



NHSRU

Nursing Health Services
Research Unit

The Nursing Resource Team: An Innovative Approach to Staffing

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Main Messages

In contrast to traditional float pools, resource teams recognize nursing expertise, create opportunities for full-time work, and provide nurses with opportunities for professional development.

The nursing resource team at Hamilton Health Sciences:

- Represented an innovative transformation of the traditional float pool.
- Provided a recruitment strategy offering full-time employment to new and experienced nurses internal and external to the organization.
- Led to high staff satisfaction. Resource team nurses received extensive orientation, had opportunities for continuing education, and were well-placed for career advancement in the hospital.
- Capitalized on nursing expertise by deploying members to clinical areas where they were competent to practice and could use their specialist skills and expertise.
- Provided staffing flexibility at the individual, unit, and organizational level.
- Represented a “just-in-time approach” to clinical needs. It provided a flexible and adaptive mechanism for dealing with fluctuations in patient census, for covering nurse absenteeism, and reducing overtime.
- Was a targeted professional staff development strategy and included opportunities to experience a variety of clinical areas and patient types.
- Provided a pool of skilled nurses that could be recruited into specialist nursing areas as jobs become available.
- Was a successful strategy for reducing and ultimately eradicating agency use.

Executive Summary

Employers in the hospital sector have been examining new ways of providing care. Over the past decade nurse staffing has been a challenge for hospitals. One response has been to use a nursing resource team, an innovative transformation of the float pool of the past. Resource teams consist of staff employed by the organization to cover vacancies and absences and to respond to increases in patient acuity or numbers.

Hamilton Health Sciences (HHS), one of the largest health care institutions in Canada, was a pioneer in the use of the nursing resource team (NRT). Prior to the establishment of the NRT, nursing human resources management had become problematic. Insufficient nursing capacity meant using agency nurses, sanctioning overtime, and leaving nursing teams short-staffed. Limited staffing capacity created stress for nursing staff who felt overworked and under-supported. In September 2002, HHS implemented the NRT to secure a supply of highly skilled registered nurses to augment clinical unit staff.

Specific objectives for this study were:

1. To describe the structure, processes, and activities of the NRT.
2. To explore the impact the NRT has had on the nursing personnel of HHS.
3. To explore the impact the NRT has had on management and administration.
4. To explore the impact the NRT has had on the organization.

The employment of a centralized resource team in a decentralized program management environment posed challenges. However, the study found that the NRT was an inventive human resources management strategy. It created full-time jobs that attracted nurses who would otherwise have remained in involuntary part-time positions. It also offered team members flexibility of scheduling and professional development opportunities that they might not have received as permanent unit staff. The NRT integrated nurses into the organization in a manner that recognized their unique abilities and employment needs, resulting in high staff satisfaction.

The NRT offers a competitive advantage for the organization through its ability to recruit, retain, and maximize the use of nurses during times of shortage. Both the NRT and

nursing agencies were sources of auxiliary staff that supplemented permanent nurses at the unit level. However, the NRT proved more proficient at providing appropriate staff coverage and facilitated the discontinuation of agency use. The NRT supports the efficient allocation of staff and is considered to provide safer, more productive, and higher quality staff than agencies. The use of a nursing resource team provides a way for an organization and its employees to work together to benefit nurses and management, and ultimately improve patient care.

Recommendations

General Recommendations

The implementation of the resource team at Hamilton Health Sciences was considered a success by all study participants. The following recommendations are of a general nature and relate to the lessons learned during the planning and implementation of this innovation.

- 1) Innovations should be staged over a reasonable period of time.
- 2) The planning and implementation phases of innovative projects require a core group of influential and talented people. Consistent leadership is required to provide continuity during operationalization of the project.
- 3) Innovations should be well resourced.
- 4) Orientation and interpretative sessions must be planned to ensure all parties are aware of the nature and scope of innovations and the structures and processes they entail.
- 5) New role descriptions must be prepared. In some cases, roles will undergo substantive change in order to specify the range of skills required by incumbents (e.g., business clerks).
- 6) A process of continuing evaluation should be implemented to incorporate feedback and adjust to changing conditions.

Specific Recommendations

- 1) The size of the NRT should be increased to ensure adequate coverage and eliminate overtime.
- 2) To make optimum use of nurses' expertise and skill sets, it is essential that clinical clusters include relatively narrow and related skill sets and areas of expertise. The

medical-surgical cluster currently includes a considerable variety of subspecialties.

Strategies to ensure that nurses are sent only to areas where they have experience are required.

- 3) Business clerks should be sufficiently educated and oriented to their roles to deploy nurses to units where they can use their skill sets and expertise.

Introduction

This study explored the nursing resource team (NRT) at Hamilton Health Sciences (HHS) from September 2002 until June 2004, the first two years of its implementation.

Specific objectives for this study were:

1. To describe the structure, processes, and activities of the NRT.
2. To explore the impact the NRT has had on HHS nursing personnel.
3. To explore the impact the NRT has had on management and administration.
4. To explore the impact the NRT has had on the organization

How to Read This Study

Case studies facilitate in-depth understanding of complex phenomena within their natural context. This report provides a review of float pools and resource teams, followed by a short description of the study methods and a summary of the findings. The report concludes with a discussion of the significance of the NRT as an innovative staffing strategy.

Relevance: The Need for Flexible, Innovative Staffing

A global nursing shortage has prompted organizations and governments to re-examine their recruitment and retention strategies. In 2000, the Canadian Health Services Research Foundation and Ontario Change Foundation commissioned the Nursing Effectiveness, Utilization and Outcomes Research Unit to conduct a nationwide policy synthesis, *Commitment and care: The benefits of a healthy workplace for nurses, their patients and the system*.¹ The synthesis recommended the promotion of recruitment and retention strategies by employing new and creative job designs. To ensure a supply of nurses adequate to meet patient needs, health care organizations must adopt innovative and flexible staffing arrangements.

A variety of strategies were used to address staff shortages and recruitment and retention issues. The Canadian Nursing Advisory Committee (CNAC) suggested:

One solution to staff shortages is the creation of a “float pool,” where nurses work in multiple units or at multiple sites. However, such pools can

be difficult to maintain, because nurses generally prefer permanent assignments.²

Although float pools were first mentioned in 1976, there is a paucity of literature on the subject. The few research studies available provide little evidence for their effectiveness or appropriateness as a human resources or staffing intervention.³ The terms *float pools* and *resource teams* are used interchangeably in the literature. Terms used in this study are defined as follows:

Float pools and resource teams: Groupings of casual, relief, or permanent staff employed by the organization to work on an “as-needed basis” to fill vacant positions or cover absences.

Floating: The process in which the nurse is assigned to an area or unit in response to patient census or care demands.

Cluster: Units which are grouped together because of similar patient populations or clinical specialty; for example, pediatric medicine, pediatric surgery, and pediatric oncology or cardiology, cardiac surgery, and complex cardiac care.

Structural design: Identifies how a float pool is organized; for example, its administrative structure and the range of units or types of clusters to which nurses may be deployed

Operational design: Refers to how the pool operates; for example, whether nurses work a complete shift in one area or move across many areas.

Background

Float Pools at a Glance

Floating is not a new practice.⁴ From 1974 to 1979, nursing shortages led to innovative schedules and staffing models, as well as to the use of agency or assistive staff.⁵

Accounts of floating appear in the literature in the mid to late 1970s.^{6 7 8} In 1981, the first use of the term *resource team* occurred in an article⁹ describing creation and organization of a float pool. The author did not differentiate float pools from resource

teams nor did she define the term. However, the term has been used since the article was published and has become increasingly common in recent years.

Float pools and resource teams are prevalent in Canada and the United States (US).^{10 11 12} In 2002, the Ontario Hospital Association (OHA) sponsored workshops across the province on nurse scheduling techniques. Sixty-five percent of the respondents to a survey given during the workshops identified using innovative and creative scheduling approaches, such as float pools/resource teams.¹³

In Canada and the US, the major reason for the use of float pools/resource teams in hospitals has been to save costs. Other reasons include a shortage of nurses and fluctuations in patient census, acuity, volume, and care demands. Using float pools/resource teams is considered a strategy facilitating flexible manipulation of staff^{14 15 16 17} and is credited with reducing reliance on costly agency nurses.^{18 19} Recently, float pools have been considered a recruitment and retention strategy.^{20 21} Crimlisk²² found that out of 39 new graduate RNs admitted to a float pool program over 19 months, 32 were working within the facility and 27 remained in the float pool. Contrary to this finding, however, experts in Canada suggest float staff may be difficult to retain.^{23 24}

Float Pool/Resource Team Variation

Float pools and resource teams are not well differentiated in the literature. There is a tendency to refer to more sophisticated models of managing “just-in-time” staff coverage as resource teams and older models as float pools. For ease of presentation, float pools and resource pools are compared as ideal types. To clarify why the NRT in the current study is innovative, a preliminary typology has been constructed based on differences between a traditional staffing strategy (float pools) and a recent innovation (resource teams). A unique characteristic of the NRT approach is the recognition of nursing expertise.

Assistive Versus Replacement Staffing Strategies

The literature indicates that float nurses may be deployed as either assistive or replacement staff. In assistive roles they do not take a full patient assignment, may only

be present in one area for part of a shift, and may work across many hospital units. In this role nurses act as temporary caretakers. Zimmerman²⁵ describes an in-house, floating staff nurse, working in an assistive role. Nurses in the replacement design work as replacement staff and take on individual patient assignments comparable to those of unit staff nurses. The assistive design is essentially a traditional float pool approach, sometimes co-existing with a replacement strategy.²⁶ In more recent resource team approaches, however, nurses are responsible for full patient assignments and care provision. They rarely take on an assistive role.

Hiring and Management

Hiring practices for traditional float pools and modern resource teams differ. Float pool members were not always hired specifically as float nurses and were often part-time or casual staff in need of work. Nurses sometimes floated without belonging to a particular pool and may have floated involuntarily.^{27 28 29 30 31 32 33 34} In contrast, nurses are often hired directly into resource teams and into their choice of either full- or part-time work status.

Resource teams usually have more management involvement and supervision than float pools and may have managers. Incentives include flexible work arrangements, shift differentials, and increases in pay. Nurses receive direct supervision and support from their resource team manager and educator. Managing the resource team involves the professional development of the staff through education, skill enhancement, and professional practice activities.

Resource Teams and Float Pools Compared

Float pools and resource teams are usually managed centrally. This is the case even in hospitals like HHS that are organized according to a program management model. Resource staff are managed and deployed by a central staffing office that assigns nurses to areas in need of personnel across the entire hospital. The difference between a traditional float pool and a modern resource team is the range of units to which an individual nurse can be assigned. In a traditional float pool, a nurse is regarded as a generic worker who is able to work with various patient populations and utilize many

skill sets.³⁵ In resource teams, however, nurses' specialized skills are recognized and used. Nurses work in their area of clinical expertise and preference, developing "in-depth knowledge of particular clinical populations."³⁶

Combination float pools/resource teams in which nurses may be assigned as generalists and specialists also exist. In these designs nurses are assigned to clinical clusters with certain patient populations. Examples of clustered units include critical care and emergency departments, adult medical-surgical, and pediatrics.³⁷ However, nurses may also be sent to areas such as medical-surgical for which it is assumed only generic skills are required.

The Case in Context

It is essential to understand the context in case study research.^{38 39} The social, economic, political, cultural, and professional milieu must be explored to contextualize the phenomenon in its natural setting.^{40 41}

Ontario Hospitals

In 1996, the Health Services Restructuring Commission (HSRC) was established to make decisions on the restructuring of public hospitals in Ontario.⁴² Today, hospitals in the province continue to experience external and internal pressure to provide safe and efficient care. For example, demographic changes in the population are leading to changing patterns of demand and volume of services.⁴³ Major pressures facing the hospital system include: increased complexity; diminishing resources; sicker patients; less predictability; legislative and regulatory demands; governance and resource allocation stress; and an impending crisis in the recruitment and retention of professionals.^{44 45} This is the context in which HHS operates.

Hamilton Health Sciences

Located in south-central Ontario, HHS is composed of five hospitals and one cancer centre dispersed among four physical sites. It includes Hamilton General Hospital, the McMaster University Medical Centre (housing the McMaster Children's Hospital), the Henderson Hospital, Chedoke Hospital, and the Juravinski Cancer Centre.

Organizational Design: Program Management

Organizational design refers to the relationships of individuals, groups, and departments within an organization. Program management is a form of organizational design in which individuals and resources are coordinated and managed according to program area rather than professional discipline.⁴⁶ Oncology, for example, might be a program area composed of multidisciplinary groups. Other program areas might be more multidisciplinary and generic such as rehabilitation services or women's health. Through the adoption of program management, many hospitals change from centralized bureaucratic structures to decentralized integrated delivery systems.⁴⁷ HHS is organized in terms of programs.

Hospitals have used program management as an organizational strategy since the late 1970s, but in the late 1980s and early 1990s this model of service delivery became more common. Adoption of program management is considered to be a response to "the increasing turbulent and resource-constrained environment facing health care organizations."⁴⁸ Hospitals adopt program management in the hope of achieving cost reduction and greater efficiency. However, because program management shifts authority from disciplinary managers to directors of programs, its acceptance may result in the loss of professional identity and conflict.^{49 50 51 52} One outcome of program management at HHS was the "dissolution of the traditional nursing departments," which weakened the professional nursing voice and visibility.⁵³

Managing nursing human resources is a focal issue for Ontario hospitals. Low nursing capacity has made scheduling and coordination of nursing staff difficult. A survey of registrants at an OHA workshop in 2002 identified four main challenges to nurse scheduling: increased/fluctuating demands; scheduling/processes; limited resources; and work-life balance. Program management places the responsibility of human and material resource management on individual programs

The staffing and scheduling of nursing services in HHS is currently decentralized to the program area, and thus to individual patient care units. Each clinical unit maintains a full-time staff and a part-time roster of nurses that are scheduled or called at the last minute to cover vacancies, sick calls, and sudden increases in patient acuity levels. Part-time

personnel are scheduled on master rotations to create greater flexibility in responding to variability in staffing needs. In contrast, the staffing and scheduling of the NRT is centralized.

Research Methods

Methodology

Case study methodology, as described by Robert K. Yin⁵⁴ and Robert Stake,⁵⁵ was used. The study was exploratory and designed to investigate “the particularity and complexity of a single case.”⁵⁶

Sample and Data Sources

A distinguishing characteristic of case study methodology is the use of multiple sources of data and the employment of various data collection methods.^{57 58 59} Data sources for this study included focus group and interview data, diagrams, documents, participant observation, and an economic analysis (see Table 1).

Table 1

Data Sources

Data Source	Description	Total
Focus Groups	NRT RNs, managers, administrators, site administration coordinators	9 groups (75 participants)
Interviews	NRT RNs, managers, administrators, business clerks, union representative, RNs	24 participants
Observation	Business clerks	1 (2 participants)
Documents	Emails, reports, concept papers, media communications	364
Diagrams	Diagrams created by participants describing the NRT	57
Economic indicators	Cost associated with the administration, management, and orientation of the NRT; cost comparison between NRT and agency usage.	1 analysis

Participants included nurses, business clerks, managers, and administrators. A total of 101 individuals took part through 24 interviews, nine focus groups, and direct observation. Front line nurses, comprising 23 NRT nurses and 20 unit-based charge

nurses, were the largest group, representing 42.6% of the sample. Three interviews were held with individual staff nurses.

Management, with 26 participants (24.5% of the sample), was the second largest group, followed by administration with 11 representatives (17.8%). Other interviewees included 5 (6.9%) site administration coordinators, 4 (5.9%) business clerks, a union representative, and a former float nurse. Interviews and focus groups were originally intended to be held with the NRT nurses, managers, and administrators directly involved in or affected by the activities of the resource team. The importance of including the business clerks and site administration coordinators was identified through focus groups and interviews.

Focus Groups

Focus groups allow researchers to elicit discussion, interact with many participants, and observe the social dynamics among participants.⁶⁰ All nurses who were members of the NRT during the study period were invited to participate in semi-structured focus groups. Focus groups were also held with clinical managers, site administration coordinators, and the Nursing Resource Group Benchmarking Committee composed of senior hospital management and administrators.

Interviews

Interviews using a semi-structured approach were conducted with managers, administrators, and other key informants. Resource team nurses who expressed interest in participating but could not attend the focus group were interviewed.

Observation

In case studies, researchers use observation to better understand phenomena within their contexts.^{61 62 63} Two business clerks consented to an observation of their work environment and activities for a period prior to their scheduled interviews.

Documents

Researchers also use documents to provide contextual information about phenomena that they cannot directly observe.^{64 65} An analysis of 364 documents provided information on the uses, goals, context, and processes surrounding the NRT.

Diagrams

Visual representations such as diagrams or photographic media are useful supplementary data sources.^{66 67 68 69 70} Drawings, for example, can be used to explore participants' understanding or conceptualization of a phenomenon.⁷¹ A total of 57 diagrams were used to explore how participants conceptualized the NRT.

Economic Data

Research team members working in administrative roles within the organization collected data to assess the economic impact of the NRT on the organization during the study period. Costs associated with the NRT were obtained and a comparison was made between agency and NRT nurse use.

Data Management and Analysis

Coding of transcribed focus groups, interviews, and converted documents and diagrams was performed using QSR NVivo, a program for handling qualitative data analysis research projects.

Research Ethics

Approval for this study was granted from the Ethics Review Board at McMaster University and HHS.

Findings**I. Nursing Human Resources at Hamilton Health Sciences**

The first objective of the study was to describe the NRT in terms of structure, processes, and activities. These can best be understood within the organizational context.

Document analysis demonstrated that nursing human resources management has been a major challenge for HHS. The use of agency nurses and costs incurred from nurses

working overtime causes significant financial strain. In 2000-2001, there were over 150 vacancies on inpatient nursing units. When resources are not readily available, overtime is used. The result may be a greater amount of sick time. The sum spent on overtime in 2002-2003 was 1.5 million, and the agency costs for the same fiscal period were 2.3 million. The use of agency nurses was substantial even after the NRT had become established because it was not able to meet the specialized needs of critical care.

In 2001, Deloitte & Touche were commissioned to review staffing and resource management at HHS. The review identified structural and practice inconsistencies related to human resources management across the organization. Variation across hospitals sites in rates of sick leave and overtime were identified, as was variation across units in efficiency in staffing.^{72 73} Senior administration reported that nurses were feeling overworked and under-supported. Nurses spent considerable time on administrative functions such as calling in staff. When unit resources were not available, overtime, agency use, or short-staffing resulted.

Goals of the Nursing Resource Team

The NRT was intended to be an innovative expansion and remodeling of the traditional float pool. It was created to provide greater flexibility in nurse scheduling and ensure the availability of appropriate nursing resources to meet the fluctuating needs of patients. The goals of the nursing resource team, identified at its inception, were to provide:

1. Greater flexibility in scheduling and ensure appropriate nursing resources are available to meet the fluctuating needs of patients at HHS;
2. Expert and specialized nurses with an alternative career opportunity;
3. An optimal entry and learning environment for newly graduated nurses; and
4. Greater opportunity for HHS to recruit more nurses into full-time positions.

HHS anticipated the innovation would reduce expenditures on nursing sick time, overtime, and external agencies. Management of agency use came under the scope of the NRT through the creation of the Nursing Resource Centre (NRC). The NRT was able to facilitate the elimination of agency use via successful management of the utilization, quality, and costs of agency nurses.

Structural and Operational Design of the Nursing Resource Team

The NRT is a centralized structure in a decentralized program management environment. Nurses are hired, centrally coordinated, and managed through the NRC. Resource team nurses have a common manager and educator. Their schedules are created by the NRT manager and their shifts are assigned and coordinated by NRT business clerks. The NRT is comprised of full- and part-time RNs who are assigned to clinical areas to meet staffing requirements. Resource team nurses respond to various needs, including those based on patient acuity, replacement for sick time, changes in census, vacation relief, and known vacancies.

The NRT at HHS is an innovative organizational structure. It is divided into specialist clusters; these are groups of clinical areas that are related to each other by care practices or patient population. For example, the Children’s Hospital cluster serves a grouping of pediatric care units (see Figure 1).

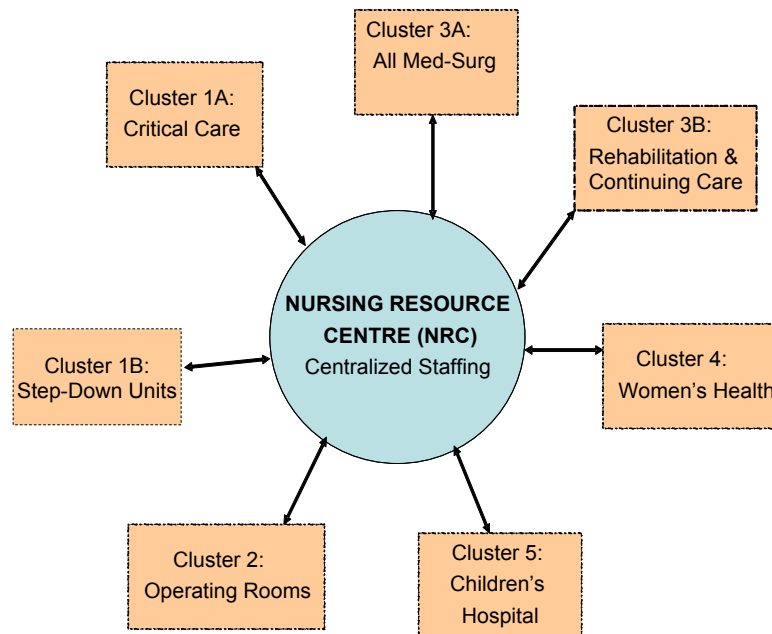


Figure 1. Structure of the Nursing Resource Team.

The cluster design originated from two workshops held in late May and early June of 2002. Directors, clinical managers, education and development clinicians, as well as other individuals were invited to create clusters according to expected nurse competencies and skill sets. Five clusters were created; two with subclusters (see Table 2). The broken lines used in the diagram represent the flexible and permeable nature of units and clusters. Clinical areas that require specialty or critical care skills were separated from other clusters. For example, the critical care cluster is made up of eleven clinical units or areas and requires critical care competencies (see Table 2). The medical-surgical (med-surg) cluster serves 26 areas or units and requires basic nursing skills. The NRT is designed to enable nurses to work in their areas of specialization. Nurses are assigned according to their area of expertise or clinical interest to work as replacement or supplemental staff. They work within one or more clusters depending on their competency level and experience.

Table 2

Nursing Resource Team: Clinical Clusters

Clusters	Number of Units or Areas	Skill Sets
Cluster 1A: Critical Care	11	Requires knowledge of critical care practice guidelines and the skills required to function in a critical care environment (e.g., ventilation and monitoring of cardiac rhythms).
Cluster 1B: Step-Down Units	8	Requires additional skills above basic competencies but does not require extensive critical care competencies.
Cluster 2: Operating Rooms	3	Pre-requisite knowledge.
Cluster 3A: All Med-Surg areas & Rehabilitation	26	Basic medical-surgical competencies.
Cluster 3B: Rehabilitation & Continuing Care (subset of cluster 3A)	11	Basic medical-surgical competencies.
Cluster 4: Women's Health	3	Basic medical-surgical competencies plus perinatal certificate.
Cluster 5: Children's Hospital	5	Basic medical-surgical competencies, critical care plus Pediatric Intensive Care Unit (PICU).

II. Impact on Nursing Personnel

The second objective was to assess the impact of the NRT on front line staff. The vanguard of the organization is the nursing staff. The data specific to nursing personnel, gleaned from the study sources, fell into five major areas: recruitment, staff allocation, scheduling, professional development, and workload.

Recruitment

HHS had few full-time positions to offer new nurses. The NRT provided a welcome source of full-time employment for nurses inside and outside HHS. In turn, the NRT provided nurses with a stepping stone to permanent full-time jobs in specialty areas. HHS management believes this strategy is beneficial to the individual nurse and the hospital.

Placement in the Resource Team

Table 3 shows the steps involved in resource team placement and the result of each step.

Table 3

Resource Team Placement: Process and Outcome

Process	Outcome
The nursing resource team receives applications.	Applicants are offered full-time work.
Newly hired nurses meet with management to discuss career goals.	The nurses identify existing skills and areas for skill and professional development.
New nurses participate in CPO orientation	The nurses strengthen existing skills and gain new ones.
Nurses are assigned to clinical clusters appropriate to experience and career goals and clinical unit nurses orient them to the various units.	The new nurses are able to work in the units in the clinical cluster. They gain experience in the various units and develop competencies and skill sets relevant to related patient populations.
Nurses who are competent and experienced in one clinical cluster may be oriented to another.	Nurses are able to work across many clinical areas in response to staffing needs.
Nurses may decide to leave the resource team to work in one unit.	Nurses that leave the resource team are retained by the organization.

Staff Allocation: Recognition of Expertise

The specialized nature of nursing practice is acknowledged by the organization. The NRT attempts to place nurses in their preferred area of clinical practice; however, challenges related to the deployment of nurses were identified. The diagram analysis indicated that resource team nurses varied in their perceptions of how the NRT was organized, suggesting there was a need for more orientation or a lack of clarity in the way the NRT was operationalized.

The size and poor definition of some clusters, the large med-surg cluster in particular, was a major challenge for booking and placing resource team nurses. NRT nurses may be sent to any clinical area in the cluster to which they are assigned. The med-surg cluster was considered an area in which generalized skills were needed and to which most nurses could be deployed. However, the 26 units in the cluster were characterized by a considerable degree of subspecialization. Consequently, nurses sent to this area often felt they were working outside their fields of expertise or in an area where they had limited experience. As the study took place during the first two years of NRT implementation, this finding is not surprising. It appears that the structure of the clinical clusters and the placement processes should be reviewed.

Scheduling

Nurses in the interviews and focus groups often mentioned flexibility as an important motivation and the greatest benefit to working in the resource team. NRT nurses are able to choose work patterns that fit their personal needs rather than working within a rigid staffing schedule.

Professional Development

The NRT facilitates professional development for new and experienced nurses. Although neophyte nurses feel the NRT is a challenging work arrangement, they find the associated experiences, education, and skill development beneficial. Novice nurses hired into the NRT receive more orientation than nurses hired into individual clinical units.

Furthermore, they are provided with greater opportunities to explore a variety of practice environments.

Experienced nurses feel the NRT provides greater professional opportunities than those available to staff nurses. Most resource team nurses consider the NRT a vehicle for professional growth and view the opportunities it presents as a major benefit and incentive. Resource team nurses and their managers participate in career planning, focusing on skill development and educational opportunities. Nurses are provided with a comprehensive, competency-based orientation and development program. NRT nurses are primarily managed by and interact with the NRT manager and educator. However, when working in clusters, they also work with the clinical manager and educators of the units to which they are deployed.

Workload

Prior to the establishment of the NRT, unit resources had to be allocated to administrative functions such as calling in staff. NRT nurses provide an alternative to overtime, agency use, and working understaffed. At the time of the study, nurses were generally satisfied with the resource team nurses and valued the staffing support they provided. However, the nursing unit staff still felt overworked and under-supported. The NRT did not have the capacity to meet all coverage requirements; consequently, resource team nurses were not always available to replace absent staff or respond to increased patient numbers.

III. Impact on Management

Although the NRT has different meanings for managers than front line nurses, the former also consider it a positive innovation. They see it as a successful hiring strategy and an effective method of managing and deploying staff to ensure effective coverage and continuity of care.

Hiring

Clinical managers use the NRT as immediate, short- or long-term staffing support. Administrators thought the NRT allowed them to maintain staffing at a reasonable level and provided an opportunity to recruit more staff. In particular, the NRT facilitated the recruitment and hiring of nurses into full-time positions. Unlike unit level staffing that uses position control, the NRT allowed for some flexibility. Managers could use the NRT to supplement their staff until they were able to hire more nurses. The NRT also served as

a pool from which managers were able to recruit staff. From its inception to June 2004, approximately 167 staff nurses have entered HHS through the NRT; 139 (83%) of those hired are currently working within the organization.

Staffing

The NRT provided an alternative to overtime or agency nurse use. Thereby allowing greater control over the quality of staffing and continuity of care by helping units increase staffing when needed, particularly during times when hiring more staff was not feasible. It also allowed for immediate replacement of nurses calling in sick and support with staffing when patient numbers increased. Nurses from the team are full-time, familiar with the system, and acknowledged by the system. Quality assurance is easier for an organization when known employees are being deployed. In addition to greater reliability, reducing agency use is a cost-effective staffing strategy.

Management of the Nursing Resource Team

While the management of the NRT generally proceeded smoothly, there were some barriers to deploying nurses in ways that made optimum use of their skills. Business clerks carried out the scheduling and assignment of nurses and other health care personnel to units. They also managed and tracked the deployment of agency and NRT nurses. To function effectively, they required expert knowledge of human resources practices, including those of the HHS and the nursing agencies. In addition, they needed to know the skill needs of the practice areas and the skill sets of individual nurses. Their role is performed under considerable pressure and is especially difficult when they are working with new or less knowledgeable colleagues. While the process of selecting nurses takes account of their skills, assignment may be made in terms of availability, particularly where the large med-surg cluster is concerned. Constraints of time and nurse availability mean that nurses may sometimes be assigned to areas in which their experience is limited.

IV. Impact on the Organization

Innovative Centralized Staffing In a Program Management Model

The fourth objective of the study was to assess the impact of the NRT on the organization. HHS moved to a decentralized program management model in order to increase the autonomy of individual areas. However, staffing often requires a more centralized approach because of the nature of the acuity and fluctuating demands of the patient population in specific clinical areas. The NRT allowed for centralization of human and fiscal resources within a decentralized program management environment. The centralized recruitment, hiring, management, development, and deployment of staff to decentralized clinical programs and units facilitated the sharing of resources across the entire organization. The findings of this study support a model of administration that includes the decentralized management structure working in tandem with a centralized NRT structure.

Management of Agency Use

Prior to the NRT, HHS used an outsourcing strategy to meet its short-term staffing needs. As the organization did not centrally monitor, coordinate, or intervene in agency use, there was no control over the extent or rate of agency use, the rates different agencies were charging, or the quality of work performed by agency nurses. The creation of the NRT has allowed the organization to reduce its reliance on agencies and ultimately to discontinue their use.

The implementation of the NRT aided the control, reduction, and management of costs associated with personnel staffing. The NRT negotiated lower prices with specific agencies, as well as monitored and handled agency nurse competency issues. The organization supervised agency use, bargained for more favorable rates, and dealt with performance and quality issues related to agency nurse use.

Provision of a Learning Environment

The NRT provides an optimal entry and learning environment for newly graduated nurses and professional development for more experienced nurses. It is also successful in preparing nurses to work in specialist areas.

Flexibility

The NRT has provided the organization with two types of flexibility. It has enhanced “external flexibility,” which is the “organization’s ability to adjust the size of its workforce to fluctuations in demand.”⁷⁴ However, the extent to which the organization can quickly reduce its workforce is somewhat limited because most of the NRT nurses are employed full-time. The ability of the NRT to redeploy nurses from one task to another, a concept known as “internal flexibility,” counters this limitation by facilitating movement of staff to areas of need across the organization.

Discussion

The NRT is an innovative staffing and staff management model because it represents a transformation of the traditional float pool. The NRT emphasizes replacement rather than assistive staffing. Moreover, it respects and supports nurses as specialists with patient-specific expertise and experience. Another inventive aspect of the NRT is that the administration is centralized, even though individual nurses are deployed only to those areas for which they possess the requisite skills.

Overall, the NRT was considered a successful innovation by management and clinical staff. Study participants made comparisons between agency and resource team nurses, usually to the advantage of the NRT. Both resource team and agency nurses complement and support existing hospital nursing staff. However, where agency nurses were previously the only resource for staff shortages, resource team nurses now represent an alternative option. Resource team nurses were generally considered a higher quality, safer, and more accountable alternative to agency nurses. In fact, they constituted the care providers of choice for the med-surg areas. In contrast, agency nurses were considered more skilled than NRT nurses for critical care areas. However, it should be noted that resource team nurses rarely worked in these units.

Refinement of Clusters

During hospital restructuring in the 1990s, the importance of specialist skills in nursing practice was minimized.⁷⁵ One of the achievements of the NRT was its re-emphasis on these skills; however, at the time of the study, the potential for maximization had not

been entirely realized. Although the NRT attempts to place nurses within appropriate clinical clusters, it is not always successful in doing so. There is a need to review the placement processes to ensure that nurses make full use of their skills. There is also a need to re-examine the larger clusters, which may actually include a considerable number of subspecialties. The med-surg cluster, for example, contains a few oncology units, which many nurses would consider to be specialized. Nurses are sent to areas where they have no expertise or float to so many areas that they do not become well acquainted with any of them. The number and type of units to which nurses can float require consideration.

Need for Expansion of the Nursing Resource Team

Despite implementation of the NRT, HHS was still not able to meet its staffing demands. After the use of agencies was discontinued in June 2004, HHS recruited a number of nurses in anticipation of the need for additional staffing support. However, the shortage of nurses with particular skills (e.g., critical care) continued to be an issue. It became evident that the number of nurses within the NRT needed to be increased, as did the number of nurses with critical care preparation.

Recommendations

General Recommendations

The implementation of the resource team at Hamilton Health Sciences was considered a success by all study participants. The following recommendations are of a general nature and relate to the lessons learned during the planning and implementation of this innovation.

- 1) Innovations should be staged over a reasonable period of time.
- 2) The planning and implementation phases of innovative projects require a core group of influential and talented people. Consistent leadership is required to provide continuity during operationalization of the project.
- 3) Innovations should be well resourced.
- 4) Orientation and interpretative sessions must be planned to ensure all parties are aware of the nature and scope of innovations and the structures and processes they entail.

- 5) New role descriptions must be prepared. In some cases, roles will undergo substantive change in order to specify the range of skills required by incumbents (e.g., business clerks).
- 6) A process of continuing evaluation should be implemented to incorporate feedback and adjust to changing conditions.

Specific Recommendations

- 1) The size of the NRT should be increased to ensure adequate coverage and eliminate overtime.
- 2) To make optimum use of nurses' expertise and skill sets, it is essential that clinical clusters include relatively narrow and related skill sets and areas of expertise. The medical-surgical cluster currently includes a considerable variety of subspecialties. Strategies to ensure that nurses are sent only to areas where they have experience are required.
- 3) Business clerks should be sufficiently educated and oriented to their roles to deploy nurses to units where they can use their skill sets and expertise.

Conclusion

The NRT is an innovative resource-based human resources management strategy. It offers a competitive advantage for the organization through its ability to recruit, retain, and maximize the use of nurses during a time of shortage. The NRT is a strategy for creating full-time jobs and attracting nurses who might otherwise find it difficult to obtain full-time work. The NRT is also a vehicle for staff development. It provides excellent orientation and integrates nurses into the organization in a manner that recognizes their unique abilities and employment needs.

The NRT proved to be a more efficient means of providing appropriate staff coverage and has facilitated the discontinuation of agency use. The NRT supports the efficient allocation of staff and is considered to provide safer, more productive, and higher quality staff than agencies. The use of a nursing resource team provides a way for an

organization and its employees to work together to benefit nurses and management, and ultimately improve patient care.

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