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Christine M. Duffield Edith Cowan University, c.duffield@ecu.edu.au

Di E. Twigg Edith Cowan University, d.twigg@ecu.edu.au

Judith D. Pugh Edith Cowan University, j.pugh@ecu.edu.au

Gemma Evans Edith Cowan University

S Dimitrelis

See next page for additional authors

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Authors Christine M. Duffield, Di E. Twigg, Judith D. Pugh, Gemma Evans, S Dimitrelis, and Michael A. Roche

The Use of Unregulated Staff: Time for regulation?

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Introduction and Background

Poor nursing care leading to patients' death and disability has forced several countries to conduct inquiries into their hospital systems. The most recent and perhaps most significant, because of the scale of deliberations, occurred in 2013 in the National Health Service (NHS) England, within the largest publicly funded health service worldwide. The Mid Staffordshire Hospital Inquiry investigated avoidable deaths that occurred between January 2005 and March 2009 and was damning about the poor quality of nursing care (Francis, 2010). Findings included but were not limited to failures in administering prescribed medications; and inadequate completion of nursing records, medical rounds and nursing handovers (Francis, 2013). While surprisingly, the inquiry was unable to ascertain the number of nurses employed, media reports indicated that there was extensive substitution of registered nurses (RNs) with unlicensed nursing support workers, which at times reached levels of 50% of caregivers (Francis, 2013). This was despite recommendations from earlier inquiries (2007 - 2008) in the same Trust that the skill mix of 40:60 skilled (qualified) nurses to unskilled (nursing support workers) be reversed to 60:40. This echoed an issue identified in earlier studies, where a reduction in nursing teamwork and the quality of care was associated with a high proportion of nursing support workers in the workforce (Spilsbury & Meyer, 2005). Indeed, lean skill mix (a high percentage of unskilled workers) has been linked to numerous negative patient outcomes (Kane, Shamliyan, Mueller, Duval, & Wilt, 2007; Needleman et al., 2011; Roche, Duffield, Aisbett, Diers, & Stasa, 2012; Twigg, Duffield, Bremner, Rapley, & Finn, 2012). In view of this research and other findings, it is timely to consider the current state of nursing support worker employment, their role and scope of practice and the impact on patients and nurses, with a view to regulation of these workers.

Definition

There are many titles used to refer to unregulated nursing workers, which leads to confusing terminology: unlicensed assistive personnel (United States [US]); health care assistants (UK and Australia); personal care attendants (Australia); auxiliaries or auxiliary nurses; patient care assistants, birth assistants, psychiatric aides; and assistants in nursing (Australia). Other titles found in the literature include medical assistant, patient care technician, care extender, nurse aide, nurse tech, nursing orderlies and attendants. The International Standard Classification of Occupations (ISCO 2008) categorises all these unlicensed workers under the occupation title of 'Patient Care Workers in Health Services' (International Labour Organization, 2012). The generic title 'nursing support workers' will be used throughout this paper.

Nursing support worker employment

The employment of nursing support workers has been increasing over the past few years. Two significant factors driving this growth are nursing shortages and the increased costs of care (Gillen & Graffin, 2010; Graham & Duffield, 2010; Heath, 2002; Sibbald, Shen, & McBride, 2004). In the US, nursing assistants comprise an estimated 24.7% (593,490) of the over 2.4 million paraprofessionals (Squillace, Remsburg, Bercovitz, Rosenoff, & Branden, 2007), and close to 72% (1.45 million) of the direct care nursing home workforce in 2006 (Bureau of Labor Statistics, 2008). These figures are mirrored in other countries. For example nursing support workers represent approximately 17% of the entire UK NHS workforce with 223,000 support staff (Akers & Chandler, 2006). In England alone, the figure is approximately 40%; 669,953 staff registered with the Nursing and Midwifery Council (Buchan & Seccombe, 2012) and 286,000 assistant staff employed (NHS Information Centre Workforce and Facilities Team, 2009); and 25% in Australia - 257,200 RNs and 64,600 nursing support workers (Australian Bureau of Statistics (ABS), 2013; Australian Institute of Health and Welfare (AIHW), 2008).

Internationally, nursing shortages are well documented. Despite some slowing of the exit rate following the Global Financial Crisis (GFC) in 2007-2008, RN shortages persist in many countries. For example, in the US shortages are predicted to continue but have been revised

down from over 1 million nurses by 2020 to 260,000 by 2025 (Littlejohn, Campbell, Collins-McNeil, & Khayile, 2012). In the UK a shortage of 42,807 (12.2%) is predicted in 2021/22 (Buchan & Seccombe, 2012); in Australia, 109,000 (27%) by 2025 (Health Workforce Australia (HWA), 2012). Shortages in the regulated nursing workforce lead inevitably to the increased use of nursing support workers, particularly as the costs of health care continue to rise (Keeney, Hasson, McKenna, & Gillen, 2005; Marshall, 2006). In the US 17.6% of gross domestic product (GDP) is now directed towards health, the highest of any developed country (Organisation for Economic Co-operation and Development (OECD), 2012). By comparison in the UK, the largest publicly funded health service, this rate is 9.6% and in Australia (also a publicly funded system) 9.1% of GDP (OECD, 2012). The salary cost of a nursing support worker ranges from 40% to 80% of a RN salary; roughly 37% in the US (Bureau of Labor Statistics, 2013); 63% in the UK (National Health Service Careers, 2013); and between 55% and 77% in Australia (ABS, 2013; Shared Services, 2011). It is understandable that employment of nursing support workers has increased over the years.

Role and scope of practice

The role of nursing support workers has also changed over time. In the 1980s they performed ancillary, non-nursing work (McKenna, Hasson, & Keeney, 2004), but more recently their role has extended to undertaking activities previously provided by licensed workers (Australian Nursing Federation (ANF), 2008; Maben & Griffiths, 2008), leading to greater concern about their increasing role in patient care. Activities in which they may be involved include bathing and dressing, feeding, helping people to mobilise, toileting, bed making, generally assisting with patients' overall comfort, and monitoring patients' conditions (Bureau of Labor Statistics, 2013; National Health Service Careers, 2006). More importantly, some nursing support workers record clinical observations, including blood pressure, temperature and fluid balance; collect specimens; monitor blood glucose; perform venepuncture and remove intravenous cannulae; conduct simple wound cleansing and dressings; and perform cardiopulmonary resuscitation (Bureau of Labor Statistics, 2013; NSW Department of Health, 2010). There is growing debate around whether nursing support workers have the requisite knowledge, training and support to undertake an increasing range of tasks safely. Training, which usually permits them to work according to

protocols (Rimmer & Hand, 2010), varies from no training required through to a program that lasts anywhere between six days to six weeks (Keeney et al., 2005). There is general concern about the lack of a consistent approach to educational preparation, scope of practice and regulation (Francis, 2013; Lintern, 2012; Sprinks, 2012; Willis, 2012). Regulation would provide greater role clarity for nursing support workers and other health care professionals, protect the public from unsafe practices and protect individual support staff from working beyond their scope of practice (Storey, 2007).

The implications of using nursing support workers

Introducing nursing support workers to a ward or unit can be approached in one of two ways, either of which can potentially change the mix of staff, approach to care on a ward/unit, and impact on patients and staff. The first is a substitutive model of nurse staffing whereby regulated staff (RNs) are replaced by unregulated nursing support workers. This ultimately dilutes the skill mix with fewer hours of care provided to patients by regulated nursing staff (Blegen, Vaughn, & Vojir, 2008; Roche et al., 2012). The second model is a supportive or complementary model whereby unregulated nursing support workers are added to ward staffing. In this model the total number of hours of patient care provided increases and the number of hours provided by RNs is maintained (Carrigan, 2009; Roche et al., 2012). Both methods have implications for the way patients are assigned to caregivers and the work caregivers may then undertake. Duffield et al. (2010) found task assignment was used with a poorer skill mix (fewer RNs) and when staff were unfamiliar with the ward and patients. Patient allocation was used when staffing included more RNs, more RNs with degrees and more expert nurses. Task assignment can lead to issues with continuity of care because work is divided into tasks and different staff members undertake different tasks for the same patients. Usually the RN addresses more complex tasks, whereas lesser skilled staff (nursing support workers) undertake more routine tasks (Duffield, Roche, Diers, Catling-Paull, & Blay, 2010).

There is growing concern that in order to meet current health demands, the scope of nursing activities in which nursing support workers are involved is expanding at a rate that could potentially impact patient safety (Holloway & McConigley, 2009), registered nurse workload and team efficiency. One of the most significant and well researched issues

related to their use of is the impact on patient outcomes (morbidity and mortality), particularly in a substitution model. A number of large studies internationally have found that a decreased use of RNs and increased use of nursing support workers results in high mortality and morbidity rates and greater adverse patient outcomes (Duffield et al., 2011; Kane et al., 2007; Needleman et al., 2011; Roche et al., 2012). The state of this body of work and science has now reached the point where systematic reviews have been conducted. In the first of these Lang et al. (2004) reviewed 43 studies concluding richer nurse skill mix had a "probable" relationship with reduced failure to rescue rates among surgical patients, lower inpatient mortality rates and length of hospital stay for medical patients. More recent studies link reduced RN staffing with increased hospital acquired pneumonia, unplanned extubation, cardiac arrest and failure to rescue in surgical patients; longer length of stay in intensive care units and surgical patients (Kane et al., 2007), and increased mortality rates, between 2% to 7% higher (Needleman et al., 2011). Failure to rescue has been linked to nursing surveillance (Clarke & Aiken, 2003; Kelly & Vincent, 2011) and RNs are best qualified and able to accurately detect problems and intervene in a timely and effective fashion (Clarke & Aiken, 2003; Kelly & Vincent, 2011; Needleman, Buerhaus, Stewart, Zelevinsky, & Mattke, 2006; Tourangeau et al., 2007). Indeed, recent evidence suggests that patient outcomes are even better where there is a higher proportion of baccalaureate-prepared nurses providing care (Aiken et al., 2011; Tourangeau et al., 2007).

A change to unit staffing which includes the use of nursing support workers, also impacts on nurses with whom they work (Marshall, 2006; Spilsbury et al., 2011). A substitutive model of staffing that reduces RN hours of care and increases those provided by nursing support workers is likely to add to RN workload (Moyle, Skinner, Rowe, & Gork, 2003); adds to the licensed nurse's responsibilities for ensuring patient safety (Marshall, 2006); leads to more interventions left undone, poorer job satisfaction and reduced staff retention (Aiken, Clarke, Sloane, Sochalski, et al., 2001); higher rates of burnout (Leiter & Laschinger, 2006); and increased costs linked to more overtime claimed by registered nurses (Aiken, Clarke, Sloane, & Sochalski, 2001; O'Brien-Pallas, Thomson, Alksnis, & Bruce, 2001). In addition, RNs may spend less time delivering bedside care which can impact on their relationship with patients (Spilsbury & Meyer, 2005). There is concern that when nursing support workers perform aspects of patient care that have long been the province of RNs, the lines and channels of

accountability blur, particularly if the role of the support worker is unclear (Castledine, 2004; Jack et al., 2004; Maben & Griffiths, 2008; Spilsbury et al., 2011).

Researchers have also found that the expanding role for nursing support workers can impact team efficiency and patient care delivery. Feelings of role ambiguity and role conflict from nurses toward support workers may impede the functioning of the team (Keeney et al., 2005; Spilsbury et al., 2011); and potentially increase the responsibilities of RNs (Marshall, 2006). There is risk of either an under-utilisation of support workers, irrespective of their skills, knowledge or experience; or delegation of tasks to support workers outside their prescribed scope of practice, often with no RN supervision (Spilsbury & Meyer, 2005). While RNs consider themselves professionally accountable for the patient care that they delegate to nursing support workers (Alcorn & Topping, 2009; Marshall, 2006), many believe that nursing support workers should also be accountable for the care they deliver and, therefore, registered with a professional, statutory and regulatory body (Alcorn & Topping, 2009). In addition RNs are often poorly prepared in the delegation, supervision and assessment of the competence of support workers (Alcorn & Topping, 2009).

In contrast to the substitutive model, introducing nursing support workers using a complementary staffing model has been shown to have positive effects. Patient rounding by RNs and nursing support workers, where scheduled visits are made to patients in hospital rooms to address immediate patient needs, has been associated with positive patient outcomes and improved patient safety (Blakely, Kroth, & Gregson, 2011); reduced patient falls (Woodard, 2009); reduced use of the call bell (Woodard, 2009); fewer work interruptions (Shepard, 2013); consistency and continuity of patient care; and improved patient satisfaction (Meade, Bursell, & Ketelsen, 2006).

The need for regulation

As nursing support workers represent a significant and growing proportion of the health workforce, it is not surprising that internationally the call for regulation has been escalating (Storey, 2007). However regulating a new group of health workers is not a simple task. A number of factors need to be considered including: the model of regulation to employ (e.g. voluntary vs. compulsory, employer-led vs. statutory) (Royal College of Nursing, 2012; Storey, 2007); the cost to nursing support workers who may earn significantly less money to

nurses ("How should HCA's be regulated", 2008); and deciding which regulatory body is most suitable in overseeing this group of workers (Storey, 2007).

Regulation of some categories of these workers currently exists. A number of US states and territories have primarily state-defined regulations or guidelines for RN delegation, supervision, and assignment of nursing support workers (that is, unlicensed assistive personnel) in acute care hospitals along with mechanisms for reporting their inappropriate use (Thomas, Barter, & McLaughlin, 2000). Nonetheless, the scope of practice of these workers varies from one jurisdiction to another and there are no standards for education and training pertaining to them working in acute care US hospitals (Thomas et al., 2000). By comparison, the UK has standardized, national vocational training and duties for nursing support workers designated healthcare assistants (Thomas et al., 2000). However, the Nursing and Midwifery Council does not support mandatory regulation of healthcare assistants; instead it favours the development of delegation standards for RNs and midwives and enhanced competency-based training for nursing support workers (Commons Health Committee, 2012). Australia has yet to mandate national, standardized vocational education and training for nursing support workers who can acquire skills through various pathways including vocational training, informal training and undergraduate nursing programs (Algoso & Peters, 2012). The onus currently, is on employers in Australia to define the essential functions, duties and requisite competencies of nursing support workers and on RNs to appropriately delegate, supervise and assign work. Continuing with the status quo - lack of regulation - places the public, regulated nurses and nursing support workers at risk (Storey, 2007). Regulation would provide consistency and perhaps greater accountability for nursing support workers.

Conclusion

Shortages in the nursing workforce and continuing financial constraints are impacting the staffing decisions of managers where supply and skill mix become important considerations. However it is unlikely that the escalating patient demands can be met entirely by a workforce comprising registered nurses, leading to the inevitable growth in employment of nursing support workers. The findings of inadequate nursing care in the NHS is a signal to all countries that changes in the composition of the health workforce are underway with

worrying consequences for patients. For their protection regulation of nursing support workers must be given serious consideration. More importantly, further research is required to determine the positive impact that the addition of nursing support workers (using a complementary model) might have on patients and staff and models of staff integration, which could possibly maximise their use.

References

- Aiken, L. H., Cimiotti, J. P., Sloane, D. M., Smith, H. L., Flynn, L., & Neff, D. F. (2011). Effects of nurse staffing and nurse education on patient deaths in hospitals with different nurse work environments. *Medical Care*, 49(12), 1047-1053.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., & Sochalski, J. A. (2001). Cause for concern: nurses' reports of hospital care in five countries. *LDI Issue Brief*, *6*(8), 1-4.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. A., Busse, R., Clarke, H., . . . Shamian, J. (2001). Nurses' reports on hospital care in five countries. *Health affairs*, 20(3), 43-53.
- Akers, S., & Chandler, T. (2006). The Secondment into Pre-registration Training Nurse Scheme, A Report to the Department of Health: Widening Participation in Learning Strategy Unit
- Alcorn, J., & Topping, A. E. (2009). Registered nurses' attitudes towards the role of the healthcare assistant. *Nursing Standard*, 23(42), 39-45.
- Algoso, M., & Peters, K. (2012). The experiences of undergraduate Assistants in Nursing (AIN). *Nurse Education Today*, 32(3), 197-202. doi: 10.1016/j.nedt.2011.08.002
- Australian Bureau of Statistics (ABS). (2013). *Australian Social Trends, April 2013: Doctors and Nurses*. Canberra, ACT: ABS. Retrieved from
 - http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features20April+2013#p3
- Australian Institute of Health and Welfare (AIHW). (2008). *Australia's health 2008*. (Cat. no. AUS 99). Canberra, ACT: AIHW. Retrieved from http://www.aihw.gov.au/publications/aus/ah08/ah08.pdf
- Australian Nursing Federation. (2008). ANF Position Statement: Licensing of Assistants in Nursing and Personal Care Assistants (However Titled). Canberra, ACT: ANF. Retrieved from http://www.anf.org.au/pdf/policies/PS_Licensing_AINS.pdf
- Blakely, D., Kroth, M., & Gregson, J. (2011). The impact of nurse rounding on patient satisfaction in a medical-surgical hospital unit. *MEDSURG Nursing*, 20(6), 327-332.
- Blegen, M. A., Vaughn, T., & Vojir, C. P. (2008). Nurse staffing levels: Impact of organisational characteristics and registered nurse supply. *Health services research*, *43*(1 Part 1), 154-173. doi: 10.1111/j.1475-6773.2007.00749.x
- Buchan, J., & Seccombe, I. (2012). Overstretched. Under-resourced. The UK nursing labour market review 2012 (pp. 45). London: Royal College of Nursing.
- Bureau of Labor Statistics. (2008). *National Industry Occupation Employment Matrix: 2006-2016*. Washington, DC: US Department of Labor
- Bureau of Labor Statistics. (2013). Occupational Outlook Handbook 2012-13: Nursing Aides, Orderlies, and Attendants. Washington, DC: US Department of Labour. Retrieved from http://www.bls.gov/ooh/healthcare/nursing-assistants.htm
- Carrigan, C. (2009). Mixing it up: The future of assistants in nursing. *Australian Nursing Journal*, 17(4), 24-27.
- Castledine, G. (2004). The role of the healthcare assistant in nursing. British Journal of Nursing, 13(19), 1161.
- Clarke, S. P., & Aiken, L. H. (2003). Failure to rescue: needless deaths are prime examples of the need for more nurses at the bedside. *AJN The American Journal of Nursing*, 103(1), 42-47.
- Commons Health Committee. (2012). Health Committee 15th report Annual accountability hearings: responses and further issues. Appendix 2: Nursing and Midwifery Council's response. London: UK Parliament Retrieved from
 - http://www.publications.parliament.uk/pa/cm201012/cmselect/cmhealth/1699/169907.htm.
- Duffield, C., Diers, D., O'Brien-Pallas, L., Aisbett, C., Roche, M., King, M., & Aisbett, K. (2011). Nursing staffing, nursing workload, the work environment and patient outcomes. *Applied Nursing Research*, 24(4), 244-255.
- Duffield, C., Roche, M., Diers, D., Catling-Paull, C., & Blay, N. (2010). Staffing, skill mix and the model of care. *Journal of Clinical Nursing*, 19(15-16), 2242-2251.
- Francis, R. (2010). Independent Inquiry into care provided by Mid Staffordshire NHS Foundation Trust January 2005 March 2009 *The Mid Staffordshire NHS Foundation Trust Inquiry* (Vol. 1, pp. 455). London: The Stationery Office.
- Francis, R. (2013). Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry *The Mid Staffordshire NHS Foundation Trust Inquiry* (Vol. 1-3, pp. 1776). London: The Stationery Office.
- Gillen, P., & Graffin, S. (2010). Nursing delegation in the United Kingdom. *Online Journal of Issues in Nursing*, 15(2). doi: 10.3912/OJIN.Vol15No02Man06
- Graham, E. M., & Duffield, C. (2010). An ageing nursing workforce. Australian Health Review, 34(1), 44-48.

- Health Workforce Australia. (2012). *Health workforce 2025: Doctors, nurses and midwives volume 1*. Adelaide, SA: Health Workforce Australia. Retrieved from http://www.hwa.gov.au/sites/uploads/health-workforce-2025-volume-1.pdf
- Heath, P. (2002). *National Review of Nursing Education 2002: Our duty of care*. Canberra, ACT: Nursing Education Review Secretariat. Retrieved from
 - $http://www.dest.gov.au/archive/highered/nursing/pubs/duty_of_care/duty_of_care.pdf$
- Hegner, B. R., Acello, B., & Caldwell, E. (2008). *Nursing assistant: a nursing process approach* (10 ed.). Clifton Park, NY: Delmar Learning.
- Holloway, K., & McConigley, R. (2009). Descriptive, exploratory study of the role of nursing assistants in Australian residential aged care facilities: the example of pain management. *Australasian Journal on Ageing*, 28(2), 70-74.
- How should HCA's be regulated. (2008). Nursing Times.
- International Labour Organization. (2012). *International Standard Classification of Occupations (ISCO-08)*. Geneva: International Labour Office. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms 172572.pdf
- Kane, R. L., Shamliyan, T. A., Mueller, C., Duval, S., & Wilt, T. J. (2007). The association of registered nurse staffing levels and patient outcomes: systematic review and meta-analysis. *Medical care, 45*(12), 1195-1204.
- Keeney, S., Hasson, F., McKenna, H., & Gillen, P. (2005). Nurses', midwives' and patients' perceptions of trained health care assistants. *Journal of advanced nursing*, *50*(4), 345-355. doi: 10.1111/j.1365-2648.2005.03399.x
- Kelly, L., & Vincent, D. (2011). The dimensions of nursing surveillance: a concept analysis. *Journal of advanced nursing*, *67*(3), 652-661.
- Lang, T. A., Hodge, M., Olson, V., Romano, P. S., & Kravitz, R. L. (2004). Nurse-patient ratios: a systematic review on the effects of nurse staffing on patient, nurse employee, and hospital outcomes. *Journal of Nursing Administration*, 34(7-8), 326-337.
- Leiter, M. P., & Laschinger, H. K. S. (2006). Relationships of work and practice environment to professional burnout: testing a causal model. *Nursing research*, *55*(2), 137-146.
- Lintern, S. (2012). Willis commission backs HCA regulation and graduate nursing. Nursing Times, 108(45), 3.
- Littlejohn, L., Campbell, J., Collins-McNeil, J., & Khayile, T. (2012). Nursing Shortage: A Comparative Analysis. *International Journal of Nursing Practice*, *1*(1), 22-27.
- Maben, J., & Griffiths, P. (2008). Nurses in society: starting the debate (pp. 32). London: National Nursing Research Unit, King's College London.
- Marshall, M. (2006). The use of unlicensed personnel: their impact upon professional nurses, patients and the management of nursing services. *Nursing Monograph*, 4-8.
- McKenna, H. P., Hasson, F., & Keeney, S. (2004). Patient safety and quality of care: the role of the health care assistant. *Journal of Nursing Management*, 12(6), 452-459.
- Meade, C. M., Bursell, A. L., & Ketelsen, L. (2006). Effects of nursing rounds: on patients' call light use, satisfaction, and safety. *AJN The American Journal of Nursing*, 106(9), 58-70.
- Moyle, W., Skinner, J., Rowe, G., & Gork, C. (2003). Views of job satisfaction and dissatisfaction in Australian long-term care. *Journal of Clinical Nursing*, 12(2), 168-176.
- National Health Service Careers. (2006). *Healthcare assistants/auxiliary nurses*. Retrieved from http://www.nhscareers.nhs.uk/details/Default.aspx?Id=485
- National Health Service Careers. (2013). *Pay for Nurses*. Retrieved from http://www.nhscareers.nhs.uk/explore-by-career/nursing/pay-for-nurses/
- Needleman, J., Buerhaus, P., Pankratz, V. S., Leibson, C. L., Stevens, S. R., & Harris, M. (2011). Nurse staffing and inpatient hospital mortality. *New England Journal of Medicine*, *364*(11), 1037-1045.
- Needleman, J., Buerhaus, P., Stewart, M., Zelevinsky, K., & Mattke, S. (2006). Nurse staffing in hospitals: Is there a business case for quality? . *Health Affairs (Project Hope), 25*(1), 204-211. doi: 10.1377/hlthaff.25.1.204
- NHS Information Centre Workforce and Facilities Team. (2009). NHS Hospital and Community Health Services Non-Medical Staff (England) 1998-2008. London: The Health and Social Care Information Centre
- NSW Department of Health. (2010). Assistants in Nursing working in the acute care environment: Health Service Implementation Package. NSW. Retrieved from http://www0.health.nsw.gov.au/pubs/2010/ain_acute_care.html
- O'Brien-Pallas, L., Thomson, D., Alksnis, C., & Bruce, S. (2001). The economic impact of nurse staffing decisions: Time to turn down another road? *Hospital Quarterly*, 4(3), 42-50.

- Organisation for Economic Co-operation and Development. (2012). How does the United States compare. Retrieved 27 May 2013, from http://www.oecd.org/unitedstates/BriefingNoteUSA2012.pdf
- Rimmer, D., & Hand, T. (2010). Ask the Board: HCA or AP: what's the difference? *British Journal of Healthcare Assistants*, 4(2), 97.
- Roche, M., Duffield, C., Aisbett, C., Diers, D., & Stasa, H. (2012). Nursing work directions in Australia: Does evidence drive the policy? *Collegian*, 19(4), 231-238. doi: 10.1016/j.colegn.2012.03.006
- Royal College of Nursing. (2012). RCN Policy and International Department RCN Nursing Department Policy Briefing 40/12: The weakness of voluntary regulation for health care support workers. Retrieved from http://www.rcn.org.uk/__data/assets/pdf_file/0008/493874/40.12_Support_worker_regulation_FINAL.pdf
- Shared Services. (2011). ACT Public Service Nursing and Midwifery Enterprise Agreement 2011-2013.
- Shepard, L. H. (2013). Stop going in circles! Break the barriers to hourly rounding. *Nursing Management, 44*(2), 13-15. doi: 10.1097/01.NUMA.0000426147.98903.ae
- Sibbald, B., Shen, J., & McBride, A. (2004). Changing the skill-mix of the health care workforce. *Journal of health services research & policy*, *9*(suppl 1), 28-38.
- Spilsbury, K., Adamson, J., Atkin, K., Bloor, K., Carr-Hill, R., McCaughan, D., . . . Wakefield, A. (2011). Challenges and opportunities associated with the introduction of assistant practitioners supporting the work of registered nurses in NHS acute hospital trusts in England. *J Health Serv Res Policy*, 16(1), 50-56.
- Spilsbury, K., & Meyer, J. (2005). Making claims on nursing work: Exploring the work of healthcare assistants and the implications for registered nurses' roles. *Journal of Research in Nursing*, *10*(1), 65-83. doi: 10.1177/136140960501000104
- Sprinks, J. (2012). Regulator jettisons HCA work to concentrate on fitness to practise. *Nursing Standard, 26*(28), 11.
- Squillace, M. R., Remsburg, R. E., Bercovitz, A., Rosenoff, E., & Branden, L. (2007). An introduction to the National Nursing Assistant Survey. *Vital Health Statistics. Ser. 1, Programs and collection procedures, 44*, 1-54.
- Storey, L. (2007). Regulation of healthcare assistants: an ongoing debate. *British Journal of Healthcare Assistants*, 1(1), 15-17.
- Thomas, S. A., Barter, M., & McLaughlin, F. E. (2000). State and territorial boards of nursing approaches to the use of unlicensed assistive personnel. *JONA'S Healthcare Law, Ethics, and Regulation*, 2(1), 13-21.
- Tourangeau, A. E., Doran, D. M., Hall, L. M., O'Brien Pallas, L., Pringle, D., Tu, J. V., & Cranley, L. A. (2007). Impact of hospital nursing care on 30-day mortality for acute medical patients. *Journal of advanced nursing*, *57*(1), 32-44.
- Twigg, D., Duffield, C., Bremner, A., Rapley, P., & Finn, J. (2012). Impact of skill mix variations on patient outcomes following implementation of nursing hours per patient day staffing: a retrospective study. *Journal of advanced nursing*, 68(12), 2710-2718.
- Willis, G. (2012). "It's unacceptable that support workers are not regulated". Nursing Times, 108(47), 7.
- Woodard, J. L. (2009). Effects of rounding on patient satisfaction and patient safety on a medical-surgical unit. *Clinical Nurse Specialist*, *23*(4), 200-206.