Nursing Care Delivery Models and Intraprofessional Collaborative Care: Canadian Nurse Leaders' Perspectives

SAGE Open Nursing
Volume 8: 1–8
© The Author(s) 2022
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/23779608221133648
journals.sagepub.com/home/son

(\$)SAGE

Dawn Prentice, RN, PhD , Jane Moore, RN, PhD, Bruna Fernandes, RN, BScN, and Emma Larabie, RN, BScN

Abstract

Introduction: There are many different types of nursing care delivery models used to organize and provide care in hospitals. These models are comprised of different organizational structures and staffing skill mixes.

Objective: The aim of this study was to explore how nursing care delivery models promote intraprofessional collaborative care in acute care hospitals from the perspectives of nurse leaders.

Methods: A qualitative descriptive approach was used for this study. Telephone interviews were conducted between January 2021 and August 2021 using an interview guide comprised of semi-structured and structured questions. Using a purposeful sampling technique, ten leaders from nine hospital systems, representing both urban and rural hospitals in the province of Ontario, Canada, participated in the study. Content analysis was conducted resulting in two overarching themes.

Results: The first theme, *Fluidity of the Model* addresses the flexibility of the models and the impact of contextual factors such as changes in nurses' scope of practice, government funding changes, staffing mix, and organizational policies and rules. The second theme, *Tools of the Trade* describes the resources that hospitals implement to promote intraprofessional collaboration that indirectly impacts on patient safety.

Conclusion: Nursing care delivery models need to be flexible and adaptable. All nursing care delivery models in this study used various tools to promote intraprofessional collaborative care.

Keywords

nursing care delivery models, intraprofessional collaborative care, qualitative research

Received 10 May 2022; Revised 25 September 2022; accepted 2 October 2022

Introduction/Background

Over the last two decades healthcare reforms have resulted in acute care organizations employing different categories of nurses which has necessitated the development of new models of care delivery. Nursing care delivery models refer to the organization and structure of how nursing care is provided (Fowler et al., 2006; Havaei et al., 2019). The two most common models of care delivery are Total Patient Care and Team Nursing (Havaei et al., 2019).

With the Total Patient Care Model, one nurse is assigned to a group of patients to provide care (Fairbrother et al., 2010; Parriera et al., 2021); whereas with the Team Nursing Model of care delivery, a small team of nursing staff work collaboratively to provide care for a group of patients; usually a team leader is assigned in this model (Dickerson & Latina, 2017; Dubois et al., 2013; Parriera et al., 2021).

Historically, nursing positions in acute care hospitals were mostly filled by registered nurses (RNs). However, the number of registered/licensed practical nurses (R/LPNs) working in acute care hospitals in Canada has been increasing in recent years. The proportion of R/LPNs working in Canadian hospitals increased from 16.3% to 21.3% between 2007 and 2016 (Canadian Institute for Health Information [CIHI], 2017), and in 2019 the proportion increased slightly to 21.6% (CIHI, 2020). The increasing number of different categories of nurses requires all nurses

Department of Nursing, Brock University, Canada

Corresponding Author:

Dawn Prentice, Department of Nursing, Brock University, 1812 Sir Isaac Brock Way, St. Catharines, Ontario, Canada L2S 3A1. Email: dprentice@brocku.ca

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access page (https://us.sagepub.com/en-us/nam/open-access-at-sage).

to work collaboratively to ensure patient focused care despite the nursing care delivery model used.

Review of the Literature

Intraprofessional collaboration is defined as "a relational and respectful process among nursing colleagues that allows for the effective use of the knowledge, skills and talents of all nursing designations to achieve optimal client and health system outcomes" (Canadian Nurses Association [CNA], 2020, p. 4). Effective teamwork is thought to promote positive outcomes for patients and health care providers (Registered Nurses Association of Ontario, 2016; Valentine et al., 2015), as well as to reduce incidence of missed nursing care and errors while caring for patients (Dougherty & Larson, 2010). Furthermore, intraprofessional collaboration has been found to be associated with a decrease in hospital acquired pressure ulcers and patient falls (Ma et al., 2018). With over 19.4 million professional nurses worldwide (World Health Organization, 2020) and the benefits of effective collaboration on patient care, intraprofessional collaboration among nurses is a necessity in today's healthcare system.

The COVID-19 pandemic further impacted the nursing shortage and the need for nursing staff to maintain quality patient care. During the pandemic some critical care areas were required to adopt a new type of nursing care delivery model to ensure quality patient care. One example is critical care areas that normally have a 1:1 patient to nurse ratio needed to adopt a Team-based nursing care delivery model (Mhawish & Rahseed, 2022) as a strategy to address patient needs. Because of the pandemic, some ICU nurses were deployed to care for very ill COVID-19 patients and general duty nurses were reassigned to ICUs, for a period of time to work on a Team-based nursing assignment (ICU nurse and general nurse) (Jones et al., 2022). Being able to respond to rapid changes in the healthcare environment context further underscores the importance of ensuring all nursing care staff is working collaboratively to provide care.

To date there has been little published evidence addressing nursing care delivery models and high-quality intraprofessional collaboration. The purpose of this study was to explore nursing care delivery models in acute care hospitals to understand how they promote intraprofessional collaborative care. This study addressed the research question *How does the nursing care delivery model in your organization promote intraprofessional collaborative care?*

Researchers' Assumptions

Given that it is an expectation that all nurses work collaboratively (CNA, 2020), and that collaboration leads to higher functioning teams, the researchers in this study were interested in exploring how intraprofessional collaboration is

operationalized and promoted in different nursing care delivery models.

In the fall of 2019, a scan of hospital websites in Ontario Canada was undertaken to explore hospitals which at that point in time identified a nursing care delivery model or specific care delivery model used by the hospital. Thirty-one hospitals or hospital systems (multiple sites) were identified as having a nursing care delivery model or an articulated model of care on their website and were used as a potential sample for the study reported in this paper.

Methods

A qualitative descriptive approach as described by Sandelowski (2000) was used for this study. In general, qualitative approaches are used to "answer questions about experience, meaning and perspective, most often from the standpoint of the participant" (Hammarberg, et al., 2016, p. 499). A benefit of qualitative descriptive studies is that they are useful for health research studies because healthcare professionals can describe their own experiences with the phenomena being studied (Neergard et al., 2009). Given the aim of this study was to understand the positionality of intraprofessional care within the nursing care delivery models from the perspective of nursing leaders, this approach was deemed to be appropriate.

Recruitment and Sample

A purposive sampling of ten nursing leaders from both rural and urban areas across the province of Ontario, Canada and who identified as having a nursing model of care delivery or a specified care delivery model on their hospital website were interviewed about the models of care from their institutions. Nurse leaders were chosen as key informants as the researchers believed they would be the best person in the hospital organization to speak to the nursing models of care delivery and intraprofessional practice within their institutions. If an email address for the nursing leader was provided on the website, the research assistant (RA) sent an email with the letter of information and consent attached to see if the nursing leader would be interested in participating in the study. If a nurse leader did not have an email address listed on the organization's website, the RA contacted the hospital switchboard to obtain the name of the organization's nurse leader and left the nurse leader a recruitment voicemail message. If agreeable, a date and time was arranged for the interviews. All participants were given \$10 gift card (sent electronically) as a thank you for participating in the study which was outlined in the letter of information and consent.

Data Collection

A 20-item interview guide comprised of semi-structured and structured questions about the nursing care delivery model, scope of practice for nurses, staff mix, workforce planning,

Prentice et al. 3

opportunities for shared governance and retention was used for this study. The interview guide was developed by the research team based on the literature and piloted with an expert nurse leader who suggested a change to one of the questions for clarity. Two demographic questions (the years of experience as a nurse leader and the number of clinical sites for which the nurse leader was responsible) were also posed.

Telephone interviews are both a convenient and effective way of collecting data (Musselwhite et al., 2006). One criticism of telephone interviews is that they do not foster a connection between the researcher and the participant. Yet Trier-Bieniek (2012) challenges this idea and suggests that telephone interviews for qualitative studies may yield more "honest" responses (p. 630) due to people becoming more use to virtual communication methods.

In the province of Ontario Canada, there were multiple government ordered shut-downs from mid-January 2021 until the end of June 2021 (https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Ontario) necessitating alternative methods of data collection. In addition, due to the provincial government guidelines, the university was not allowing any in-person research because of the government mandated shut-downs and is still encouraging researchers to consider if in-person research is the only option (Brock University, 2022).

Telephone interviews were conducted by a master's level graduate nursing student who was employed as a RA for this study. The RA did not have any prior relationship with any of the participants. The RA conducted the interviews in English between January 2021 and August 2021 and each interview lasted on average 46 min (ranged between 27 and 78 min). Each interview was digitally recorded and transcribed by another RA who was a fourth-year undergraduate nursing student. Each interview was transcribed on average within two weeks of the interview. All interview transcripts were uploaded to NVivo (2014) for analysis. After the tenth interview repetitive information was reported by the informants and no further interviews were sought.

Data Analysis

Conventional content analysis (Hsieh & Shannon, 2005) was used for this study. This analytical approach is used when describing a phenomenon and coding of the data is developed through iterative reading and reflection of the text (Hsieh & Shannon, 2005). The first two authors read all transcripts and developed codes independently and then met to discuss their coding and refined the codes together. The third author independently reviewed three manuscripts and developed codes. The authors then met to discuss the coding and any discrepancies were resolved by consensus. In the next step, codes and relationships among the data were examined. Some codes were merged and categories with subcategories

were formed. In the final step two overall themes were developed.

Trustworthiness of the Data

To ensure trustworthiness of the data, Tracy's (2010) criteria rigor, sincerity, and credibility were applied. Rigor was obtained through a purposive sampling of different nursing leaders from across the province. Sincerity was achieved through a clear transparent outline of methods used for the study. Credibility was accomplished through thick description of the findings, researcher triangulation during data analysis, and the use of data triangulation from the use of multiple participant voices.

Ethics

Ethics clearance to conduct this study was provided by the [Brock University # 20-068]. A letter of information and informed consent was emailed to each participant prior to beginning the study. At the start of the interview, the graduate student RA obtained a verbal consent and reminded the participants that they could refuse to answer any questions and could withdraw from the study at any time. A code number was assigned to each participant to ensure confidentiality.

Results

Sample Characteristics

Ten nursing leaders from nine hospital sites both in rural and urban settings (one site had two nursing leaders represented) participated in the study. The average length of time in the nursing leader role ranged from 5.5 months to 17 years. The number of hospital sites that the nursing leaders oversaw ranged from one site to a maximum of seven. Nursing care delivery models described by the participants included Primary Nursing, Total Patient Care, and hybrids of these models as well as unique models of care developed for the organization. Five nursing leaders noted that their nursing care delivery system changed to a Teams-based model during the COVID-19 pandemic in certain areas of the hospital system including some intensive care units (ICUs). This change was driven by an increase in number of patients and acuity as well as the nursing shortage.

Research Question Results

Two overall themes were developed from the data analysis: Fluidity of the Model and Tools of the Trade.

Theme #1 Fluidity of the Model. The first theme is comprised of elements that is the contextual factors, that refers to both the internal and external factors that impacted on the nursing care

delivery model while ensuring that the nursing care staff continued to work in a collaborative manner and a patient centered approach to providing care in hospital settings was followed. The dynamism of the model and need for fluidity to address the changing contextual factors reflects the need for a nursing care delivery model to be flexible and adaptable to change while ensuring nurses continue to work in a collaborative manner. Contextual factors such as changes in scopes of practice of nurses which are regulated by nursing regulatory bodies, and changes in funding available for the publicly funded healthcare system, also impacted the care delivery models and changes in staffing mix. Furthermore, the human resources policies of organizations and union rules affected skill mix changes, which impacted on the nursing care delivery system. For example, this skill mix changes may include replacement of RN positions with R/LPN positions or the addition of unregulated workers to the model of care delivery. Moreover, the nursing leaders recounted changes made in skill mix and in the nursing care delivery model to meet patient care needs and provide quality patient care while maintaining accountability during the COVID-19 pandemic. For example, moving to a Teams-based model of care delivery model further highlighted the importance of intraprofessional collaboration. Nursing leaders noted that the nursing care delivery model may have been adjusted over the years, but the need for intraprofessional collaboration and essential aspects of the model stayed the same. Figure 1 shows contextual factors that impact nursing care delivery models. Participant 2 provided an example of how the change in scope of practice of the R/LPN impacted the care delivery model:

And so, the principles of the model are sound today, as they were ten years ago. What has evolved is one of the examples you raised, which is the R/LPN scope of practice continues to evolve. We don't have to go in and change the model principles. We just have to keep up with the current scope and make sure that we are working with our managers and our staff, so they know what's in and out of their scope. So that's where the flexibility comes.

Being a publicly funded healthcare system can also have an impact on care delivery systems especially when cost cutting measures are in effect, or the mandate to ensure the right caregiver is caring for the right patient. In times of cost constraint, nursing leaders may need to examine scope of practice for the nursing staff and staff mix against their nursing care delivery models. This may result in nursing roles being changed or replaced. Participant 4 addresses the impact of funding on the nursing care delivery model and skill mix when caring for patients.

Certainly anytime, and particularly again, going back seven or eight years ago when the funding model changed dramatically, and we needed to be thinking about how we spent our money and making sure that we were maximizing scope of practice. There were some situations where RN roles were replaced with R/LPN roles. Again, trying to match the type

of work that needed to be done with the right person to do that type of work.

Nurse leaders mentioned they must consider hospital's human resources policies and union rules when making any changes to the nursing care delivery model. Participant 3 provides an example.

Anytime you make a change in your RN R/LPN roles again, you have to go through the collective agreement and go through HR [human resources] and work with the union on that. So, if we want to reduce RNs in one area and increase the R/LPN ratio, we have to work with our HR and our union partners to do that.

Participant 7 further elaborates on factors that must be considered when changing skills mix within care delivery models.

...on a clinical unit where you have a patient assignment and it affords the opportunity for either an RN or R/LPN to manage that patient complement, maybe not necessarily the other RN expectations in their scope, but from a practice place. Then you could interchange and assign the nurses in either in either frame or either context, but you have to do that within the context of the union language. So, if we got a sick call for example, and the sick call was an R/LPN, we would have to go through all of our R/LPN's before we would interchange an RN thereafter for that assignment.

Data for this study were collected during the COVID-19 pandemic. The nursing leaders commented on the continuous need to revise nursing care delivery models in order to meet patient needs taking in consideration the nursing shortages that resulted from the pandemic.

More recently with the pandemic, we are moving to a more team-based model in the ICU's. In the NICU, like the neonatal intensive care unit, they're pretty much still RN focused, one to one care. But I would say in our ICU we are moving to a team-based model as well. (Participant 8)

When we talk about the care, we tend to focus on what's the ratio and what's the skill mix.... And you know it's been interesting because the pandemic has certainly highlighted some of the challenges. And as we have been asked to, you know, to actually stretch our resources and the need to talk about team nursing or what I call sometimes modular nursing. It has surprised me how foreign a concept that seems to like most of the leaders and most of our staff. (Participant 6)

Theme # 2 Tools of the Trade. The second theme describes the tools that are used in hospitals to promote or encourage intraprofessional care and indirectly promote patient safety. Inherent in this theme are elements such as the electronic

Prentice et al. 5

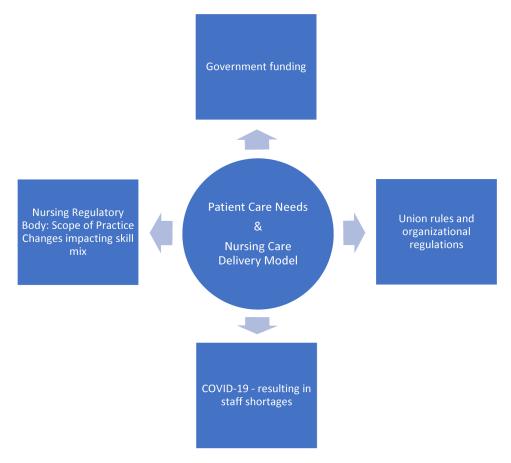


Figure 1. Contextual factors impact on nursing care delivery models.

documentation systems used in acute care hospitals, safety huddles, and at the organizational level, work force planning and shared governance councils. Despite the type of nursing care delivery models present in their respective organizations, all participants addressed tools they use in their organizations to promote intraprofessional and interdisciplinary care as well as patient safety. Tools such as electronic documentations systems and electronic Kardexes can be easily accessed to learn about the patient and facilitate communication among team members. Other electronic tools such as secure chat lines for discussing patient care needs among health care staff are another example of a communication tool.

Nurse to nurse safety huddles or bedside safety checks during patient handover at shift change provides a tool for intraprofessional communication.

And that they have to go through the safety check, so highrisk meds, and is the patient a fall risk and other things like that. Check all the IV lines and any safety features, and then that's when they would communicate, you know. What's coming up? The patients got tests coming up or patient needs to family contact tonight or whatever. So, we try to accomplish the communication that way. (Participant 2)

At the organizational level, nursing care delivery models are also influenced by the number of staff available. Therefore, strategic workforce planning, as discussed by Participant 3 in the excerpt below, sound onboarding processes and strategies to retain nursing staff are important as the ability to maintain a full complement of nursing staff and promote intraprofessional collaboration which in turn supports patient safety.

Workforce planning is both strategic and can be done on a strategic basis, on a yearly basis where we look at anticipated retirements, normal attrition maternity leaves, those that are known and perhaps assumed to be depending on the age group of those nurses. Who, you know, your sick leaves, your long-term sick leaves, your disabilities. Those are all taken into context when we're developing like an overall systemic workforce planning initiative. When I came at that time there was only one intake of staff a year. (Participant 3)

Finally, shared governance councils is another tool that organizations can use to promote collaboration among team members. Shared governance councils can either be intraprofessional or interprofessional. It provides nursing staff with an opportunity to discuss their concerns, as well as

promote collegiality with other healthcare professionals, which in turn can improve team communication and collaboration. Participant 2 shares their organizations' experience with nursing practice committees.

And the other thing we have which all hospitals have is we have a clinical nursing practice committee which is representatives from every unit with an alternate backup member that meets monthly and that's all frontline nurses and myself and our chief nurse lead that with my practice team. And every year in the fall, we brainstorm with them. In the first meeting what nursing issues are important to them. (Participant 2)

Discussion

The aim of this study was to describe how nursing care delivery models promote intraprofessional collaborative care. We found that there are many models of care delivery being used in the hospital systems that were studied and these care delivery models have been adjusted over the years depending on contextual factors and resulting in hybrid models. The fluidity or dynamism of these models is helpful in addressing changes in patient care needs and staffing mix. Despite the fluidity of the models and changes in skills mix and care delivery systems, the need to provide tools to ensure intraprofessional collaboration is indispensable.

It is evident that all the nursing leaders implemented tools to promote both intraprofessional and interprofessional collaboration at their hospitals. Investment in electronic communication tools and implementation of nurse-to-nurse bedside handovers, which also serve as important safety checks, are examples of integration of collaborative practices as well as measures to ensure patient safety. These examples of communication tools were not nursing care delivery model dependent and were implemented in some form at each hospital system. Although some of these communication tools are not new, they are integral to ensure effective communication (Freel & Fleharty, 2021; Stewart & Hand, 2017) which is an important aspect of intraprofessional collaboration and essential to promote patient safety.

A surprising finding was that half of the nurse leaders mentioned that they had moved to a Teams-based nursing model of care delivery because of the COVID-19 pandemic and the subsequent nursing shortages. The Team-based nursing model was introduced in the 1950s (Fairbrother et al., 2010) and is an advantageous model as it promotes nurses working together intraprofessionally and collaboratively, sharing the patient workload as well as supporting new nursing graduate team members. The need for flexibility in a care delivery model has never been as essential as now when the pandemic caused chaos because of an increased hospitalization rate. The nursing staff exhaustion and nursing shortage that was exacerbated by the pandemic (Buerhaus, 2021; Credland, 2021) further exhibits the need

for flexibility in models of care delivery. With a Team-based nursing care delivery model different skill mixes can be used (e.g., professional nurses as well as unregulated healthcare workers), and more experienced nurses can support new graduate nurses, which is a benefit of this model. Moreover, shared responsibility for the care of the patients assigned to the team can be seen as an advantage, especially in times of nursing shortages.

Further research could look at the impact on staff of retention and the changing of models and what the Team-based models of nursing looked like during the pandemic. Is a Team-based model going to be the fall-back care delivery model in times of nursing shortages? As models of care delivery fluctuate and new hybrid models are developed with different skill mixes, it is important to note that elements such as intraprofessional collaboration and attention to outcomes such as patient safety are crucial. The need has never been greater for units to invest in nurses as a method of both recruitment and retention for the purpose of patient safety and healthy workplaces.

Study Strengths & Limitations

This study adds to the literature that examines the different types of nursing care delivery models and the methods used to promote intraprofessional collaboration. Although the study was conducted in a large province in Canada with a purposeful sample of nursing leaders representing both urban and rural hospital systems, it was still undertaken in one province and therefore the findings may not be reflective of all nurse leaders' experiences in Canada. Another limitation is that participants were initially identified through their respective hospital's websites and if their website did not have information about the nursing care delivery model they would not be contacted, which could result in missing potential participants. Participants shared their individual perspectives, and this may not reflect all nurse leaders' experiences. In addition, because this study provided nurse leaders' perspectives of intradisciplinary collaboration, the perspectives of front-line nurses may be different. The study was also conducted during the COVID-19 pandemic which may also have altered nurse leaders' perspectives.

Implications for Practice

Any nursing care delivery model implemented in a hospital system must be fluid and adaptable to contextual factors such as changes in staffing mix changes, patient acuity or as seen in this study, able to respond to unplanned events such as a pandemic. Nursing leaders must be knowledgeable of and support implementation of new communication and practice technologies that enhance intraprofessional collaboration. This may also involve facilitating time for education on newly implemented communication technologies and team building sessions.

Prentice et al. 7

Conclusions

This study explored nursing care delivery models that promoted intraprofessional collaborative care. We found that nursing care delivery models must be adaptable in order to respond to changes in contextual factors; this was evident during the COVID-19 pandemic when nursing leaders discussed the need to respond quickly to address patient care needs and staffing challenges. Furthermore, all the nursing leaders reported that they implemented various tools to promote intraprofessional collaborative care regardless of the type of nursing care delivery model used in the organization.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Brock University Explore Grant.

ORCID iD

Dawn Prentice https://orcid.org/0000-0003-2461-785X

References

- Brock University. (2022, September). *COVID-19 guidelines and considerations for completing REB applications for in-person research*. [name of university website blinded for review].
- Buerhaus, P. I. (2021). Current nursing shortages could have long-lasting consequences: Time to change our present course. *Nursing Economics*, *39*(5), 247–250.
- Canadian Institute for Health Information. (2017). Regulated nurses, 2016. https://www.cihi.ca/sites/default/files/document/ regulated-nurses-2016-report-en-web.pdf
- Canadian Institute for Health Information. (2020). Nursing in Canada, 2019: A lens on supply and workforce. https://www.cihi.ca/sites/default/files/rot/nursing-report-2019-en-web.pdf
- Canadian Nurses Association. (2020). Intra-professional collaboration. Position statement. https://hl-prod-ca-oc-download.s3-cacentral1.amazonaws.com/CNA/2f975e7e-4a40-45ca-863c5eb f0a138d5e/UploadedImages/documents/CNA-Position-Statement_Intra-Professional-Collaboration.pdf
- Credland, N. (2021). ICU Nursing shortage can no longer be ignored. *Emergency Nurse*, 29(1), 14. https://doi.org/10.7748/ en.29.1.14.s12
- Dougherty, M., & Larson, E. (2010). The nurse-nurse collaboration scale. *Journal of Nursing Administration*, 40(1), 17–23. https://doi.org/10.1097/NNA.0b013e3181c47cd6
- Dickerson, J., & Latina, A. (2017). Team nursing: A collaborative approach improves patient care. *Nursing*, 47(10), 16–17. https://doi.org/10.1097/01.NURSE.0000524769.41591.fc
- Dubois, C.A., Damour, D., Tchouaket, E., Clarke, S., Rivard, M., & Blais, R. (2013). Associations of patient safety outcomes with models of nursing care organization at unit level in hospitals.

- International Journal for Quality in Health Care, 25(2), 110–117. https://doi.org/10.1093/intqhc/mzt019
- Fairbrother, G., Jones, A., & Rivas, K. (2010). Changing model of nursing care from individual patient allocation to team nursing in the acute inpatient environment. *Contemporary Nurse*, *35*(2), 202–220. https://doi.org/10.5172/conu.2010.35.2.202
- Fowler, J., Hardy, J., & Howarth, T. (2006). Trialing collaborative nursing models of care: The impact of change. *Australian Journal of Advanced Nursing*, 23(4), 40–46.
- Freel, J., & Fleharty, B. (2021). Standardizing handoff communication. An electronic tool helps ensure care continuity and reduces miscommunication. *American Nurse Journal* 16(3), 30–33.
- Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. *Human Reproduction*, *31*(3) 498–501. https://doi.org/10.1093/humrep/dev334
- Havaei, F., MacPhee, M., & Dahinten, S. (2019). The effect of nursing care delivery models on quality and safety outcomes of care: A cross-sectional study of medical-surgical nurses. *Journal of Advanced Nursing*, 75(10), 2144–2155. https://doi. org/10.1111/jan.13997
- Hsieh, H. F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687
- Jones, K. L., Johnson M. R., Lehnertz A. Y., Kramer R. R., Drilling K. E., Bungum L. D., & Bell S. J. (2022). Rapid deployment of team nursing during a pandemic: Implementation strategies and lessons learned. *Critical Care Nurse*, 42(3), 27–36. https://doi.org/10.4037/ccn2022399
- Ma, C., Hye Park, S., & Shang, S. (2018). Inter- and intradisciplinary collaboration and patient safety outcomes in U.S. Acute care hospital units: A cross sectional study. *International Journal of Nursing* Studies, 85, 1–6. https://doi.org/10.1016/j.ijnurstu.2018.05.001
- Mhawish, H. A., & Rasheed, A. R. (2022). Staffing critical care with nurses amid the COVID-19 crisis: Strategies and plans. *International Nursing Review*, 69(3):369–374. https://doi.org/ 10.1111/inr.12738
- Musselwhite, K., Cuff, L., McGregor, L., & King, K.M. (2006). The telephone interview is an effective method of data collection in nursing research: A discussion paper. *International Journal of Nursing Studies*, 44(6), 1064–1070. https://doi.org/10.1016/j.ijnurstu.2006.05.014
- Neergard, M. A., Olesen, F., Andersen, R. A., & Sondergaard, J. (2009). Qualitative description the poor cousin of health research? *BMC Medical Reach Methodology*, 9(52). https://doi.org/10.1186/1471-2288-9-52
- NVivo qualitative data analysis software; QSR International Pty Ltd. Version 10, 2014.
- Parreira, P., Santos-Costa, P., Neri, M., Marques, A., Queirós, P., & Salgueiro-Oliveira, S. (2021). Work methods for nursing care delivery. *International Journal of Environmental Research and Public Health*. 18(4), 2088. https://doi.org/10.3390/ijerph18042088
- Registered Nurses Association of Ontario. (2016). RNAO Healthy Workplace Best Practice Guidelines Project. *Intraprofessional collaboration among nurses*. https://rnao.ca/bpg/guidelines/intra-professional-collaborative-practice-among-nurses
- Sandelowski, M. (2000). Whatever happened to qualitative description? Research in Nursing & Health, 23(4), 334–340. https://doi.org/10. 1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G

Stewart, K. R., & Hand, K. A. (2017). SBAR, communication and patient safety: An integrated literature review. *MedSurg Nursing*, 26(5), 297–305.

- Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry 16*(10), 837–851. https://doi.org/10.1177%2F1077800410383121
- Trier-Bieniek, A. (2012). Framing the telephone interview as a participant-centred tool for qualitative research: A methodological
- discussion. *Qualitative Research: QR*, 12(6), 630–644. https://doi.org/10.1177/1468794112439005
- Valentine, M., Nembhard, I., & Edmondson, A. (2015). Measuring teamwork in health care settings: A review of survey instruments. *Medical Care*, 53(4), 16–30. https://doi.org/10.1097/MLR.0b013e31827feef6
- World Health Organization. (2020). State of the world's nursing 2020. https://www.who.int/publications/i/item/9789240003279