacancies led to an over reliance on agency nurses, which led to increased responsibility and burden for the permanent staff, who were then attracted to less burdensome posts, but in doing so contribute to the increased burden of the remaining staff. Swift recruitment and induction was identified as a key management strategy to help avoid this cycle.

Participants discussed the push from posts through the impact of the 'heaviness' in physical and emotional labour of nursing on in-patient wards. Participants discussed factors that contributed including:

staffing levels, acuity of patients, increased volumes of people with multiple physical and mental health problems such as cognitive impairment: 'The wards have changed so much from even 5 years ago. Because we discharge as soon as we can, there are no patients who self-manage any more, there are only very dependent patients and so many of them have dementia these days, the work is really heavy, no respite', senior nurse, outer London.

Many of the senior nurses discussed the importance of strategies for the regular review work of staff ratios to workload. In addition, they cited the importance of senior staff to be alert to these pressures and to ensure they listen to, respond appropriately and engage the nursing staff in developing solutions as described above. One senior nurse offered the example of investing in ward team development days in which the ward managers and their teams were resourced to take time together away from the ward to work out solutions and better ways of working. The preceptorship activities discussed above were also cited as important, as were broader Trust strategies for staff well-being. Two of the senior nurses speculated on whether the expectations of those qualifying as nurses were not attuned sufficiently to the 'reality' of nursing work in acute care settings and thought that increased clinical experience in these settings during training might address this.

Many considered that the ward manager was a key factor in keeping the nurse in the post or at least in the organisation. Poor line management practices were thought to be significant: 'people don't leave their job; they leave their managers', senior human resource manager, inner London. Some noted staff survey evidence of bullying by managers, despite anti-bullying policies. Management training was considered important and offered in all Trusts, although only some targeted nurse managers. One human resource manager observed that this type of development had to be ongoing and not seen as a one-off initiative. The rationale for this being not only because there was turnover in nurse managers but also because giving time for reflection and learning with peers away from the workplace enhanced their management practices and had benefits for the organisation.

### Discussion

The senior managers interviewed here had a sophisticated understanding of the 'push' and 'pull' factors (Rottenberg 1956) for nurses in the metropolitan nursing labour market. They recognised that in a metropolitan area, despite the constrained financial environment,

there was significant demand for nurses which was greater than the supply in the nursing labour market place. Consequently they understood their organisation was in competition with others, despite all organisations being part of one publically funded health service. Retention of nurses was an important strategic issue for all the organisations. Some organisations were using nurse leavers' data systematically to inform those strategies. The senior nurse managers were aware of the varying needs and incentives of different groups within their nursing workforce and described their retention strategies for each of these groups. To our knowledge this paper is the first to report such recognition of the nursing labour market and also strategically to address retention considering the different segments within the nursing workforce. Previously reported papers consider determinants of turnover only (for example Nei *et al.* 2014), or examine only one sub-group within a workforce (O'Brien-Pallas *et al.* 2006, Leese *et al.* 2009). Retention strategies targeted at nurses, and beyond good human resource practices for all staff, addressed key themes of remuneration, progression of nursing careers and the immediate work environment including management behaviours. It was evident that while the participants could describe initiatives or activities in most of these thematic areas, there was variation by organisation. As a qualitative study it is possible to theorise whether one thematic area has greater retention properties for a segment of the nursing workforce compared with another. For example, do nurse team building and engagement strategies result in similar retention rates for all sub-groups of nurses (by demography and nurse grade) and in all work 'burdensome' contexts (for example, acute wards with different types of patient acuity and staffing levels)? One question the evidence here raises is whether career development opportunities offset the 'pull' of increased remuneration for all nurses or particular subsets of nurses.

This study has limitations in drawing participants from one metropolitan area only. However, there was breadth in that participants worked in different urban settings with differently sized nursing workforces. As a qualitative study it can only be generalised at the theoretical level (Crotty 1998) and this study offers insights to be tested in different settings and contexts.

## Conclusions

Metropolitan areas offer nurses choice in employment and employers. Against this context, strategies that are likely to retain nurses in individual hospital

organisations have to be tailored to particular sub-groups and address interlinked issues of remuneration, nursing career progression and immediate work environment.

## Implications for nurse managers

In contexts where multiple organisations compete for nurses to work for them, strategic leadership addressing retention is likely to be important in paying due attention and apportioning resources to retention strategies. Aside from good human resource management practices for all, strategies tailored to different segments of the nursing workforce and offered equitably are likely to be important. Attention should be paid to strategies that address: remuneration, the immediate work environment and progression of nursing careers.

## Source of funding

This study was funded by the National Health Service (NHS) Health Education South London (HESL) part of NHS Health Education England. The views expressed in this paper are those of the authors alone and not those of the funding body, the NHS or the Department of Health.

## Ethical approval

The study was reviewed by the University Research Ethics Committee [Reference 09-02-2015].

## References

- Halter M., Boiko O., Pelone F., Beighton C., Harris R., Gale J., Gourlay S. & Drennan V.M. (2016a) The determinants and consequences of adult nurse staff turnover: a systematic review of systematic reviews. in press.
- Halter M., Pelone F., Beighton C., Boiko O., Harris R., Gale J., Gourlay S. & Drennan V.M. (2016b) Interventions to reduce adult nurse turnover: a systematic review of systematic reviews. in press.
- Buchan J. & Secombe I. (2012) *The UK Nursing Labour Market Review 2012*. The Royal College of Nursing. Available at: [http://www.rcn.org.uk/\\_\\_data/assets/pdf\\_file/0016/482200/004332.pdf](http://www.rcn.org.uk/__data/assets/pdf_file/0016/482200/004332.pdf), accessed 3 November 2015.
- Buerhaus P.I., Auerbach D.I. & Staiger D.O. (2009) The recent surge in nurse employment: causes and implications. *Health Affairs* 28 (4), w657-w668.
- Canadian Institute of Health Information (2015) *Supply of Nurses in Canada Declines for First Time in 2 Decades*. Available at: <https://www.cihi.ca/en/spending-and-health-workforce/health-workforce/supply-of-nurses-in-canada-declines-for-first-time-in>, accessed 3 November 2015

- Crotty M. (1998) *The Foundations of Social Research: Meaning and Perspective in the Research Process*. Sage, London.
- Department of Health (2013) *The NHS Constitution, 2013*. Available at: <https://www.gov.uk/government/publications/the-nhs-constitution-for-england>, accessed last 3 November 2015
- Department of Health (2014) *Hard Truths: the Journey to Putting Patients First*. Cm8777- Available at: <https://www.gov.uk/government/publications/mid-staffordshire-nhs-ft-public-inquiry-government-response>, accessed 2 November 2015
- Glasser M., Peters K. & Macdowell M. (2006) Rural Illinois hospital chief executive officers' perceptions of provider shortages and issues in rural recruitment and retention. *Journal of Rural Health* 22 (1), 59–62.
- Health Education England (2013) *Investing in People for Health and Health Care. Workforce Plan for England Proposed Education and Training Commissions for 2014/15*. Available at: <http://hee.nhs.uk/2013/12/17/hees-first-national-workforce-plan-published-today>, accessed 4 November 2015
- Health and Social Care Information Centre (HSCIC) (2014) *Workforce Minimum Data Set v3.0*. Available at: <http://www.hscic.gov.uk/wMDS>, accessed 7 March 2016.
- Health and Social Care Information Centre (HSCIC) (2015a) *NHS Hospital and Community Health Services Non-Medical Workforce Census England 2004–2014*. Available at: <http://www.hscic.gov.uk/searchcatalogue?productid=17386&topics=1%2fWorkforce%2fStaff+numbers&sort=Relevance&size=10&page=1#top>, accessed at 3 November 2015
- Health and Social Care Information Centre (HSCIC) (2015b) *NHS Workforce Statistics January 2015 Provisional Statistics*. Available at: <http://www.hscic.gov.uk/article/2021/Website-Search?productid=17709&q=stability+index&sort=Relevance&size=10&page=2&area=both#top>, accessed 7 March 2016
- Health Workforce Australia (2012) *Health Workforce 2025: Doctors, Nurses and Midwives Volume 1 and 2*. Available at: <http://hwa.gov.au/our-work/health-workforce-planning/health-workforce-2025-doctors-nurses-and-midwives>, accessed 10 November 2015
- Jiang K., Lepak D.P., Hu J. & Baer J.C. (2012) How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms *Academic Management Journal* 55 (6), 1264–1294.
- Juraschek S.P., Zhang X., Ranganathan V. & Lin V.W. (2012) United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality* 27 (3), 241–249.
- Kingma M. (2007) Nurses on the move: a global overview. *Health Services Research* 42, 1281–1298.
- Kline D.S. (2003) Push and pull factors in international nurse migration. *Journal of Nursing Scholarship* 35, 107–111.
- Kovner C.T., Brewer C.S., Fatehi F. & Jun J. (2014) What does nurse turnover rate mean and what is the rate? *Policy, Politics & Nursing Practice* 15 (3–4), 64–71.
- Leese B., Storey C. & Cheater F. (2009) Retaining primary and community nurses over the age of 50 years: the views of managers. *Journal of Nursing Management* 17, 975–985.
- Leone C., Bruyneel L., Anderson J.E. *et al.* (2015) Work environment issues and intention-to-leave in Portuguese nurses: a cross-sectional study. *Health Policy* 2015; S0168-8510 (15) 00243-2.
- National Institute for Health and Care Excellence (2014) *Safe Staffing for Nursing in Adult Inpatient Wards in Acute Hospitals*. Available at: <https://www.nice.org.uk/guidance/sg1>, accessed 3 November 2014
- Nei D., Snyder L.A. & Litwiller B.J. (2014) Promoting retention of nurses: a meta-analytic examination of causes of nurse turnover. *Health Care Management Review* 40 (3), 237–253.
- NHS England (2015) *Staff Family and Friends Test Data*. Available at: <https://www.england.nhs.uk/ourwork/pe/fft/staff-fft/data/>, accessed 10 November 2015.
- NHS Staff Council (2015) *NHS Terms and Conditions of Service Handbook*. Available at: <http://www.nhsemployers.org/your-workforce/pay-and-reward/nhs-terms-and-conditions>, accessed 4 July 2015
- Nursing and Midwifery Council (2006) *Preceptorship Guidelines. NMC Circular 21/2006*. Available at: <http://www.nmc.org.uk/standards/additional-standards/standards-to-support-learning-and-assessment-in-practice/>, accessed 7 November 2015
- O'Brien-Pallas L., Duffield C. & Hayes L. (2006) Do we really understand how to retain nurses? *Journal of Nursing Management* 14, 262–270.
- Picker Institute/NHS (2014) *National NHS Staff Survey Co-ordination Centre Staff Survey 2014*. Available at: <http://www.nhsstaffsurveys.com/Page/1010/Home/Staff-Survey-2014/>, accessed 10 November 2015.
- Rottenberg S. (1956) On choice in labor markets. *Industrial and Labor Relations Review* 9 (2), 183–199.
- Silverman D. (2013) *Doing Qualitative Research*, 4th edn. Sage, Thousand Oaks, CA.
- World Health Organization (2013) *Enhancing Nursing and Midwifery Capacity. Human Resources for Health Observer: 12*. Available at: <http://www.who.int/hrh/resources/observer12/en/>, accessed 1 November 2015
- World Health Organization (2015) *Health Workforce 2030*. Available at: [http://www.who.int/hrh/documents/strategy\\_brochure2014/en/](http://www.who.int/hrh/documents/strategy_brochure2014/en/), accessed 1 November 2015