Variation in job titles within the nursing workforce

Alison Leary PhD, RN, Professor of Healthcare & Workforce Modelling1
Katrina Maclaine MSc, RGN, Associate Professor of Advanced Practice, Chair AAPE-UK1,2
Paul Trevatt MSc, RGN, Strategic Clinical Network Lead3
Mark Radford PhD, RN, Director of Nursing - Improvement4
Geoffrey Punshon PhD, Visiting Fellow1

1London South Bank University, London, UK
2Association of Advanced Practice Educators, London, UK
3NHS England (London region), London, UK
4NHS Improvement, London, UK

Correspondence
Alison Leary, School of Health & Social Care, London South Bank University, London, UK.
Email: alisonleary@yahoo.com

Aims and objectives/background: The work of specialist nursing has been under scrutiny for many years in the UK due to a perception that it is not cost-effective. A common issue is the lack of consistency of job titles, which causes confusion to the public, employing organisations, colleagues and commissioners of services. Lack of consistency has implications for the wider perception of advanced specialist practice in the worldwide community and the workforce more generally. This study aims to understand the variation in job titles in the UK population.

Methods: A pre-existing data set of accrued studies into the work of nurses working in specialisms was mined for insight (N = 17,960). This study used knowledge discovery through data and descriptive statistics to perform secondary analysis.

Results: Mining these data revealed 595 job titles in use in 17,960 specialist posts once the specialism had been removed. The most commonly used titles were Clinical Nurse Specialist, Nurse Specialist/Specialist Nurse, Advanced Nurse Practitioner and Nurse Practitioner. There were three other primary groupings. These were variants with a specialist or technical prefix or suffix, for example Nurse Endoscopist, variants of seniority such as trainee, senior nurse for [specialism] or variants of function such as Nurse Prescriber. The clustering was driven primarily by pay band. A total of 323 posts were recorded as holding titles such as Advanced Nurse Practitioner or Specialist Nurse who were not registered with the Nursing & Midwifery Council.

Relevance to clinical practice: In this data set, there is a large array of titles, which appear to have little relationship with other factors like education. This is confusing to the public, employers and those commissioning services. It also demonstrates that the previous assumptions by Council for Healthcare Regulatory Excellence that advanced practice labels are associated with career progression are unsound and should be addressed by the regulator.

Keywords
advanced practice, clinical nurse specialist, job titles, nurse practitioner, specialist practice
INTRODUCTION

The work of specialist nursing has been under scrutiny for many years in the UK due to a perception that it is not cost-effective (Read, 2015). Despite this scrutiny, these role titles have continued to expand in an uncoordinated way (Barton, Bevan, & Mooney, 2012); this is largely due to the actions of employers rather than the profession as employers confer titles. Common issues include lack of consistency of job titles, variation in preparation for roles and variation in levels of practice (Lowe, Plummer, O’Brien, & Boyd, 2012). This causes confusion to the public, employing organisations and, in England, to commissioners of services. In addition, there is a safety concern regarding the confusion of titles and lack of regulation of roles, which can be found in documents such as coroners reports (Swann, 2016).

Worldwide the picture is variable. In North America, nursing bodies regulate the use of protected titles and postmaster-level education board certification. The umbrella of advanced practice includes the Clinical Nurse Specialist (CNS), Nurse Practitioner (NP), Certified Nurse Anaesthetist and Certified Nurse-Midwife plus variants on specialty certification (ANCC, 2017; Hamric & Hanson, 2003). This approach provides clarity regarding level and relationship between specified titles for all key stakeholders and public.

In Canada, inconsistencies in application of titles have also been noted. An example is inconsistency in the requirements for and the use of the term CNS, which led to lack of role clarity for the CNS role (Donald et al., 2010). In Alberta, the title “Specialist” is restricted to registered nurses practising in a specialty who have a degree and at least 3 years of experience in the specialization. However, the title “Specialist” is not limited to the CNS role and appears to be in common use in nursing roles such as clinical nurse educators. Both the non-CNS-titled nurse in the role of a CNS and the indiscriminate use of the CNS title contribute to role confusion within and outside the profession (Donald et al., 2010). There has been awareness of these issues for years; authors such as Monica Redekopp (Redekopp, 1997, p. 88) noted how the confusion over roles leads to frustration, hampers collaboration, contribute to conflict, prevents the CNS from optimising knowledge and skills, and even result in deletion of the post.

In Australia, nursing titles have been protected by law. The titles “Nurse,” “Registered Nurse,” “Enrolled Nurse” and “Nurse Practitioner” are all protected (NMBA, 2017).

In the UK, while there has been interest in protecting the title “nurse” for some time (Clews, 2010), currently the term nurse is not protected by statute. In contrast examples of healthcare-related titles, which are currently protected, include “Operating Department Practitioner,” “Occupational Therapist,” “Paramedic,” “Radiographer” and “Hearing Aid Dispenser” (HCPC, 2017). A protected title is a contract between the profession and the state. The state gives the professions exclusive rights to use professional titles and undertake certain roles. In exchange, the state can be assured that anyone using those titles or performing those roles will be appropriately trained so that quality of work can be assured. In this way, it aims to protect the public from harm by people practising when they are not qualified to do so (Holmes, 2009).

Other countries, which are introducing such roles, now tend to favour pursuing a professional and regulatory framework during the development of the role (Hibbert et al., 2017) in which job titles are protected and can be used only by certified and credentialed individuals. The confusion over the naming of nursing roles and their various functions or scopes of practice has been an issue for some time, not just for nursing but other healthcare professionals too and serves to feed role dissonance (Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004; Gardner, Chang, & Duffield, 2007). There is now a vast body of international literature discussing advanced practice and the contribution these roles make to health care. However, lack of consistency around title, role definition and scope of practice remains (Lowe et al., 2012). This lack of clarity is not confined to the UK. Authors such as Duffield remark that there is little consistency in nomenclature in Australia (Duffield, Gardner, Chang, Fry, & Stasa, 2011).

What does this paper contribute to the wider global clinical community?

- The range of job titles in use in the UK today to describe nurses in specialist practice is extremely varied.
- Other countries developing specialist and advanced levels of practice may wish to clarify or regulate these roles before widespread introduction to avoid this lack of clarity.
- Nurses who were not registered with the Nursing and Midwifery Council were recorded in the data set using job titles such as Advanced Nurse Practitioner, Assistant Nurse Practitioner and specialist nurse, which could be an issue in terms of public understanding of these roles and present an issue for patient safety.
- This variation in job title and lack of clarity appear to cause confusion to commissioners of healthcare services, colleagues and employers. It is likely to be misleading to patients and undermines confidence in the profession.
benefits to patients from these roles. The cumulative data from these studies have been warehoused over a 10-year period.

2 | AIMS

To mine this pre-existing data set to better understand the scale of variation of job titles in the UK.

3 | METHODS

The primary methodology is descriptive statistics and knowledge discovery through data mining (KDD) (Fayyad, Piatetsky-Shapiro, & Smyth, 1996). This is an interdisciplinary area focusing upon methodologies for extracting useful knowledge from data (Witten, Frank, & Hall, 2011). These techniques are sometimes known as “big data” studies.

Since 2006, a number of studies and pieces of research for which the author has been commissioned have been undertaken and have been aggregated into an anonymised data set. This set was then mined.

The a priori set mined consisted of detailed anonymised activity and demographic data of 17,960 UK nurses collected over 10 years (2006–2016) in 41 specialisms within the four UK countries. Examples include prostate cancer (Leary et al., 2016), lung cancer (Khakwani et al., 2016), sickle cell and thalassaemia (Leary & Anionwu, 2014) and rheumatology (Olive & Leary, 2012). This equates to around 70 million hours of work. The group are self-identified as in some way practising in a specialist field. Initially, descriptive statistics were used to look at frequency. These data were then subjected to cluster analysis using K-means clustering algorithm (Weisstein, 2017), which is a nonhierarchical technique often used in industries such as banking or retail. In KDD, a cluster is a group of objects that belongs to the same class. In other words, similar objects are grouped in one cluster and dissimilar objects are grouped in another cluster. The goal of clustering is to separate a finite unlabelled data set into a finite and discrete set of “natural,” hidden data structures, rather than provide an accurate characterisation of unobserved samples generated from the same probability distribution (Cherkassky & Muller, 1998). Analysis was carried out in Mathematica V10™.

4 | RESULTS

Mining the data set revealed 595 job titles in use in the overall data set of 17,960 posts. This excludes title specialism (e.g., CNS breast cancer and CNS rheumatology were both categorised in the CNS data subset). Any charitable support title was also discarded (e.g., Macmillan CNS was categorised only as CNS). Unique technical descriptive suffixes with particular professional accreditation were retained, for example endoscopist, colonoscopists or colposcopist.

The five most commonly used job titles were CNS (6,721) followed by Specialist Nurse/Nurse Specialist (2,334), Advanced Nurse Practitioner (2,214), Nurse Practitioner (1,977) and Lead Nurse (665). The least common were Trainee Advanced Practice Consultant (3), Specialist Liaison Nurse (8), Trainee Consultant Practitioner (11), Nurse Clinician (12), Specialist Support Sister (23) and Locality Nurse (4). The prominence of the CNS title reflects the targeted groups of the studies.

The other titles were primarily variants on nurse, specialist, advanced, practitioner, trainee, case manager, navigator, lead, senior, clinical and specialism.

To provide structure, the remaining data were “binned” into three different sets. “Binning” is a way of grouping similar sets of data into groups to allow categorisation. Variants with a specialist technical prefix of suffix, for example Nurse Endoscopist, Emergency Nurse Practitioner, [specialism] Nurse (i.e., bladder and bowel), Critical Care Practitioner and Triage Practitioner were binned into one set. The second set included variants of seniority such as Consultant, Trainee, Student, Associate, Deputy, Senior Nurse for [specialism] Matron [specialism], Lead Nurse [specialism] Senior CNS, Trainee Advanced Nurse Practitioner and Advanced Practitioner in Training. The final set included variants of function such as Nurse Prescriber, Rapid Response Nurse and Locality Nurse. There were a series of combination of adjective, adjective, nouns such as Advanced Clinical Practitioner. The binned sets were arbitrary on this analysis and could be revised in future.

A summary of the job title groupings is shown in Figure 1.

The job titles were then referenced against other parameters in the data set. These were pay band (N = 17,540), education level (N = 8,064), years in role (N = 8,064) using K-means clustering. There was clustering between pay bands 6 & 7 and variants of CNS (the largest group) and between pay bands 7 & 8 and variants of Nurse Practitioner and Advanced Nurse Practitioner meaning Nurse Practitioner and Advanced Nurse Practitioner title holders tended to
be on a higher banding. There was clustering between seniority variants (lead, senior, team leader, etc.) and pay band at 7 and 8a. There was clustering between educational attainment \( n = 8,064 \) at master’s level and job title (CNS and Advanced Nurse Practitioner). The Masters level qualification was chosen as it is recommended for advanced practice (ICN 2017). Highest number of years in role clustered around CNS with a mean of 12 years in role (range <1–34 years).

Of concern was a small subset of those not having a recordable qualification leading to registration with the Nursing & Midwifery Council (NMC). Of the 8,064 in which educational level was obtained, 323 (4%) were using titles which alluded to specialist and advanced levels of practice despite being unregistered. These post holders were on pay band three and four (approximately £17,000–£22,000). Of these, the majority use the term Advanced, Nurse or both Advanced and Nurse in their job title. In this group of unregistered post holders various titles were returned. Advanced Practitioner was the most common (83) followed by Specialist Practitioners (69) and Advanced Nurse Practitioner (52). The full range of titles is shown in Table 1. They primarily worked in emergency care, pre-assessment, theatres and cancer.

The data set was derived from a series of national studies and so was directed at those working in a specialism in the UK thus may not be representative.

To examine this issue further, a search was made on the NHS Jobs website during April & May 2017. NHS jobs is a central repository for all vacant NHS posts in England. Using the search terms “advanced” and applying a pay band 1–4 filter, it was possible to see that the use of the term advanced appears common. In one random search posts such as Advanced Intermediate Support Worker, Advanced HCA/CQUIN, Associate Advanced Assistant Practitioner, Advanced Associate Nurse and Advanced Care Navigator were listed. Searching with the term “nurse” and using the same pay bands resulted in roles for which registration was not required such as Clinical Support Nurse, Assistant Nurse Practitioner, Community Nurse, Level Four Nurse and Assistant Nursing Practitioner. Figure 2 shows an example of one such advertisement.

### Table 1
The unregistered subset \( n = 323 \) of those not holding a qualification leading to registration with the NMC in the UK

<table>
<thead>
<tr>
<th>Title</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Practitioner</td>
<td>83</td>
</tr>
<tr>
<td>Advanced Nurse Practitioner</td>
<td>52</td>
</tr>
<tr>
<td>Specialist Practitioner</td>
<td>69</td>
</tr>
<tr>
<td>Specialist Support Nurse</td>
<td>12</td>
</tr>
<tr>
<td>Advanced Assistant Practitioner</td>
<td>14</td>
</tr>
<tr>
<td>Specialist Healthcare Assistant</td>
<td>22</td>
</tr>
<tr>
<td>Other*</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>323</strong></td>
</tr>
</tbody>
</table>

*Includes Assistant Nurse Practitioner (6), Associate Nurse Practitioner (5), [specialism] Nurse (7).

### 5 | DISCUSSION

This short study demonstrates the extremely varied labelling of posts in the UK even within one assumed sphere of practice. The need to clarify the role in health care and professional clarity is identified as a strategy to enhance this. Themes around role clarity, professional identity, ability to enhance healthcare provision and interprofessional issues have been examined by many authors (Bryant-Lukosius et al., 2004; Duffield et al., 2011; Lowe et al., 2012; Read, 2015). Yet policy and regulation have failed to maintain pace with this development.

The differences in nomenclature have led to confusion over the roles, scope of practice and professional boundaries of nurses in both a national (National Leadership and Innovation Agency for Healthcare 2010) and international context (Duffield, Gardner, Chang, & Catling-Paull, 2009). In recent years, Northern Ireland, Wales and Scotland have sought to standardise job titles (National...
The variety of posts means that attribution of complexity of work or outcomes is challenging and consistency would help articulate the function of the roles. For example, the term associate was used for registered and unregistered staff in terms such as associate CNS (registered) and associate specialist nurse (both registered and unregistered). Added to the fact that England has introduced a Nursing Associate role in recent months (HEE 2016), the lack of clarity presents a challenge when undertaking research in areas such as nurse-sensitive indicators.

In 2009, the Council for Healthcare Regularity Excellence (CHRE 2009) determined that statutory regulation of advanced practice was not necessary as they argued that much of what is termed “advanced practice” was career progression. However, CHRE also cited concerns around the need to protect titles to protect the public (CHRE, 2010). The labelling of roles in this sample appears to have little relationship with education or years in post; thus, this assumption may be unsafe and should be reconsidered. Harmonisation of titles would curb the proliferation of titles, introduce clarity and possibly enhance safety. The unprotected use of titles could contribute to undermining confidence in the profession and in professional regulation as those who are not registered are not subject to professional regulation.

5.1 Limitations

This study is limited in that it mines an a priori data set collected to look primarily at the complexity of specialist practice in the UK. It would be interesting to look at a much wider sample of nursing posts, which purposively includes the nonregistered workforce and also includes non-NHS employees.

6 CONCLUSION

The range of job titles in use in the UK today to describe nurses in specialist practice is extremely varied. Nurses who were not registered with the NMC were recorded in the data set using terms such as Advanced Nurse Practitioner and specialist nurse, which could be an issue in terms of public understanding of these roles. In this data set, there is a large array of titles which appear to have little relationship with other factors like educational level. This could be confusing to the public, employers and those commissioning services. Job titles are conferred by employers, and currently, there is little consistency.

It is necessary to consider public safety and the vagueness of job titles does not offer assurance. The development of credentialing though medical colleges will further add to the confusion as these institutions also seek to define these roles.

The lack of a framework across England is an issue. Future role development and education from a common framework should be considered.

Strategic workforce planning requires improvement. These roles are rarely considered despite the impact they have. Standardisation would help explain and also deploy the role to ensure that it delivers.

This variation and lack of clarity appear to cause confusion to commissioners, colleagues and employers. It is likely to be misleading to patients in that titles do not appear to confer assurance of educational background or levels of expertise.

7 RELEVANCE TO CLINICAL PRACTICE

A range of job titles describe specialist practice in the UK despite efforts by the different countries to harmonise titles. Titles are extremely varied and terms such as advanced nurse practitioner are used by nonregistrants without meeting the recommended educational or professional credentials. As there is no regulation of specialist advanced practice in the UK, employers and postholders drive the labelling of posts. Harmonisation of titles would curb the proliferation of titles, introduce clarity and possibly enhance safety.

This is particularly important for the international community in countries, which are developing these roles as given the current situation described in the UK. It may be better to tackle issues such as agreed definition and regulation before expansion of roles, thus avoiding the confusion that exists in the UK.

ACKNOWLEDGEMENTS

The authors wish to thank the participants and commissioners for the contributory studies.

CONTRIBUTIONS

AL contributed to study design, data collection, analysis of data and manuscript preparation. KM contributed to study design and analysis of data and manuscript preparation. PT contributed to study design and manuscript preparation. MR contributed to study design and manuscript preparation. GP contributed study design, data collection, analysis of data and manuscript preparation.

CONFLICT OF INTEREST

There are no competing interests.

REFERENCES


Department of Health (2007). The cancer reform strategy HMSO.


HCPC (2017). Protected titles. Website: https://www.hpc-uk.org/about/registration/protected-titles/


How to cite this article: Leary A, Maclaine K, Trevatt P, Radford M, Punshon G. Variation in job titles within the nursing workforce. J Clin Nurs. 2017;00:1–6. https://doi.org/10.1111/jocn.13985