

Creating a Bridge between Academic and Clinical Realities for Student Nurses: Evaluation of a Summer Student Internship Program

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Abstract

Acknowledging the tension between the current availability of nurses and the need to create opportunities for student nurses, the SCO Health Service in Ottawa developed a nursing Summer Student Internship Program. This paper describes the development, implementation and evaluation of this program. A mixed-methods approach was used in this cross-sectional descriptive study. Nineteen student nurses completed a self-administered questionnaire, and seven staff nurses participated in a semi-structured interview. The findings suggest that the program was a mutually rewarding experience for students

and staff nurses. Students reported that the program facilitated their integration into nursing practice, increased their confidence in clinical proficiency and improved their organizational skills. The program provided a vehicle for student nurses to optimize and strengthen their learning. Most students expressed an interest in future employment as a summer intern. Nurses' responses were also positive and favoured continuing the program. Nurses appreciated the opportunity to mentor students within a unique program and considered the students' contribution to patient care valuable. Future research should examine the utility of such a program in terms of attracting, recruiting and retaining novice and experienced nurses.

In 2002, a nursing Summer Student Internship (SSI) program was piloted with five students at the SCO Health Service in Ottawa, Ontario. The SSI program was expanded in 2003, based on a high level of participant and organizational satisfaction. Twenty-four students participated. The primary goal of this program was to help address organizational summer staffing requirements in a new and innovative way. At the time of SSI program inception, the registered practical nurse (RPN) vacancy rate was about 10%. There was also an anticipated additional 10% RPN requirement to meet summer relief needs. Furthermore, there was no graduating RPN class for 2003 based on changes in program length of the RPN course curriculum. The secondary goals were to create an environment for students to acquire new knowledge, to socialize students to nursing practice and to foster professional growth. This paper describes the development, implementation and evaluation of the SSI program.

Literature Review

A limited number of articles have focused specifically on student nurses' summer employment in nursing (Desrosiers 2000; Grinstead 1995; McAlpine and Cargill 1992; Tritak et al. 1997). These summer employment programs are often referred to as externship programs. An externship program is actually like an internship program but is external to the nursing program of study (Desrosiers 2000).

In a pre-test and post-test study of six student nurses who had participated in a summer hospital employment program, McAlpine and Cargill (1992) examined students' attitudes towards the profession, role identification and degree of knowledge of the hospital organization. Results indicated that students had more positive attitudes towards their profession, greater knowledge of the hospital organization and felt more "like nurses" at the end of their summer employment. Students' task performance was also observed and timed. Results suggested that as the number of skills performed by students per day increased, the quality of performance decreased. When interviewed, the students acknowledged that their performance was not as it should be. They reported "there is not time to take all those steps" and "everyone does it." When students were observed, it was often noted that they appeared to be modelling behaviours of nurses on the unit. Other findings indicated that the students felt that they received greater support and reinforcement

of their identities as “nurses” from individuals with little connection to the professional system (e.g., families, cleaners) compared to those with more connection (e.g., nurses, doctors). Lastly, although students “felt more like nurses” at the end of the summer program, the majority agreed that they wouldn’t really feel like a nurse until they passed their licensing exams.

Tritak and colleagues (1997) examined nursing autonomy and dimensions of professional activity among 41 student nurse externs. Pre-test and post-test results revealed no significant differences in autonomy or dimensions of professional activity. At post-test (i.e., one year later), the results revealed significantly greater professional autonomy. Students also reported greater self-confidence and ease at answering examinations; better time management and insight into staff nurse duties; skills and knowledge development; and the opportunity to earn and learn simultaneously. Finally, the academic averages of the externs were compared with a representative group of students who did not participate in an externship program. Results found that externs obtained significantly higher mean grade-point averages, compared to the sample of non-externs.

While the literature on summer student programs is limited, there was suggestion that a SSI approach would benefit students. Therefore, a decision was made to develop and implement the SSI program.

Development of the SSI Program

A new job category for student nurses was created through partnership and negotiation with key stakeholders. Newly defined role expectations included (1) performing care traditionally undertaken by unregulated personal care attendants (PCAs), (2) performing selected nursing skills and (3) working in close collaborative practice with a registered nurse (RN) or a registered practical nurse (RPN). Student nurses were recruited from nursing programs at two colleges and one university.

An advanced practice nurse (APN) with expertise in nursing education and preceptorship reviewed the course curriculum of each school to formulate a draft list of selected skills that would be applicable to all care settings within the organization. Prior to student recruitment, the draft skills list was reviewed and refined by nurse leaders until consensus was reached.

Students eligible to participate in the SSI program had successfully completed the second year of a RN program and were available for full-time work (i.e., 37.5 hours per week; 7.5 hours per shift) on either a day–evening or a day–night rotation. Prior to being interviewed by the Director of Nurse Scheduling, students’ applications were screened for eligibility by the Human Resources Department.

Implementation of the SSI Program

Following initial approval of the program by the Chief Nursing Officer (CNO), the Director of Nurse Scheduling in collaboration with Human Resources and the

Collective Bargaining Unit approved the temporary addition of the new category of employee. A letter of agreement outlining the time frame, wages, scheduling and mobilization rules and the approved list of clinical skills was signed by the Human Resources Department and the Collective Bargaining Unit. Prior to hiring the students, the Director of Nurse Scheduling discussed the operationalization of the program with unit managers. The number of available vacancies and vacation quotas per unit influenced the number of students to be hired. Students were assigned to a specific unit to facilitate continuity and integration into the practice environments.

Students participated in a general PCA orientation program, which included one shift partnered with a RPN or a RN. Additional orientation included a half-day session outlining roles and accountabilities of the SSI and regulated nursing staff, as well as a review of the SSI skills list. At the unit level, SSIs were assigned to a specific module and worked in close collaboration with the RN and RPN. Patient care assignments for the SSIs were prepared by the RN modular leader.

Students' schedules, which were prepared by the scheduling office, were distributed to the students at the start of their employment. The hourly rate for a SSI was higher than the PCA hourly rate but lower than the RPN hourly rate. Typically, SSIs augmented the units' regular staff complement and were assigned as extra care providers. However, if a PCA or RPN vacancy could not be replaced from the existing casual pool, the SSIs were counted as part of the unit staff complement.

Methods

A mixed-methods approach was used for data collection and analysis. The quantitative component consisted of a self-administered student questionnaire, completed by the SSIs at the end of the summer. Qualitative data were analyzed from taped semi-structured interviews with staff nurses (i.e., RNs and RPNs). Evaluation of the SSI program was considered a quality assurance initiative, which did not require submission to the research ethics board. Questionnaire return was considered implied consent from the SSIs. Staff nurses provided written consent so that direct quotes from their taped interviews could be used.

Sample and procedures

Questionnaires and self-addressed envelopes were mailed to the 24 SSIs via the internal mail system. Completed questionnaires were returned to the nursing administrative clerk, who then gave them to the evaluation team.

A trained research assistant who was not linked to the SSI program conducted the nurses' interviews. The unit managers and the CNO helped identify potential nurse participants. RNs eligible to participate had worked with one or more of the SSIs.

Taped interviews lasted about 15 minutes and were conducted in a private room on the unit. Sample-size calculation was based on a priori estimation of when saturation would be reached. It was estimated that saturation would likely occur with approximately five to 10 nurses from the various nursing units. The final sample consisted of seven RNs or RPNs.

Development of the student questionnaire

Items for the student questionnaire were developed by an evaluation team composed of APNs and research consultants. As illustrated in Table 1, the final questionnaire contained 10 items, which were categorized under four main topics (i.e., benefits of the program, role identity, skill development, future employment interests).

Development of the questions for the nurses' interviews

Results of the student questionnaires guided the development and refinement of the final five open-ended questions used in the nursing interviews. Nurses were also given the opportunity to discuss other issues related to the program at the end of the interview. The five open-ended questions were:

1. What skills did the SSIs perform that helped you in your practice?
2. Were there any skills that the SSIs were not permitted to perform that would have been helpful to your practice?
3. When a SSI was working in the RPN role, how did this affect your practice?
4. When the SSI was working in the RPN role, how did this affect patient outcomes?
5. Would you like to see the SSI program continued next summer?

Measurement

Most items on the students' questionnaires were scored on a 4-point Likert scale from "Strongly disagree" to "Strongly agree." Students were also asked to list three additional clinical skills that they would like to see on the approved skills list. Finally, students were asked about their future employment interests as a SSI or PCA.

Data analysis

Descriptive statistics were calculated using the Statistical Package for Social Sciences (SPSS). Responses from the semi-structured interviews were transcribed verbatim and entered into a text document. Two research consultants independently analyzed the document to determine the major themes. Inductive content analysis was performed. Codes were attached to data with shared meaning (Miles and Huberman 1994). These codes were clustered to form higher-order themes and subthemes. For example, the major theme "patient care" incorporated the subthemes of both unfavourable and favourable patient outcomes. The reliability and validity (i.e., clarity, relevance and completeness) of the coding was discussed with all members of the research team until consensus was reached.

Results

Student questionnaire

Nineteen questionnaires were returned, representing a 79.2% response rate. Key findings are presented below, and a summary is presented in Table 1.

Table 1.

Student survey (n=19)				
	Disagree*	Agree	Strongly agree	Missing data
	%	%	%	%
My participation ... allowed me to ...				
Increase my confidence in skill performance	0	26.3	73.7	0
Develop my organizational skills	0	15.8	84.2	0
Benefit from the support of nursing staff	0	47.4	52.6	0
Facilitate my integration into nursing	0	47.4	52.6	0
Staff were aware of my role/responsibilities				
Registered Nurse	10.5	47.4	42.1	0
Registered Practical Nurse	26.3	31.6	42.1	0
Unit Manager	5.3	21.1	68.4	5.2

Please list three additional skills that you would like added to the approved list.

Are you interested in employment as an intern next summer, if available? Yes or No (If no, why?)

Are you interested in employment as a personal care attendant? Yes or No (If no, why?)

*Most items were scored on a 4-point Likert scale from "Strongly disagree" to "Strongly agree." No respondent chose the "Strongly disagree" option. Thus, it is not presented.

Benefits of the program

Overall, the SSIs reported that the program allowed them to increase their confidence in skill performance, develop their organizational skills, facilitate their integration into nursing and benefit from the support of the nursing staff.

Role identity

The majority of SSIs agreed that the RNs, RPNs and unit managers were aware of their role and responsibilities. However, about one-quarter of SSIs (26.3%) disagreed that the RPN was aware of their role and responsibilities.

Skill development

Blood glucose monitoring (68.4%) was identified as the most common skill that the SSIs wanted added to the approved list. Other skills identified included medication administration (5.3%), urinary bladder scans (5.3%) and oxygen saturations (5.3%).

Future employment

Most SSIs (84.2%) were interested in future employment as a SSI, and about 80% were interested in continuing employment as a PCA upon completion of the SSI program.

Results of the Semi-Structured Interviews with Nurses

The four major themes to emerge from the nurse interviews were (1) skills and knowledge, (2) roles and responsibilities, (3) patient care and (4) practice supports.

Knowledge and skills

Most nurses indicated that the SSIs had a beneficial effect on unit workload and continuity of care by allowing nurses to spend more time with their patients. For example, one nurse commented, “They did the basics, mostly activities of daily living and vital signs, which gave us some free time to spend with patients.” Another explained, “When regular staff are on vacation, it’s even worse – now we have complex patients here. After awhile, [the SSIs] got to know the patients; there’s continuity of care.”

Reciprocity in skills and knowledge sharing was identified as a valued benefit for both nurses and SSIs. For example, one nurse commented, “I would ask them if they had any other suggestions, and I believe that they ... expressed some experiences that they learned in school, some of the new techniques, and basically we just reviewed it together. ... The students were always, always asking questions.”

Roles and responsibilities

Nurses commented on their dilemmas in negotiating the tension between coaching and the need to respect the SSI role limits. The SSIs were described as “very professional and comfortable at the bedside” and “very keen to learn, you showed them once and they would move on it; they would take the initiative.”

The most common skill that nurses wanted added to the SSIs’ approved clinical skill list was “medications.” However, nurses acknowledged that because students were not “registered,” this expectation was unrealistic. Staff still provided learning opportunities for the students. For example, one nurse commented: “With medications, there were a number of times I asked the students if they knew the particular patient and why this patient was on a particular medication. I also encouraged them to go and find out why, just as a learning experience – and I think they needed a lot of help with medications.”

Some nurses commented on the difficulty of finding a safe and acceptable balance between SSI expectations and actual role definition. “A few of them were very adventurous, ... but a few also had an attitude that they could take on more

responsibility. I felt that, at times, a few students wanted to overstep their description of what they were supposed to be doing.”

Patient care

Overall, nurses emphasized the favourable impact that the SSIs had on patient care. One nurse stated, “The patients most definitely benefited from the students. The students generally spent more time with the patients, talking with them; they got to know the patients and their care needs.” Another nurse stated, “The students could give more support to the patient.”

Practice supports

Nurses discussed the benefits and disadvantages of having SSIs assigned to the unit. When SSIs were extra care providers on the unit, nurses considered them a valuable addition to the team. On some occasions, SSIs replaced a RPN shift vacancy. They acted within the boundary of the SSI role; other functions, such as medication administration, were undertaken by the RN. Most nurses agreed that the program was an excellent learning opportunity for SSIs and that their presence helped balance the workload for the nurses on the unit: “It didn’t free up our time so much because we had extra medications to give, but it sort of balanced out because the students were permitted to perform certain nursing skills.”

Although most nurses were satisfied when the SSI assumed some of the aspects of care typically undertaken by the RPN, nurses acknowledged that the SSI was not a RPN and did not have the RPN’s knowledge or skill. Thus, the SSIs required additional support and coaching by the RN. One nurse commented, “They could help me with patients’ transfer, but there was a lot of cueing needed. They might have needed some help, some teaching, some guidance, but they were always adventurous to ask questions on learning techniques.”

Discussion

The SSI program provided nurses with the opportunity to coach and act as role models for prospective nurses. As described in several other published examples (Desrosiers 2000; Grinstead 1995; McAlpine and Cargill 1992), this experience was valued by both students and nurses. Both parties expressed the desire to have the program continue.

The summer internship experience facilitated an opportunity for student nurses to gain practical experience and to examine the clinical realities of nursing practice. Evidence suggests that adults learn most effectively when they have an opportunity to apply new knowledge and skills in a timely manner (Dotlich and Cairo 1999). Using new knowledge is an important part of developing and refining foundational nursing practice knowledge. The SSI program provided a further clinical venue for

participants to increase their skill, dexterity and confidence. Furthermore, through incorporation of new knowledge, additional new learning and cognitive restructuring occurs. Successive reinforcement through programs such as the SSI program can help build confidence and clarify scope and role expectations for student nurses (McAlpine and Cargill 1992; Tritak et al. 1997). However, results of this evaluation provided a snapshot at only one point in time. It would be interesting to track practice-entry integration and intention to continue in nursing longitudinally among nurses who had participated in programs such as the SSI program.

Canadian professional nursing organizations predict that recruitment and retention of nurses will be an important challenge in the coming years (Canadian Nurses Association 1998; Registered Nurses Association of Ontario 2003). Patient outcomes will depend on the ability of the profession and organizations to develop successful strategies to attract, recruit and retain nurses (Betts 2003; Desjardins 2003).

Several factors require consideration before implementing a SSI program. To help ensure that regular and part-time staff are afforded their full quota of shifts, SSIs were guaranteed full-time work only for the summer period (July through August). In addition, the number of SSIs hired was based on current vacancy rates and vacation quotas for the summer months. Another consideration was that staff replacement had to reflect collective agreement expectations. Thus, if a RPN or PCA called in sick, the Scheduling Resource Office would first try to find a replacement from the casual pool. Only when the casual pool was exhausted would the SSI be counted with the regular unit staff complement. A further consideration was the impact of students on nurses' workload. Nurses in this study greatly appreciated having the SSI as an extra staff member and did not feel "overburdened" with their coaching role. Typically, SSIs were very knowledgeable regarding the skills on the approved list. The time commitment for nurses to coach SSIs is typically less compared to the time required to preceptor a student during their academic clinical placements. Although some of the students were adventurous, close supervision acted as a check to ensure safe patient care. A final consideration is cost. The cost of the program for the organization was neutral. The number of times that a SSI filled a RPN or PCA shift tended to balance the cost associated with having an extra care provider on the unit.

This evaluative project was limited by small sample size and potential recruitment bias. The SSIs who chose to respond to the questionnaire and the nurses who consented to be interviewed may not be a representative sample. Despite these limitations, the results suggest that a summer internship program was beneficial for students, staff nurses, patients and the organization.

Conclusion

The SSI program benefited multiple constituents. Students had an opportunity to strengthen their clinical competency and to develop practice confidence. Nurses had an opportunity to share and validate their knowledge through coaching and role-modelling. Nurses perceived that patients benefited from the additional attention and time that students brought to the care delivery process. Continuity of care was optimized during a period where typically there would be increased staff variability due to vacation relief. The organization benefited by identifying and implementing a creative strategy in which a new job category of provider made important contributions in care delivery.

Our healthcare system is changing in fundamental ways. Providers, educators and policy makers need to develop strategic approaches to facilitate student transitions into the profession. Initiatives such as the Summer Student Internship program can create a context to foster professional growth for both students and nurses.

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