Skills and Knowledge Required by the Twenty First Century Health Information Professional

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Introduction

The intention of this paper is to use analyzed professional health information vacancy details advertised on three specific websites for six months to determine the competencies and skills required by health information professionals in the twenty-first century. The type of post available, location of the work and application methods will also be reviewed.

Literature review

The article by Davies (2008) analyzed "professional" health information vacancies advertised on three specific websites for 6 months from 1 April 2006 (to 30 September 2006). The person specifications for relevant vacancies were either downloaded or requested from the hiring organization. The core skills and experiences required for professional health information posts were identified. This research provided a comparison to the data collected in this research in 2009.

Many studies have identified the skills and qualifications required by specific librarian positions, such as serial librarians / medical mediated searchers (Atlas, 2000) and electronic / digital librarian positions (Croenis & Henderson, 2002). This paper focuses on the personal specifications required by information specialists working in the health area.

Stroyan (1987) considered the geographical distribution of librarian positions advertised in the USA. These were unevenly distributed across the country.

The top two job titles in the Life@Work Survey (Creaser, 2007) were "Librarian" (23%) followed by "Assistant Librarian" (16%).

A study by Orme (2008) reported a content analysis of one-hundred and eighty advertisements advertised on the CILIP (Chartered Institute of Library and Information Professional's Library Information) Gazette between 2006 and 2007. Each advertisement required a professional library or information qualification. The study identified fifty-nine different requirements which

suggest that a wide variety of skills and qualities are needed by library and information professionals.

Communication, networking and training / teaching were the three highest ranked generic skills in the 2006 Life@Work Survey (Creaser, 2007). Fisher (2003) stressed that the librarian workforce needs to be flexible and adaptable; with important skills such as knowledge management, project management, user focus, leadership and strategic thinking. Cullen (2005) and Cullen and Kavanagh (2006) identified the most sought after skills and attributes to be IT, communication, management, flexibility, self-motivation, team work, enthusiasm and initiative. Two studies identify communication as an important skill and flexibility as a useful attribute. However the other skills are not replicated in other studies.

Research aim and objectives

The aim of this article was to analyze "professional" health information vacancies advertised on three specific websites for 6 months from 1 June 2009 (to 30 November 2009).

The objective for this research was to identify the core skills required by employers advertising for health information professionals.

LisJobNet is the Chartered Institute of Library and Information Professionals' (CILIP) recruitment section. The website "jobs.ac.uk" advertises jobs in research, science, academic and related professions, mainly, although not limited to the UK. The NHS website http://www.jobs.nhs.uk advertises jobs in the NHS in England and Wales, rather than the whole of the UK.

Methods

Each fortnight (to coincide with new advertisements on LisJobNet), all health-related vacancies advertised directly by the hiring organization were identified. Agency vacancies were excluded, as full person specifications are not readily available without first contacting the agency. Two other websites, http://www.jobs.ac.uk and http://www.jobs.nhs.uk, were also visited fortnightly and health-related vacancies recorded. E-mail notifications from the medical library e-mail discussion group, lismedical, were also noted.

The person specifications for relevant vacancies were downloaded from the Web. The main criterion for determining if the person specification of a vacancy was to be analyzed was that a degree in an information-related subject was 'essential'. These qualifications included librarianship, information studies, information management, archives and record management. The core skills and experiences required from the person specifications were identified.

Content analysis was utilized to analyze this information to determine patterns in the data.

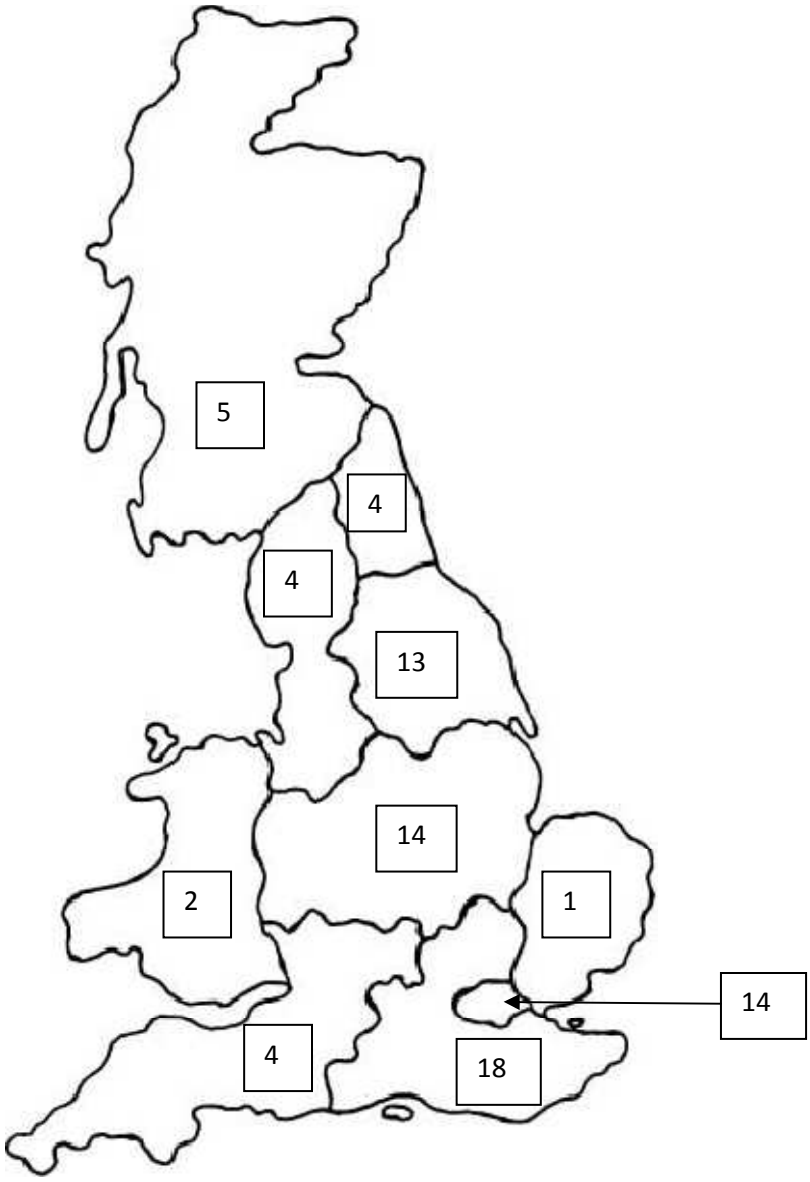
Results

In the 6 months reviewed, 9% of all the vacancies advertised were health-related and required a professional qualification (10% LisJobNet and 8% of the vacancies on 'jobs.ac.uk').

In the 6-month period reviewed, the 90 health related vacancies identified could be broken down into five categories. The NHS vacancies (60) were three times the number for the next largest sector, the University (19). The "Other" category (11) included posts advertised in: Royal Colleges 6; charity 2; government 2 (one central and one local council).

The number of advertised vacancies varied monthly. The peak month was July (32), followed by September (23), October (18) and then June (15). The 2 months with the lower number of job advertisements were November (9) and August (10).

Figure I: Location of Posts Advertised Across the UK



The posts advertised were unequally distributed geographically (as illustrated by Figure I). Most of the vacancies were in the South East, Central London (14) followed by Yorkshire (13).

Analysis of the "job titles" focused on the title specified by the employer. No analysis was undertaken to determine the relevance of the job description to the job title. The top three primary job titles were "Librarian" (49%) and then "Manager" (20%). Thirty percent of jobs included the word "information" and 14% the word "knowledge".

The application form dominates the NHS and academic sectors as the preferred application method. Only 6% of the posts requested a CV and letter; three of these were Royal Colleges, one university and one charity.

The average length of time jobs were "live" was 19 days on "NHS jobs" and "jobs.ac.uk"; 17 days on LisJobNet and Lis-Medical. The shortest was 5 days (Lis-Medical) and the longest, 37 days (NHS jobs).

Most vacancies were advertised using the "NHS jobs" website, 55 of the 90 posts identified. CILIP advertised 31 and the academic website, 'jobs.ac.uk' advertised 21 posts. One vacancy was listed on all three websites and Lis-Medical. Over half the posts (58%) were advertised on two or more of the websites. E-mail notifications from lis-medical identified 44 vacancies, representing 55% of the posts advertised. Lis-medical promoted six posts that were not on the three websites reviewed.

The advertised posts generated 98 different person specifications categories: skills (35), knowledge (21), experience (20), disposition (7), other (7), qualifications (7) and physical (1).

Table I: Top Ranked Person Specifications for the Different Categories in 2009

Category	Person Specification
Disposition	Use own initiative
Experience	Healthcare or academic library or teaching
Experience	Teaching adults / delivering user education
Knowledge	Healthcare databases
Knowledge	Understanding of the NHS and information needs
Knowledge	MS Office applications
Other	Committed to high quality customer service
Qualifications	Degree in librarianship, information science, etc
Skills	Communications - 1-1, group, all levels
Skills	Writing skills
Skills	Interpersonal skills
Skills	Computer / IT skills

Table I lists the top requirements for each of the five specified categories (with more than one category).

Ranking the top ten responses (ignoring the category classification of skills, knowledge, experience, disposition, other, qualifications and physical produces the results shown in Table II.

Table II: Top Ranked Person Specifications in 2009

Person Specification	Percentage
Degree in librarianship, information science, etc	97%
Communications - 1-1, group, all levels	90%
Writing skills	89%
CILIP chartership or higher degree	86%
Interpersonal skills	82%
Computer / IT skills	73%
Team player	69%

Use own iniative	68%
Healthcare databases	64%
Excellent literature searching skills	62%

The top 10 'essential' specifications account for 31.1% of all the person specifications. Three of the top 10 requirements relate to technology and three to interpersonal / communication skills.

Comparisons with 2006 data

In 2006 there were 97 vacancies of which the NHS vacancies (48) were almost double the University (29). In 2009 the 90 vacancies were most frequently NHS (60), three times the number of the next category, University (19).

In 2006 the top three job titles were "Librarian" (26%), "Assistant Librarian" (21%) and then "Manager" (10%). In 2009, "Librarian" (49%), was followed by "Manager" (20%).

In 2006 most vacancies were advertised using LisJobNet, 64 of the 97 posts. The academic website, "jobs.ac.uk" advertised 31 posts and "NHS jobs" 29. In 2009 "NHS jobs" advertised 55 of the 90, followed by LisJobNet (31) and "jobs.ac.uk" (21).

Table III: Person Specifications – Changes from 2006 to 2009

2006	2009
Cataloguing standards	Internet standards and protocols
Prince II qualification	Other qualifications
Knowledge of pharmaceutical industry	Able to build up expertise in clinical areas
Understand education issues	Understand current library issues
IT trends in libraries	Current web development
At least 1 year working in a health library	Experience in intranet content management
Two years experience at a senior level	Experience of recruitment
Five years professional library experience	Experience of quality assessment processes
Project work	Evidence based healthcare
Out of regular hours working	Reliable, calm, professional, approachable
Able to make decisions	Analytical
Proactive	Good general health

Table III illustrates the changes in person specifications between 2006 and 2009. These show the changing skills and experience that employers require from their new employees. In 2009 there was more of a focus on the internet. Specific skills were preferred – recruitment experience, able to build up experience in clinical areas and experience of quality assessment processes. There are a couple of interesting shifts in focus: from Prince II to "other" qualifications; and from understanding education issues to understanding library issues.

Table IV: Comparison of the Top Ten Person Specification Requirements in 2006 and 2009

2006 Person Specification	2009 Person Specification
Degree or diploma	Degree
Oral and written communication skills	Communication – 1-to-1, group, all levels
MS Office	Writing skills
Electronic resources	Higher degree or CILIP chartership
Internet experience	Interpersonal skills
Team player	Computer / IT skills
Interpersonal skills	Team player
Work independently	Use own initiative
Prioritize and keep to deadlines	Healthcare databases
Evidence-based literature searches	Excellent literature searching skills

Table IV compares the top ten person specification rankings. In 2009 the oral and written communication skills are divided into two elements whilst they were combined in 2006. In 2006 electronic resources were required, but by 2009 this was more specific, requesting healthcare database. Conversely in 2006 specific MS Office skills were required and by 2009 general computer / IT skills were specified. In 2009 a higher degree of CILIP chartership was in the top ten, whilst internet experience and prioritizing (and keeping to deadlines) was in 2006, but not three years later.

The top 10 "essential" specifications in 2006 account for over 40% of all the person specifications compared to 31.1% in 2009. Four of the top 10 requirements relate to technology in 2006, three in 2009.

Discussion

The ability to use your own initiative and be committed to high quality customer service reflects the nature of information work. Not surprisingly, in the customer-focused role of information professionals, communication, writing skills and interpersonal skills were all in the top ten.

Need to ensure staff possess or develop skills in areas such as literature searching and teaching.

Interpersonal skills are important for health information professionals to successfully undertake roles from customer service to working collaboratively.

The 'NHS jobs' site and 'jobs.ac.uk' are sector specific (English / Welsh NHS and academia, respectively), so these sites by their nature are restrictive. This paper does not accurately reflect all the NHS jobs available in the UK, as only the English and Welsh NHS website was included.

Not all NHS vacancies were advertised on 'NHS jobs'. Four advertisements for NHS Scotland were obviously not included on the English and Welsh NHS jobs site, but nor were five other NHS vacancies. One of these were only promoted on lis-medical, another only on LisJobNet and the other three on jobs.ac.uk. Most NHS-based posts were advertised on "NHS jobs" (55 vacancies) compared to CILIP (17). This may be due to the cost of advertising on LisJobNet and had been anticipated as a development in NHS recruitment in the article by Davies (2008).

Technology has improved access to information. In the majority of cases, information including the application form can be downloaded. This immediate access to the job information is an efficient use of job-seekers time as they can quickly determine if the job is suitable. The cost of printing and distributing information now falls on the potential employer. This potentially lowers the employer's recruitment costs.

The e-mail notifications from lis-medical covered over half (55%) of the total number of posts advertised. However, this does appear to be on an ad-hoc basis by interested parties, rather than a co-ordinated effort. This does seem a particularly useful way to promote vacancies at no additional expense to employers.

The skills and attributes required by the applicant were clearly specified in the person specifications. These specifications may reflect the "ideal candidate" from the employer's perspective, but the importance of these are reflected by the specifications being given a rating of essential or desirable. Candidates are then scored against the person specifications to meet the essential criteria, with the added bonus if the candidate meets any of the desirable criteria.

The top ranked person specification unsurprisingly was a degree in information science, librarianship, etc. Those vacancies that did not specify this actually required a higher level qualification, namely a PhD. In fact having a higher degree (a Masters qualification) or CILIP chartership was ranked fourth which suggests the important of a professional standing.

There was a focus on information technology (IT) skills in the person specifications. Ranked sixth was general computer / IT skills, ninth was knowledge of healthcare databases and tenth was excellent literature searching skills (to effectively interrogate the healthcare databases). This illustrates the importance technology now has in the medical information environment.

The ability to use your own initiative and be a team player reflects the nature of information work; partly team work (for example, being on an enquiry desk rota) and then the individual's specialized role (own initiative). Not surprisingly, in the customer-focused role of library and information professionals, communication and interpersonal skills were both in the top ten.

Stroyan (1987) considered the geographical distribution of librarian positions advertised in the USA. These were unevenly distributed across the country. The posts advertised were unequally distributed geographically in this research (as illustrated by Figure I).

The top two job titles in the Life@Work Survey (2007) were "Librarian" (23%) followed by "Assistant Librarian" (16%). This research also found "Librarian" (49%) to be the most popular job title, but this was followed by "Manager" (20%).

A study by Orme (2008) reported a content analysis of one-hundred and eighty advertisements identifying fifty-nine different requirements which suggest that a wide variety of skills and qualities are needed by library and information professionals. This research used content analysis of ninety advertisements identifying ninety-eight different person specifications categories. This is half the number of advertisements to the Orme (2008) research but sixty

percent more person specification requirements. Orme (2008) may have combined more of the requirements than in this research. However, this research does confirm that library and information professionals do need a wide range of skills and attributes.

Two studies identify communication (Creaser, 2007 and Cullen & Kavanagh, 2006) as an important skill and flexibility (Fisher, 2003 and Cullen & Kavanagh, 2006) as a useful attribute. This research ranked communication in the top ten, whilst the ability to work flexibly was ranked sixteenth overall.

Conclusion

The Internet is a useful tool for identifying potential health-related employment opportunities. Unfortunately, it is not possible to restrict the job hunt to one website. The e-mail notifications from lis-medical identified a number of vacancies in the 6-month period; 55% of all those advertised. This is a useful group to be a member of, especially when job hunting.

The person specifications stress the importance of IT skills, specifically MS Office and healthcare databases. Not surprisingly, in the customer focused role of information professionals, communication and interpersonal skills were both ranked highly.

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