

Improving The Effectiveness Of Human Resources Practices Through Transforming Care At The Bedside¹

Melanie Lavoie-Tremblay, McGill University, Canada
Patricia O'Conner, McGill University Health Centre (MUHC), Canada
Joanna Streppa, McGill University, Canada
Alain Biron, McGill University Health Centre (MUHC), Canada
Judith Ritchie, McGill University Health Centre (MUHC), Canada
Guylaine Cyr, McGill University, Canada

ABSTRACT

In 2010, in an effort to increase patient involvement in decision-making about health care redesign, a Quebec university health care organization implemented the Transforming Care at the Bedside (TCAB). This article presents the results from a qualitative study exploring health professionals' perceptions of TCAB and the effect on turnover and overtime. This descriptive, qualitative study utilized focus groups, individual interviews, and a review of administrative documents for data collection. Participants included hospital workers from five units implementing TCAB. The data generated by the interviews and focus groups were analyzed using NVivo with the method proposed by Miles and Huberman (1994). During the first year of implementation of TCAB, the team noted the importance of taking time to see the effects of the changes and thereby facilitate the involvement of other team members. A number of TCAB team members also cited communication as a facilitating element for informing team members of changes. According to the participants, the TCAB strategies that were implemented have had a positive impact on practice and on the work environment, and turnover showed an improvement. There was no change in absenteeism. TCAB has the potential to impact not only nurses' work, but interprofessional team work as well, through changes that involve everyone. Future research should focus on how to support team members to reduce resistance to change and increase social support in order to implement and sustain changes.

Keywords: Transforming Care at the Bedside; Human Resources; Health Care

INTRODUCTION

*H*ealth care organizations all across the world are presently at a critical economic juncture. They have been challenged to provide improved patient care as well as attract and retain skilled health care professionals in an environment that is complex, with rapid change and limited resources. To meet this challenge, researchers, such as Viney, Batcheller, Houston, and Belcik (2006), believe that the need for the greatest change in care delivery is at the hospital bedside.

Health organizations are now at a point where all nurses need to have a good understanding of basic quality, safety, language, and methods, as well as be able to lead teams that can identify and implement strategies for improvement that make patients safer. Recently, programs have been introduced to instruct nurses not only about quality, but also about how to conduct and lead projects from beginning to implementation. Nurses who want to lead such efforts require new professional abilities and skill sets. Comprehension and application of concepts for

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improving patient safety and quality of care, as well as the acquisition of new skills, is key to the success of these programs. One such program that educates, guides, and coaches nurses to identify a quality problem on their unit and to lead improvement interventions related to the identified problem is Transforming Care at the Bedside (TCAB) (Kliger, Lacey, Olney, Cox & O'Neil, 2010).

Across the country and abroad, nurses, physicians, and hospital administrators are requesting that their facilities adopt TCAB as a means of improving patient care, increasing nurse retention, and providing safe, effective, patient-centred, and value-based care. Health providers, patients, and administrative leaders all want to participate in a process that can both increase nurses' time for direct patient care and improve the care itself (Hassmiller & Burnes Bolton, 2009). A university health care centre in Montreal, Canada, has approved a corporate strategy that entails implementing TCAB with nursing leaders (O'Connor, Ritchie, Drouin & Covell, 2012). Since the introduction of the TCAB initiative throughout the United States and abroad, few studies have examined the perceptions of front-line health care employees (other than nursing staff). Given the positive findings from previous studies regarding the benefits of TCAB, it is timely to investigate all health professionals' perceptions of TCAB at a university health centre where the program has been in use for over two years and to examine the contribution to organizational performance by looking at overtime and turnover. In furthering promotion and implementation of the TCAB program, the resulting information may be very helpful in future initiatives. The aim of this paper is to report on health professionals' perspectives on the TCAB program and its implications in terms of turnover and overtime.

LITERATURE REVIEW

Transforming Care at the Bedside

In 1996, the Institute of Medicine (IOM) in the United States initiated an ongoing effort focusing on assessing and improving the quality of health care in that country. The Committee on Quality of Health Care in America laid out a vision for how the health care system had to be drastically transformed in order to close the abyss between what we know to be good quality health care and what actually exists in practice. The reports released, *To Err is Human: Building a Safer Health System* (Committee on Quality of Health Care in America, 1999), *Crossing the Quality Chasm: A New Health System in the 21st Century* (Committee on Quality of Health Care in America, 2001), and *Keeping Patients Safe: Transforming the Work Environment of Nurses* (Committee on Quality of Health Care in America, 2003) stressed that a band-aid fix approach to reform was inadequate to address the system's problems (IOM, 2012).

IOM's recommended aims; i.e., care that is safe, efficient, patient centred, effective, timely, and justifiable, as well as transformation of the inherent culture and values of the organization (Rutherford, Moen & Taylor, 2009; Viney et al., 2006) served as a springboard for the Robert Wood Johnson Foundation (RWJF) and the Institute of Healthcare Improvement (IHI) to join forces in establishing an ambitious plan for improving the quality of bedside care by sponsoring and creating the TCAB innovative initiative (Donahue, Rader & Klauer Triolo, 2008; Roussel et al., 2012). TCAB's original focus was on improving care on medical-surgical units, where most in-patient care is delivered and where the need for improvement is greatest. It has been estimated that 35% to 40% of unexpected hospital deaths occur on such units (Lavizzo-Mourey & Berwick, 2009). Those involved with the TCAB project soon recognized that this innovative improvement strategy could be utilized with positive results in all sectors of the hospital, including acute, chronic, and ambulatory care units (Donahue et al., 2008).

The formal TCAB initiative began in 2003 and ended in 2008. The program started with the IHI leading a three-hospital pilot that expanded to 13 hospitals for two years, with 10 hospitals continuing for another two years. Hospitals were selected through a competitive application process, with a requirement to commit human and organizational resources to measure targeted patient outcome improvements. During the last two-year phase of the IHI mandate, in 2007, RWJF provided a grant to the American Organization of Nurse Executives (AONE) that enabled the recruitment of 67 hospitals into an AONE-led TCAB learning alliance. The goal of this grant was to promote the TCAB philosophy to a large group of hospitals using the smallest possible disbursement of resources (Hudson, Thrall & Cavaliero, 2012; O'Neill, Holecek & DeLima, 2011; Thompson, 2009). In addition, in 2009, AONE recruited 32 more hospital units and an additional 20 hospitals which participated via virtual learning. This work continued until 2011 (Kliger et al., 2010).

The initial TCAB curriculum was framed by four themes: 1) safe and reliable care, 2) vitality and teamwork, 3) patient-centred care, and 4) value-added care processes. As previously stated, TCAB's objectives for front-line caregivers were to identify problems on their units, develop testable strategies for improving quality of care, and develop their leadership skills to lead, engage others in their projects, and spread further system change (Kliger et al., 2010; Martin, Greenhouse, Merryman, Shovel, Liberi & Konzier, 2007; Needleman, Parkerton, Pearson, Soban, Upenieks & Yee, 2009; Roussel et al., 2012; Thompson, 2009). As the work developed, it became clear that leadership skills, including those of nurse managers, were particularly vital to the overall success of the TCAB project. It is the nurse manager who creates an environment that encourages change on the unit. This ability to change, especially with regard to decision-making, is now recognized as a core component of TCAB. Transformational leadership was later added as a fifth theme (Thompson, 2009).

A number of attributes distinguish TCAB from other quality improvement initiatives. First, TCAB engages the hearts and minds of front-line care providers and managers in improving care processes. Second, TCAB encourages transformative change. Leaders and front-line care providers challenge and validate their assumptions, critically reflect upon their experiences, and develop new perceptions and protocols. For example, TCAB promotes collaboration between nurses and patients/family member advocates as full partners in care decisions. Third, TCAB highlights continuous learning and promotes evidence-based practice. Nurses test new ideas and continually aim for quality process improvements. Last, at the core of TCAB is the Model for Improvement developed by the Associates in Process Improvement (Rutherford et al., 2009). Using the important features of the deep dive, a long brainstorming session conducted at the beginning of the process and aimed at generating ideas, as well as shorter sessions known as snorkels that are conducted on a weekly or monthly basis, this model guides nurses to focus on three questions: 1) "What are we trying to accomplish?", 2) "How will we know that a change is an improvement?", and 3) "What changes can we make that will result in improvement?" To test and implement these changes, the TCAB framework recommends using the Plan-Do-Study-Act (PDSA) cycle (Kliger et al., 2010).

TCAB Changes in Organizational Performance

According to Hassmiller and Cozine (2006), nurses spend much of their time searching for medications and physicians, hunting down required equipment and materials, and completing excessive paperwork. From a human resources perspective, better and more efficient systems of delivering nursing care must be developed. Changes initiated through TCAB make it easier for nurses to spend more time with patients and less time on administrative tasks. In most cases, these innovations have been cost neutral or have even saved money. For instance, Roussel et al. (2012) explore the processes of change that occurred on the unit of an urban, regional Level 1 trauma centre during the implementation of TCAB. One of the findings was that the time nurses spent on direct patient care increased from 40% to 50%.

Staff engagement in improving the work environment and patient care processes is paramount to change. One method of determining staff engagement relates to the volume of tested improvement ideas. Needleman and Hassmiller (2009) found that, at the end of the TCAB pilot period, 71 percent of initiatives that focused on improving efficiency or increasing the value of care (such as adoption of new end-of-shift reporting methods, work to speed, and a better coordinated discharge process among physicians, nurses, housekeeping, and other departments) had been sustained and were still in place.

As previously stated, teamwork and vitality constitute a major construct of the TCAB initiative. One specific aim of Upenieks, Needleman, Soban, Pearson, Parkerton & Yee's (2008) study was to explore the relationship between TCAB-tested innovations and changes in staff vitality. Across the 16 units studied, a total of 426 innovations were tested. The findings suggested that, as nurses became more involved in testing and implementing changes in care on their units, such as setting up whiteboards in patient rooms and using computerized bedside documentation, vitality increased.

With the implementation of TCAB, Barnabas Health made significant improvements in patient safety, quality, and patient satisfaction. As a result of the new safety innovations, falls and falls-with-harm had been reduced by as much as 50% over a one-year period. The incidence of hospital-acquired wounds showed a reduction of 45%. Patient satisfaction had also been positively impacted. With the implementation of 'Quiet Time' and

'Rounding with Intention', call bell use had decreased by 55%. On one unit, Hospital Consumer Assessment of Healthcare Providers and Systems scores rose dramatically to the 99th percentile for pain management and discharge instructions post-implementation (O'Neill et al., 2011). Furthermore, Hillman's Cancer Centre (HCC) reported a significant number of positive outcomes due to TCAB initiatives. For example, abandoned Triage phone calls (hang ups) decreased from 23% (pre-implementation) to 7%, arrival-to-departure times dropped from three hours to less than 60 minutes and there was a 63% decrease in patient wait times for simple treatments (injections, port flushes, etc.). (Lorenz, Greenhouse, Miller, Wisniewski & Frank, 2008)

Although many studies have investigated how TCAB effects changes in organizational performance, few studies have reported findings specific to nursing turnover and overtime. According to the literature, the national average for nursing turnover in United States hospitals is approximately 8% per year. Findings from Rutherford et al.'s (2009) research indicated that the mean nursing turnover from 2003 to 2007 was 3.39% and that nursing turnover had been significantly reduced post implementation of the TCAB program. In Burns, Bolton and Udin Aronow's (2009) study, a cost analysis was conducted to determine nursing turnover rate savings associated with implementation of the TCAB program. The following cost estimates were based on filling a nurse vacancy position (overtime and temporary staff), recruitment (advertising, human resources department, and nursing staff involvement), and permanent replacement of position with a new trained and orientated nurse. The findings indicated that nursing turnover decreased from 7% in 2004 to 6% in 2007, at an estimated savings of \$509,000. In addition, the findings indicated that nursing turnover decreased another 3% in 2008 and that the associated savings were \$5,090,909.

Other studies included Unruh, Agreawal and Hassmiller's (2011) research, which contrasted nursing turnover and overtime against the national average. Their findings indicated that nursing turnover in TCAB units averaged 5.15% per year per unit, as compared with a national average of approximately 8% per year, and that the total cost savings per unit among those units that participated in the TCAB initiative for 2004 to 2007 was \$288,200. In addition, their findings suggested that those units that participated in the TCAB initiative reported 2.65% fewer overtime hours than the national average. Taking into consideration that the average hourly wage of nurses increased each year, their findings inferred that the total amount of cost savings per unit (where TCAB was implemented) for 2005 to 2007 was \$509,261.

Engaging Patients through the Transforming Care at the Bedside Initiative

In 2010, in an effort to increase patient involvement in decision-making about health care redesign, the Canadian Health Services Research Foundation (CHSRF) funded a new initiative called Patients as Partners (CHSRF, 2011). With financial support from CHSRF, in 2010 a Quebec university health care organization implemented the TCAB initiative (Rutherford et al, 2009) with patients as partners in the working groups on five units at three of its sites in partnership with the Institute for Healthcare Improvement (IHI). The units involved included an internal medicine unit, a neurosurgical unit, a gynecology oncology unit, a psychiatric unit and a multi-service general surgical unit. In order to engage patients in care redesign, several patient representatives joined the core TCAB health professionals team on each unit (O'Connor et al., 2012). The goal was to facilitate redesign of in-patient care delivery processes with teams that deeply involved patients and families with health professionals to create the necessary improvements and truly meet patient and family needs. The teams, including the patient representatives, began working in September 2010, and from September 2011 to April 2012, the patient representatives worked with health professionals on three modules with the following respective objectives: 1) improve the physical work environment using 5S (sort, set, shine, standardize, sustain) LEAN methods, 2) improve patients' experience of care, and 3) improve admission and discharge processes using process mapping techniques (which they are still working on).

O'Connor et al. (2012) looked at the preliminary effects of implementing TCAB within various units and their findings were positive. For example, patient representatives had become active TCAB collaborators and an 8% increase in the amount of time nurses spent in direct patient care was noted. The responses of caregivers (measured by the Hospital Consumer Assessment of Healthcare Provider and Systems Survey) improved by 30%. Some of the other findings were: 1) developing a quiet zone for medication administration resulted in a 50% decrease in interruptions and a 60% decrease in transcription errors, 2) relocation of equipment significantly reduced the time

nurses spent in hunting and gathering, 3) redesigning a chemotherapy room resulted in a 57% reduction in wait times for patients, and 4) utilizing a more efficient mental health admission process not only reduced admission time from 4.3 hours to one hour, but also eliminated duplication of paperwork and improved team communication and interprofessional learning. Lastly, both health professionals and patient representatives had acquired some of the abilities needed to conduct Plan-Do-Study-Act cycles more effectively, lead change initiatives, and effectively negotiate and communicate. In addition to patient involvement in this initiative, health professionals, other than nurses, were invited to participate. This article presents the results from a qualitative study exploring health professionals' perceptions of TCAB and the effect on turnover and overtime.

METHODS

Design

This descriptive, qualitative study utilized focus groups, individual interviews, and a review of administrative documents for data collection. Participants included hospital workers from five units implementing TCAB in a university-affiliated health care centre in Quebec, Canada.

Procedure

Ethical approval was obtained from the ethics review board of the participating organization. A member of the research team presented the study to the teams on each unit and a date for a focus group was proposed. Individual interviews were scheduled with managers and health care team members who were not able to participate in the focus group because of time conflicts. Before the interviews, a research team member explained the study to each participant verbally and informed consent was obtained in writing. To protect confidentiality, each participant was identified by a code. Interviews lasted 45 minutes and were conducted at the participants' workplaces by a member of the research team.

Data Collection

One year after the beginning of TCAB, in October 2011 (T1), five group interviews were conducted with 28 people from five different care units. TCAB core team members on each unit were interviewed. Teams were composed of representatives (nurses, orderlies, patients, interprofessionals) who proposed, developed and tested changes. Six months later, in April 2012 (T2), eight individual interviews and nine focus groups were conducted with 68 people from five different care units. The second data collection included the TCAB core team on each unit and the other members of the unit given that the latter were becoming increasingly involved in the growing number of changes implemented on the unit. These interviews enabled us to gather information on the TCAB initiative and the perceptions of all of the health professionals. An interview guide served as the data collection tool for the interviews and focus groups. The main themes addressed were perception of TCAB objectives, facilitators and barriers, and impact. A socio-demographic profile was recorded at the start of each interview and focus group. Administrative data on nurse absenteeism, overtime, and voluntary turnover were also collected to triangulate with qualitative findings.

Data Analysis

Because the study was descriptive in nature, the analysis was primarily guided by the interview questions rather than by a specific theoretical paradigm (Polit & Hungler, 1999). Interviews were audio-recorded and transcribed. The data generated by the interviews and focus groups were analyzed using NVivo with the method proposed by Miles and Huberman (1994). Data analysis consisted of three concurrent streams of activities: 1) condensing the data (coding of individual interview data to identify major themes and categories), 2) presenting the data (data display of themes from all interviews), and 3) elaborating/verifying the data. Two researchers independently coded the transcripts from a set of data to ensure consensus and met regularly to discuss data analysis and interpretation. Finally, for overtime and absenteeism, t-tests were performed for monthly rates pre- and post-TCAB. For voluntary turnover (five units combined), only descriptive data are presented due to the nature of the data.

RESULTS

Participants

For T1, the sample includes 22 women (78.6%) and the average age (n = 26) is 43. Of the 27 participants, 11 (40.7%) had a bachelor's degree, 10 (37%) attended technical school or college, four (14.8%) had a master's degree, one (3.7%) held a certificate, and one (3.7%) had an educational background completely different from those previously mentioned. More than half of the participants (64.3%) were employed as nurses, five (17.9%) as orderlies, and five (17.9%) in some other capacity. Participants had been in their current position for an average of 12 years, with a range of five months to 37 years. Participants had been working in these health services for an average of 19 years, with a range of two to 37 years. Twenty-two (78.6%) of them were employed full-time and six (21.4%) were employed part-time.

For T2, the sample included 58 women (85.29%) and 10 men (14.70%). The average age of the participants was 40. Three (4.41%) participants had doctorates, 10 (14.70%) master's degrees, 32 (47.05%) bachelor's degrees, and 23 (33.82%) had attended technical school or college. Participants held a variety of positions: 32 (47.05%) were nurses, six (8.82%) held managerial positions, seven (10.29%) were orderlies, five (7.35%) were occupational therapists, four (5.88%) were doctors, four (5.88%) were physiotherapists, three (4.41%) were social workers, two (2.94%) were unit coordinators, one (1.47%) was a pharmacy technician, one (1.47%) was a speech therapist, and one (1.47%) was a dietitian. One participant did not specify his position. The participants had been in their current position an average of eight years, with a range of four months to 29 years. They had an average of 14 years of experience, with a range of four months to 38 years. A total of 57 (83.82%) participants were employed full-time, nine (13.23%) worked part-time, and two (2.94%) held casual employment. The common themes that emerged from the interviews were grouped into four major categories: 1) objectives of TCAB program, 2) factors and barriers, 3) impact, and 4) recommendations.

TCAB Program Objectives

From the time the program was first implemented, all of the participants had the same perception of the objective of TCAB, which aims to review work processes and restructure nurses' work in order to reduce lost time and enable nurses to spend more time at their patients' bedsides and with their families. The program also aims to improve the quality of care through the application of the three modules.

Transforming care at the bedside really means transforming care, the ways things are organized, the care processes, so that nurses can spend more time, "precious time" in quotes, with patients, time that patients consider important... The goal is to analyze the way we do things, how we offer, we deliver care, to be better organized, to give more time to patients. (TCABT2_11)

Well, TCAB, of course, Transforming Care at the Bedside, is giving nurses more time at the bedside with the patients and their families. (TCABT2_13)

We're now on our third module. Our first module had more to do with the physical structure of care... the five S's for actually reorganizing the physical environment... After that was Module 2, where we started making the patient more involved in the care as well, in a bit more of an active way, where we used the whiteboards to improve communication between nurse and patient... And in that module we also added intentional rounds... There also, it was a matter of structuring the work to make sure there was monitoring every hour, that the patient was seen by either an orderly or a nurse, so that we were really meeting their physical needs a bit more... It makes things more efficient all around. Then the third module is admission to discharge. (Inter2_11)

Elements Facilitating the Implementation of Changes for the TCAB Team

During the first year of implementation of TCAB, the TCAB team noted the importance of taking time to see the effects of the changes and thereby facilitate the involvement of other team members. A number of TCAB team members also cited communication as a facilitating element for informing team members of changes. The

TCAB team and the interdisciplinary team mention this element again in the second year with regard to informing and involving team members and thus fostering their buy-in and their understanding of the rationale behind the changes.

So at least now that there are big changes happening and we're in an open communication with the staff and we're giving them updates every couple of weeks to say this is what's going on. This is what we've done. This is what's next. Give us your feedback. There's a lot more communication and it's making a big difference.... (U4)

It's repetition and always, you know, to get people on board... And to get buy-in from everybody, to get people engaged. (TCABT2_15)

Another facilitating element identified by the TCAB and interdisciplinary team is the nature of the change. For example, Module 3 of TCAB is more conducive to the involvement of members of interprofessional teams because it concerns patient admissions and departures.

... in TCAB which involved all the disciplinary members. And it's an ongoing... it's something that the doctors, the nurses, the social workers... And it's happening faster now, I hear... and the doctors are initiating it now. So before it would be me or it would be the nurse, you know. How we're going to do this TCAB admission... Now the doctors want... when an admission comes onto the unit the doctors say: Okay, so I'd like to have a TCAB admission at this time. So we organize it. So it's working so well. (TCABT2_21)

Yes, the interprofessional team is more involved at the discharge level, but it has a strong impact on admissions. (InterT2_16)

Elements Impeding the Implementation of Changes for the TCAB Team

One element that participants identified during the two-year implementation period was resistance to change - the challenge of engaging everyone in the changes; of implementing a change; and, above all, maintaining it. The TCAB team members also identified staff misunderstanding or lack of understanding of the rationale behind the changes to be made as an obstacle during the second year, in particular because it is external to the TCAB team (when the thought process is not evident, for example). This complicates the work and the role of the TCAB team (e.g., having to repeat why it is doing something).

Well, as somebody who wasn't part of it for the earlier modules, it's very different being outside of TCAB than being here for the meetings every week where you're following exactly what's going on, the step-by-step process, to just being outside of it and just kind of hearing about it. It's very different. (TCABT2_9)

And that... that's a big, big challenge in itself because everybody is in their own little routines. And then when you introduce something new that's big like this it's very, very hard to change peoples' attitude about the way they work. (TCABT2_15)

Very resistant to change, very difficult to get someone to change something, it's very difficult. (Inter T2_12)

Because the problem is, although we're doing it now, you have to sustain it afterwards. It has to be ongoing. That will be the hardest part. (TCABT2_9)

Positive Effects of Changes for the TCAB Team

According to the participants, the TCAB strategies that were implemented have had a positive impact on practice and on the work environment. The participants said that during the two-year period, there had been a reduction in time wasted looking for things and an improvement in communication within the unit team, the physical organization of the work, and work satisfaction.

So far I find it's positive.... I spend less time wandering around looking for things. And I think we have, you know, I think the communication was well made. (U2)

... we use less time to find things or to take things, you know. Before, we were running around or climbing somewhere to get the stuff. Now we know it's in one place. Everybody knows, it's easy to access. It makes your job much easier... And much more pleasant... you spend less time running around now. (U5)

... all that reorganizing that we did on the unit... Even the resource room. Like we have a very nice room now where we can see the patients as preop. That's positive. We have a nice family room too now, like the patients or family members can go there and sit there and they have a really nice environment to be in there. (TCABT2_4)

As a final impact I've noticed, I could say that we're more efficient... The environment is better organized... I see it, because you go to the nursing station to get a record, and it's like, wow, it's well organized. (Inter T2_11)

One of the strategies noted by the interdisciplinary team was the whiteboard in patients' rooms. It serves as a source of information for everyone - patients, families, and care staff.

So actually I use it [the whiteboard]. When I walk in, I scan through it to see if the patient had any questions... so it was a good tool. (Inter T2_13)

Even the family uses it to leave their numbers, their contact info, who we can contact, the important information, and that's really important to us because... We have a telephone number. Sometimes we have other information about how we're supposed to treat the patient or what... how we're supposed to treat the person, if there are specific things... the approach we use and it's written on the board. (Inter T2_16)

RECOMMENDATIONS

Participants mentioned the importance of taking the perspective of TCAB teams and staff on each unit into account. They referred to the need to involve people, to inform all concerned about what is going on so that everyone, patients and families included, is on the same page. Lastly, it is important to continue freeing up time for the TCAB team and, in fact, for all members of the unit so that everyone can become involved in a section of the program and give his or her point of view and make suggestions.

I think that, to improve the spread of the project among staff, there would have to be ways of freeing up people who are not part of the working group in order to get them involved. Once a week maybe. Have a staff person who comes with us, who is freed up for that. I know it takes money but I think this could help the team (staff) feel more involved. (TCABT2_9)

Personally, I think it would help if, I don't know, every 4 to 6 months we had a meeting for the interprofessional team, to tell us where things are at, what's going on. Is it working? What kind of feedback are we getting from patients? Are the doctors in the loop? Are things being done properly?... what the people who implemented it have been noticing... Because we... For me, it's been put in place and I don't know where it's going. But in fact, at the beginning, we thought we would be much more involved than that. (Inter T2_10)

To get communication from everyone, it has to be done with everyone's help. At every level. Otherwise it won't work. We can't just say: you, you're not involved, but that's how it's being done now. No, everyone has to be involved for people to accept it and work on it, or else it won't work. (Inter T2_12)

I think continuing to liberate, to have liberating time for people to do these things. I don't think this could be done to the extent that it has been done without liberating time. (U4)

Human Resource Impacts

Turnover showed an improvement (4.6% compared to 12.6% 4 years ago). In terms of overtime, on the five units combined, the mean rates per month were compared for the two-year period prior to TCAB versus the two years of TCAB implementation. There was a statistically significant improvement; i.e., a drop from 3.6% to 3.0% ($p = 0.01$). There was no change in absenteeism.

DISCUSSION

This study takes into account different perspectives, including that of the interprofessional team. It appears that all participants, including the inter team, perceive that TCAB has had positive results on the work environment and practice. However, the inter team was more involved with the modules that pertained to their work. In redesigning care at the bedside, it is important to have changes that involve different players. For example, Module 3 clearly illustrates this strategy given that it necessarily involves members of the inter team on admission and discharge. Hassmiller & Cozine (2006) note that the TCAB initiative begins with the nursing profession and the results from TCAB team efforts are expected to affect all health care workers. Nonetheless, this strategy needs to be enhanced and other team members need to be included from the beginning through changes that affect them for optimum impact.

This study identifies resistance to change as an obstacle. Communication strategies are identified as possible solutions so that other persons who are not involved in the decision-making process can understand the rationale behind the change. In this regard, Lee, Shannon, Rutherford and Peck (2008) note that, to enhance interprofessional communication and collaboration amongst front-line workers, the nurse leader can utilize the following strategies: 1) inviting representatives from all disciplines involved in patient care to participate in idea-generation meetings, 2) enlist front-line staff in planning and testing ideas for improvement in areas of concern, and 3) set aside time for employees to work on improvement. By providing health care professionals with the opportunity to learn new skills, such as active communication, interprofessional collaboration, and effective decision-making, nursing leaders will engage and empower staff in owning their practice. The health care team learns to value diversity of opinion and the possibility that there are many different ways of solving a problem. This competency will be needed in the workforce of the future (Thompson, 2009).

In this study, TCAB seemed to have a positive effect on nurses, as manifested in decreased overtime and voluntary turnover. Similar findings have also been reported by other authors (Unruh et al., 2011; Rutherford, 2009). However, the observed improvements in overtime and voluntary turnover must be placed in the context of overall improvement in these same variables at the organizational level during the same period. A different study design would therefore be required to provide further clarification. These results point to the potential contribution of TCAB to the retention of nurses, with important implications for human resources practices and costs.

CONCLUSION

Health care leaders face many challenges in the context of nursing shortages and economic constraints. Different initiatives are implemented to improve the effectiveness of care delivery and make better use of health care workers' competencies. TCAB has the potential to impact not only nurses' work, but interprofessional team work as well, through changes that involve everyone. Future research should focus on how to support team members to reduce resistance to change and increase social support in order to implement and sustain changes.

If TCAB is to continue, succeed, and spread to other units and hospitals, developing and incorporating new concepts that promote patient safety, foster empowerment, and encourage effective interprofessional communication and collaboration must be built into the process so that the energy renews itself. Next steps include 1) involving more health care professionals who are not generally members of the TCAB team in building prototypes and helping assess impact, 2) developing and implementing a manager-focused program that enhances transformational leadership within hospitals where TCAB is being employed, and 3) partnering with local universities that provide health care programs (schools of nursing, medicine, etc.) to begin to integrate the TCAB model into the curricula for both entry-level and advanced-degree students.

AUTHOR INFORMATION

Mélanie Lavoie-Tremblay, N. PhD, FRSQ career award junior 2 is an associate Professor at Ingram School of Nursing McGill University. She is Nurse Scientist at McGill University Health Centre (MUHC). She is researcher at the Research Centre Fernand Seguin of Hôpital Louis-H Lafontaine, the research Institute McGill University Healthcare Centre MUHC and at the Douglas Institute Research Centre, Quebec, Canada. E-mail: Melanie.lavoie-tremblay@mcgill.ca (Corresponding author)

Patricia O'Connor, N, MScN, CHE, FCCHL is Director of Nursing & Chief Nursing Officer at McGill University Health Centre. She is Assistant Professor, Ingram School of Nursing, McGill University. E-mail: patty.oconnor@muhc.mcgill.ca

Joanna Streppa, N, MScN is a Research assistant at Ingram School of Nursing, McGill University. E-mail: Joanna.streppa@mail.mcgill.ca

Alain Biron, N., PhD is an Assistant to the Director, Quality, Patient Safety, and Performance McGill University Health Centre and Assistant Professor, Ingram School of Nursing, McGill University. E-mail: alain.biron@muhc.mcgill.ca

Judith A. Ritchie, N, PhD is an Associate Director for Nursing Research, McGill University Health Centre and Associate Professor, Ingram School of Nursing, McGill University. E-mail: judith.ritchie@muhc.mcgill.ca

Guylaine Cyr, PhD is a Research Coordinator at Ingram School of Nursing, McGill University. E-mail: gcyr.hlhl@ssss.gouv.qc.ca

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