Journal of Medical Imaging and Radiation Sciences 46 (2015) 294-301

Journal of Medical Imaging and Radiation Sciences

Journal de l'imagerie médicale et des sciences de la radiation

www.elsevier.com/locate/jmir

Research Article

# An Examination of Supervisory Structures in Canadian Radiation Therapy Departments Using National Phone Interviews

Amanda Bolderston, RT(T), MSc, FCAMRT*, Karen Yendley, RT(T), BSc, Cheryl McGregor, RT(T), ACT CTIC, Anthony Slowey, RT(T), BSc and Sharan Manship, RT(T), BSc, MBA

*British Columbia Cancer Agency, Surrey, British Columbia, Canada*

## ABSTRACT

**Background:** Canadian radiation therapy departments usually have flat organizational structures, with relatively few administrative/managerial levels. The "unit supervisor" level is a typical job role that provides direct supervision of one or more treatment units with a mixture of clinical and administrative duties.

**Methods:** At the British Columbia Cancer Agency, the unit supervisor role was recently evaluated. One approach used as part of the evaluative process was a series of telephone interviews to examine similar roles across Canada (n = 9).

**Results:** Data indicated that departmental administrative tasks seem to be increasing significantly, and there is a move toward the addition of more administrative "middle" roles across the country to deal with these. Unit supervisor roles are subsequently becoming less clinical, but there is an emerging tension with moving away from solely clinical responsibilities and assuming more administrative work.

**Conclusions:** The historic unit supervisor role was part of the team and did little administrative work. This model is becoming difficult to sustain, and tensions can arise in this new environment when using old organizational models. Focused departmental clinical expertise is important; however, balancing clinical and administrative expectations within the unit supervisor role can be problematic. Role expectations need to be examined, clarified, and communicated within departments. If unit supervisor roles are deemed clinical experts, then clinical time needs to be protected for expertise to be sustained.

## RÉSUMÉ

**Contexte :** Au Canada, les services de radiothérapie ont habituellement une structure organisationnelle plate, avec relativement peu de niveaux administratifs. Le niveau de « superviseur d'unité » est un rôle typique qui assure la supervision directe d'une ou de plusieurs unités de traitement, avec un ensemble de tâches cliniques et administratives.

**Méthodologie :** À l'Agence du cancer ce la Colombie-Britannique (British Columbia Cancer Agency), le poste de superviseur d'unité a récemment fait l'objet d'une évaluation. L'une des approches utilisées dans le cadre du processus d'évaluation a pris la forme d'une série d'entrevues téléphoniques visant à examiner des rôles similaires ailleurs au Canada (n=9).

**Résultats :** Les données indiquent que les tâches administratives de l'unité semblent afficher une croissance marquée et qu'il y a une tendance à travers le pays à l'ajout de rôles administratifs « intermédiaires » afin de composer avec cette augmentation. Les superviseurs d'unités jouent donc un rôle moins important au plan clinique, mais on note une tension émergente face à l'éloignement des responsabilités purement cliniques vers une plus grande part de travail administratif.

**Conclusions :** Historiquement, le superviseur d'unité faisait partie de l'équipe clinique et faisait relativement peu de travail administratif. Ce modèle devient de plus en plus difficile à soutenir, et des tensions peuvent survenir dans ce nouvel environnement lorsqu'on utilise de vieux modèles organisationnels. L'expertise clinique dans le service est importante, mais il peut être difficile d'établir un équilibre entre les attentes cliniques et administratives au sein du rôle de superviseur d'unité. Les attentes face au rôle doivent être examinées, clarifiées et communiquées dans tout le service. Si les superviseurs d'équipe doivent être des experts cliniques, le temps consacré aux tâches cliniques doit être protégé pour que l'expertise soit préservée.

*Keywords:* Leadership; management; organisational structures; radiotherapy; radiation therapy; supervision

The author(s) have no financial disclosures or conflicts of interest to declare.

* Corresponding author: Amanda Bolderston, RT(T), MSc, FCAMRT, Fraser Valley cancer Centre, 13750 96th Avenue, Surrey, British Columbia V3V 1Z2, Canada.

E-mail address: amandabolderston@bccancer.bc.ca (A. Bolderston).


http://dx.doi.org/10.1016/j.jmir.2015.05.001

## Introduction/Purpose

Radiation therapists (RTs) have traditionally followed a career pathway that could include clinical positions on the treatment units, specialized technical roles in the areas of planning and/or dosimetry, education positions, and supervisory roles. In the last decade, new roles such as research therapist, quality assurance specialist, and advanced practice therapist have begun to emerge although these positions are most often found at large, urban centres [1].

The most common supervisory level is the ''unit supervisor'' role although the job title varies from department to department. The role typically includes a mixture of clinical and administrative duties. At the British Columbia Cancer Agency (BCCA), this role is called a resource therapist and was conceived and implemented in 2000. It was recently decided that the role warranted an evaluation because of the significant changes in the radiation therapy landscape in the last decade and a half and perceived significant expansion in job responsibilities from the BCCA resource therapists and RTs. The evaluation examined current role responsibilities, stakeholder satisfaction, and role expectations (resource therapists, RTs, and managers) and how the resource positions at BCCA compared with similar positions across the country. It was hoped that a series of recommendations for role improvement could be developed after evaluation.

The role evaluation used a mixed-methods approach with three primary sources of data:

- An examination of similar roles across Canada; this was performed with a series of semistructured phone interviews,
- Qualitative face-to-face interviews with the BCCA resource therapists,
- A quantitative survey comparing the views of the resource therapists' responsibilities between RTs and the resource therapists' managers (''chief therapists'' at BCCA).

In addition, the following secondary information sources were used to complement the findings:

- A literature review that examined national and international staffing standards in radiation therapy,
- A previous resource therapists' workload analysis from the BCCA Abbotsford Centre,
- A document review that included job descriptions and others relating to the role.

The results of the national phone interviews will be examined in this article, supported by the secondary information sources detailed previously, where appropriate. The other two sources of data (the staff interviews and the survey) will be discussed in a forthcoming paper.

## Background

There is little literature on organizational and administrative structures specific to radiation therapy departments. More information is available on the subject of staffing, although in health care the majority of research deals with nursing. In the nursing profession, staffing is rarely as simple as determining a nurse-to-patient ratio. Other complex issues are considered such as staffing skills mix (eg, level of education and role), patient complexity (eg, type of ward and individual patients' conditions and ages), shift lengths and types, and perceived organizational support [2]. The issue of staffing for nursing has been contentious, and current thinking is to avoid a simple ''formula'' [3] and allow daily adjustment of levels that incorporate the changing needs of particular patient populations. There is a significant focus on the issues of supervision and supervisory structures in terms of the ratio of registered nurses, licensed or registered practical nurses, and unregulated workers [4].

In radiation medicine, staffing standards tend to deal with the number of staff needed in a department rather than how they are distributed. Examples can be found in the professions of medical physics [5] and radiation oncology [6, 7] as well as radiation therapy [8]. Staffing standards for RTs often focus on the development of a formula to determine the number of staff (often described as full-time equivalents [FTEs]) needed per ''case'' (patient), fraction, or treatment unit (linear accelerator) to ensure optimal patient care. These formulae rarely take into account other criteria such as technology, techniques, or patient mix (as nursing models do), and no allowances are usually made for other, nonclinical, role elements such as education, quality assurance (QA), and research. Although new technologies require increased staffing resources [9], these have not been typically factored into most standards. In addition, staffing models rarely describe supervisory aspects of practice. Examples of typical North American staffing standards can be found in Table 1.

The unpublished 2010 Cancer Care Ontario (CCO) model [8] is unique in that it incorporates recommendations for particular types of nonclinical roles such as supervisory, professional practice, and educational positions. These positions incorporate an estimated 20% of extra time for nonclinical RT activities such as QA, preceptorship/teaching, and research similar to most of the radiation oncology and medical physics models [5–7].

### *Organizational Structures*

An organizational structure defines how activities are divided within an organization. In most organizations, work is organized and delegated to create levels of authority and responsibility [12]. Organizational structures with few hierarchical levels and a comparatively high degree of autonomy for employees are called flat structures [13]. Canadian radiation therapy departments tend to have fairly flat structures, with relatively few administrative/managerial levels. A typical (but simplified) model is shown in Figure 1. Usual job roles in the radiation therapy leadership field would be the following:

- Director: provides strategic oversight and direction and serves as a point of contact with the wider hospital and