

**THE DEVELOPMENT OF A PRECEPTOR RESOURCE MANUAL FOR THE
CRITICAL CARE NURSING PROGRAM IN NOVA SCOTIA**

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A report submitted to the School of Graduate Studies in partial fulfillment of
the requirements for the degree of

Master of Science in Nursing

Faculty of Nursing

Memorial University of Newfoundland

July 2024

St. John's, Newfoundland and Labrador

Abstract

BACKGROUND: In nursing, a preceptor is assigned to a learner to provide teaching, support, supervision, and feedback. They effectively support learners in acquiring clinical knowledge and skills, often bridging the theory-practice gap. Within critical care environments, preceptors can assist learners in developing critical thinking skills, preventing transition shock, and increasing their clinical competence. Preceptorship is a vital component of The Critical Care Nursing Program (CCNP) at The Nova Scotia Health Learning Institute for Healthcare Providers, which prepares RNs to work in critical care settings throughout the province. However, a recent shift in the critical care nursing demographic in Nova Scotia has resulted in less experienced nurses taking on the preceptor role. As a result, there is now a lack of clarity among preceptors as to what constitutes preceptorship, the roles and responsibilities of a preceptor, suitable learning experiences/patient assignments, policies, and evaluation. In response, a preceptor resource manual was developed for the CCNP.

PURPOSE: To develop a preceptor resource manual for the Nova Scotia CCNP that contains specific program information and addresses the needs of current and future CCNP preceptors.

METHODS: The critical care preceptor resource development process included 1) an integrative literature review, 2) an environmental scan of existing preceptor resources used within specialty care programs, undergraduate nursing programs, and other healthcare institutions, and 3) consultations with current CCNP preceptors, CCNP faculty, and critical care CNEs. Knowle's Adult Learning Theory guided resource development.

RESULTS: Findings from the integrated literature review, the environmental scan, and the consultations both supported the need for a comprehensive resource manual and informed

development and method of delivery. A comprehensive critical care preceptor resource manual was developed to assist CCNP preceptors in supporting CCNP learners during clinical rotations. The resource included: 1) faculty contact information, 2) program description/program competencies, 3) proficiency level, 4) program delivery, 5) clinical overview/clinical guidelines, 6) developing critical thinking skills in learners, 7) roles and responsibilities, 8) effective feedback strategies, 9) when to contact CCNP faculty, 10) dealing with challenging learners/situations, and 11) CCNP clinical documentation.

CONCLUSION: A critical care preceptor resource manual for the CCNP will enhance preceptors' knowledge regarding the CCNP, program delivery, competencies, roles/responsibilities, providing feedback, developing critical thinking skills in learners, and dealing with challenging learners/clinical situations. Resource implementation will take place in the Fall of 2024, after which it is expected that preceptors will have increased knowledge of the CCNP and improved confidence in providing feedback to learners, fostering their critical thinking skills, and dealing with challenging situations in collaboration with the CCNP faculty.

KEYWORDS: *preceptor, critical care, resource, nursing.*

Acknowledgments

I want to express my heartfelt gratitude to my supervisor, Dr. Chantille Isler, for their unwavering support, encouragement, invaluable guidance, and patience throughout this journey. I am deeply thankful for your mentorship, which has shaped my work and writing.

I want to thank my fabulous colleagues and leadership team at the Nova Scotia Health Learning Institute for Healthcare Providers, who supported me in completing this project.

My two exceptional children, Easton and Elin, are for whom I completed this degree. They keep me going even on challenging days. I want them to know we should never give up, even when faced with adversity.

I want to thank all the CCNP preceptors, who are appreciated immensely by our faculty and learners. Being a preceptor is not a small undertaking, and you are valued.

Finally, I would like to thank all the ICU patients I have enjoyed caring for over my career. Caring for patients and families during the most vulnerable time of their lives is an honor. I hope to impart this to all the critical care nurses I instruct and mentor.

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Introduction

Before the COVID-19 pandemic, nursing shortages in Canada were predicted nationwide across the workforce (Canadian Federation of Nurses Unions, 2022). In response to these shortages, there has been an increase in new graduates and less experienced RNs working in specialty care areas (Baudoin et al., 2022). Historically, preceptorship within specialty care areas was reserved for more senior and experienced Registered Nurses (RNs), often combined with a preceptor course offering (R. Rizcallah, personal communication, January 2024). Preceptors in critical care play a vital role in assisting the transition of advanced beginner RNs into independent clinical practitioners through their guidance as mentors, colleagues, and teachers at the bedside (Macey et al., 2021). With the change in the critical care RN demographic, less experienced and newer graduate RNs are taking on the preceptor role.

The Nova Scotia Health Learning Institute for Healthcare Providers (Learning Institute), formerly known as the Registered Nurses Professional Development Centre (RNPDC), was established in 2003 and offers a variety of specialty programs and courses to nurses and other allied healthcare professionals. The Learning Institute is provincially funded by the Department of Health and Wellness and falls under the Interprofessional Practice and Learning (IPP&L) Portfolio at Nova Scotia Health (NSH). The Critical Care Nursing Program (CCNP) prepares RNs to work in critical care settings. This program offers self-directed, online learning with live classroom and in-person skills and simulation sessions. The program is delivered over a 13-week (full-time) and 35-42-week (part-time). CCNP faculty facilitate clinical rotations for full-time and part-time registered nurse learners. Clinical rotations for the CCNP program consist of 14 12-hour precepted shifts.

Throughout informal discussions with Clinical Nurse Educators (CNEs), preceptors, and learners, I identified a knowledge deficit within these specialty care areas concerning what constitutes preceptorship, the roles and responsibilities of a preceptor, suitable learning experiences/patient assignments, policies, and evaluation. The current document provided to learners to share with preceptors encompasses information regarding the CCNP course documentation, remediation, and clinical streams, as well as brief outlines of learner, preceptor, and faculty responsibilities related to clinical. This document lacks valuable information for new preceptors on their roles and responsibilities, learning theories, relationship-building, and providing feedback. As the subject matter expert for the CCNP program, critical care, and the preceptorship of critical care learners, I redeveloped the current “CCNP Guidelines for Preceptors” document into a resource manual for preceptors featuring these essential aspects. To ensure the resource was comprehensive, I conducted a literature review, environmental scan, and consultations with key stakeholders. The information gathered through these methods, along with Knowle’s Adult Learning Theory (1978), guided the development of a preceptor resource manual that CCNP preceptors can use in critical care units across Nova Scotia.

Objectives

The aim of this practicum project is to develop a comprehensive resource manual to support RNs who perform the preceptor role to CCNP learners in the clinical practice setting.

The key practicum objectives are:

1. To identify the best practices for precepting registered nurse learners in critical care nursing.
2. To describe methods used by others in developing a preceptor resource.
3. Identify and analyze existing preceptor resources at the Learning Institute, including CCNP and other academic and professional institutions.
4. To identify the recommendations of CCNP faculty for inclusion in a preceptor resource.
5. To identify preceptors' learning needs and recommendations for inclusion in a preceptor resource.
6. To identify the recommendations of critical care CNEs for inclusion in a preceptor resource.
7. To develop a resource manual for preceptors of CCNP learners.
8. To demonstrate advanced nursing practice competencies, such as research, education, and leadership.

Overview of Methods

This practicum project involved three distinct methods. First, I conducted an integrative literature review to determine (a) the best practices and benefits of preceptor support in critical care, (b) the role of preceptor support for new nurses in critical care, (c) methods used in developing preceptor resource manuals or materials, and (d) content recommendations for a preceptor resource. Next, I conducted an environmental scan of the internal and external preceptor materials to the Learning Institute on resources currently provided to preceptors at NSH and across Canada. Finally, consultations with three groups were conducted. Consultations were completed with key partners by distributing an online survey to CCNP preceptors and conducting semi-structured interviews with critical care CNEs and CCNP faculty.

Findings from the literature review, environmental scan, and consultations with key partners confirmed the need for a preceptor resource manual to support critical care nurses serving as CCNP preceptors. These methods provided valuable information on content inclusions and effective resource delivery methods. The data collected through these methods provided direction for developing a preceptor resource manual for the CCNP and assisted in meeting the practicum objectives.

Summary of the Literature Review

A comprehensive and integrative review of peer-reviewed and grey literature was conducted to inform the practicum project using electronic databases, including CINAHL, Nursing and Allied Health, PubMed, the Cochrane Library, Ovid Medline, and Google Scholar/search engines. For electronic databases, the search terms “preceptor*,” “nurs*,” “critical care,” “intensive care unit,” and “resource manual” were used. Grey literature was

searched using Google's search engine, using the search phrases “preceptor resource manual” and “nursing.” Reference lists of relevant studies were searched to identify the possibility for inclusion. For grey literature, Google search results were scanned to show the title and introduction of relevant items.

Studies were retrieved for full-text review if the importance of precepting RN learners in critical care, best practices for preceptors in critical care or intensive care units (ICUs), or methods to develop a resource for preceptors were discussed. Sixty-three articles were selected for full-text reading. All studies were published after the year 2000. Of these sixty-three articles, eleven were chosen for critical appraisal. Studies selected were critically appraised using the Public Health Agency of Canada (PHAC) Critical Appraisal Toolkit for analytic, descriptive studies and literature reviews (2014). Qualitative studies were analyzed using the Critical Appraisal Skills Programme (CASP) Qualitative Research Checklist (2018). Of the eleven articles, two were scoping reviews (Hardie, Darley, et al., 2022; Willers et al., 2021), three were systematic literature reviews (Schuelke & Barnason, 2017; Windey et al., 2010; Wu et al., 2018), and two were integrated literature reviews (Innes & Calleja, 2018; Smith et al., 2022). Studies were displayed in literature summary tables. Please see Appendix A for a full copy of the literature review.

Results

Findings from the literature review provided valuable information to support the need for a comprehensive preceptor resource, the benefits, and best practices for precepting RN learners in critical care, methods used by others in creating a useful preceptor resource, and content recommendations.

Need for and Benefits of a Preceptor Resource

The need for a preceptor resource was highlighted in six studies retrieved for this literature review with the rationale that preceptors may not be able to adequately perform their roles without consistent guidance, such as that provided by a preceptor manual or preparation course (Chen et al., 2021; Clipper & Cherry, 2015; Innes & Calleja, 2018; Kamolo et al., 2017; Luhanga et al., 2010; Rush et al., 2019).

It was also found that preceptors are instrumental in helping new nurses successfully transition to practice in clinical environments, including minimizing transition shock and fostering critical thinking skills (Chen et al., 2021; Clipper & Cherry, 2015; Duchscher, 2009; Innes & Calleja, 2018; Kaddoura et al., 2013; Rush et al., 2019; Sorensen & Yankech, 2008; Swinny, 2010; Willers et al., 2021), especially within the high-stakes area of critical care (Macey, 2021).

Best Practices for Precepting Registered Nurse Learners in Critical Care

The benefits preceptor support can provide to learners in critical care include creating positive and supportive learning environments through role modeling, providing constructive feedback, and displaying professionalism (CNA, 2004; Elmers, 2010; Nyhagen & Strøm, 2016). The supportive environment preceptors provide can reduce stress and promote professional development in novice and NGNs (Chen et al., 2021; Innes & Calleja, 2018). Constructive feedback is a crucial element of successful precepting in the ICU (Elmers, 2010), and one study noted that positive feedback from preceptors increases learner confidence and self-esteem and encourages learners to actively participate in patient care (Nyhagen & Strøm, 2016). According to the CNA (2004), preceptors in critical care can serve as role models to learners by demonstrating professionalism, effective communication, and evidence-based practice.

Methods Used in Developing Preceptor Resource Manuals or Materials

From the review, it was determined that the current literature must be evaluated to create a useful resource for preceptors. Three literature reviews (Foy et al., 2013; Mann-Salinas et al., 2014; Nash & Flowers, 2013) were conducted by researchers to discover what is known about preceptorship, preceptors' needs, resources, and areas for future research prior to developing preceptor training programs. Conducting a needs assessment of those using the resource is a crucial step in development. Two studies found that knowing the learning needs and difficulties preceptors encounter is crucial to creating a helpful preceptor program or resource (Vos & Trewet, 2012; Williams et al., 2021). One study by Luhanga et al. (2010) highlighted methods for delivering preceptor materials. These include workshops, courses, written manuals, self-directed learning packages, and web modules (Luhanga et al., 2010). Within one study, it was found that by offering a choice of delivery methods, such as live sessions, on-demand modules, webinars, and online platforms, institutions can meet the preferences of preceptors for flexible and accessible learning opportunities (Enderby et al., 2021).

Content Recommendations

Preceptor resources must cover all information necessary for the preceptorship of RN learners. Two studies included in this review identified learners' awareness of course objectives, expectations, and goal setting as learning needs of preceptors (Boyce et al., 2022; Luhanga et al., 2010). Six studies identified feedback and communication skills as learning needs of preceptors (Chan et al., 2019; Foy et al., 2013; Luhanga et al., 2010; Nash & Flowers, 2017; Williams et al., 2021; Windey et al., 2015), and two studies noted the development of critical thinking skills and judgment as learning needs (Luhanga et al., 2015; Windey et al., 2015).

Summary of Environmental Scan

An environmental scan of the internal and external preceptor materials to the Learning Institute was conducted to provide valuable information on resources currently provided to preceptors at NSH and across Canada.

The Learning Institute's private drive was searched for clinical documents related to preceptors or documents provided to preceptors. Additionally, Nurse Educators (NEs) within the Learning Institute provided information on the delivery method of their preceptor materials. Resources from 5 specialty care programs were included in the internal environmental scan. These programs were the CCNP program, the Emergency Nursing Program (ENP), the High-Acuity Nursing Program (HANP), the Family Practice Education Nursing Program (FPENP), and the Perioperative Nursing Program (PONP). A comparison was made between these resources and the current CCNP preceptor guide to inform what should or should not be included in the developed preceptor resource manual. Data was obtained via the Google search engine for external resources related to preceptorship at the academic or institutional level. The external environmental scan included five preceptor resources at other academic/institutional levels in Canada. Dalhousie School of Nursing (DAL SON), the University of Prince Edward Island (UPEI SON), Nipissing University, the Canadian Association of Medical Radiation Technologists, and Louis Brier Home and Hospital were included in the search. This search aided in identifying current practices for preceptor resources external to the Learning Institute and identified differences amongst programs.

Data collected for this environmental scan was organized into tables, and similarities/differences were identified in the content of preceptor resources and the delivery modes of the resources. Data was analyzed for the preceptor learning needs identified in the

literature review, such as course objectives and expectations, communication and feedback skills, and developing critical thinking skills. A complete copy of the environmental scan report can be found in Appendix B.

This environmental scan determined that the “CCNP Guidelines for Preceptors” document lacks the content of other preceptor resources at the Learning Institute, and the delivery method was less than ideal. Preceptor resources provided by other Learning Institute programs contained essential information identified as learning needs by preceptors in the literature review. Additionally, these resources were provided to preceptors ahead of clinical rotations. Preceptor resources provided at the institutional and academic levels across Canada were found to contain the learning needs identified in the literature review and were available online as PDFs. Therefore, the results of this environmental scan supported the need to redevelop the current “CCNP Guidelines for Preceptors” document into a preceptor resource manual that reflects preceptor learning needs and is delivered in an accessible format.

Summary of Consultations

Consultations for this practicum project occurred with three groups: 1) CCNP preceptors, 2) critical care CNEs, and 3) CCNP faculty. These consultations were conducted to help identify specific areas or gaps in the current “CCNP Guidelines for Preceptors” document from the perspective of CCNP preceptors, CNEs, and CCNP faculty and identify specific content recommendations and delivery modes for the developed preceptor resource manual. By agreeing to the survey terms and interview, participants consented to participate in the consultations. Please see Appendix C for a complete copy of the Consultation Report.

A convenience sample of 135 preceptors were invited via email to participate in an online survey, and 37 preceptors completed the survey, with a response rate of 27%. The survey comprised twelve questions that were either demographic, dichotomous, Likert scale, or multiple-choice type. The collected characteristics provided information about the demographics of current CCNP preceptors related to their practice, experience, and attendance at a previous preceptor course. Five-point Likert-type scale questions were used to determine the preceptor's level of knowledge related to the CCNP course flow and competency areas, the CCNP CCR and learner evaluation, and the level of the advanced beginner as it relates to the CCNP learner. Preceptors were also asked to rate the usefulness of the current "CCNP Guidelines for Preceptors" to assist in precepting CCNP learners. Finally, multiple-choice questions asked participants what content would be a helpful addition to a preceptor resource for CCNP and preferred delivery modes. The results of preceptor surveys were analyzed using descriptive statistics, including frequencies and percentages

Three educators working in critical care and three CCNP faculty responded to the recruitment email and agreed to participate in a 20-minute MS Teams interview. Interview notes from CNE and CCNP faculty consultations were transcribed electronically and saved in Word. Content analysis was used to develop themes from the interview data.

Results

CNE interviews and the survey findings revealed a lack of critical care experience amongst CCNP preceptors, with 32% of surveyed preceptors having less than two years of ICU experience and 59% having less than 18 months of experience before serving as a CCNP preceptor. Despite lacking experience in their specialty care areas, CCNP preceptors self-reported feeling prepared to serve in their roles with learners. CNEs stated that a small

percentage of their nursing staff have completed a preceptor preparation course; however, the survey results indicated that 54% of participants had previously completed a course. This may be due to the self-report factor of the course or the fact that the survey was distributed provincially and interviews were completed with CNEs affiliated with one large tertiary facility. These findings may not represent the entire CCNP preceptor population.

Most participants (68%) indicated that their learners had shared the “CCNP Guidelines for Preceptors” document with them. This finding contrasted with the themes noted in the CNE and CCNP faculty interviews. Interviewed CNEs and CCNP faculty felt this document was not well known in the critical care areas and that many preceptors had never heard of the document. Overall, the survey findings revealed that the current “CCNP Guidelines for Preceptors” is useful (n=22) and that most participants self-report agreeing or strongly agreeing with being knowledgeable in the CCNP course flow, CCNP evaluation, and the proficiency level of the advanced beginner. One theme revealed within the CCNP faculty interviews was a lack of understanding of CCNP clinicals during faculty/preceptor interactions, including the level of the advanced beginner. CNEs, CCNP faculty, and preceptors report that the “CCNP Guidelines for Preceptors” document is useful; however, themes developed in the interviews include explanations, such as a need for curriculum, course flow, and program option overviews.

The most selected helpful additions to a preceptor resource manual by preceptors were developing learners' critical thinking skills (n=26), dealing with challenging learners (n=20), developing effective communication strategies, and providing constructive feedback (n=20). These “soft skills” were also suggested for inclusion by the interviewed CNEs and CCNP faculty. Delivery methods suggested by preceptors, CNEs, and CCNP faculty were 1) email

(n=35) and 2) resources available on the unit (n=21). CNEs and CCNP faculty also suggested email distribution and having a unit resource.

The consultations conducted for this practicum project provided valuable information from key partners involved in precepting CCNP learners, including preceptors, CNEs, and CCNP faculty. Having preceptors suggest content for inclusion in a redeveloped preceptor resource ensures that their learning needs are met and are in keeping with adult learning theory. As CNEs work closely with the CCNP program and assist in educating nurses, their thoughts and opinions reflect the needs of their units. Finally, CCNP faculty oversee all clinicals for CCNP learners. Therefore, they are knowledgeable of the needs and knowledge deficits of CCNP preceptors from personal encounters.

Summary of Resource

Findings from the literature review, environmental scan, and consultations were utilized to inform the development of a preceptor resource manual for the CCNP. The resource is titled *Preceptor Resource Manual: Critical Care Nursing Program*. Please see Appendix D for a complete copy of the resource. The developed resource contains faculty contact information, an outline of the knowledge-based curriculum, program competencies, program delivery methods, and the proficiency level of an advanced beginner in critical care. These topics are in keeping with the findings of the literature review on a preceptor's need for course information, objectives, and faculty contact, in addition to content suggested for inclusion by CNEs and CCNP preceptors. Clinical information, including the roles and responsibilities of learners, preceptors, and faculty, includes when to contact faculty and clinical documentation examples as appendices. Finally, the content recommendations identified in the preceptor survey with critical

care-specific strategies included are 1) developing critical thinking skills in learners, 2) effective feedback strategies, and 3) dealing with challenging learners and situations.

Knowles' Adult Learning Theory (1978) provided the theoretical framework for developing the resource manual for preceptors of CCNP learners. Preceptors are adult learners, and as such, those using the resource manual are autonomous and self-directed, wanting to be involved in the planning of their learning and should give input into learning materials and modes of delivery; therefore, the needs assessment/preceptor survey was instrumental in guiding this preceptor resource manual.

The developed resource is a PDF file that can be easily emailed to preceptors before the clinical period. This delivery method aligns with other Learning Institute programs and institutions outside the Learning Institute in the environmental scan. Additionally, this delivery method aligns with the preferences of the surveyed preceptors, CNEs, and CCNP faculty. The resource manual is 34 pages long and is presented visually with flow charts and critical care-specific examples of strategies identified in the literature review and preceptor survey.

An overview of the CCNP program, including the competency-based methodology, the knowledge-based curriculum, program competencies, and delivery models, is provided to assist preceptors in understanding the program's structure, content, and outcomes CCNP learners attain at program completion. Throughout the resource, ongoing communication between the preceptor, learner, and faculty is emphasized. Preceptors are provided with faculty contact information to ensure they can easily access faculty when required. This includes an overview of when to contact faculty during clinical, including patient safety or professional concerns, program progression concerns, workplace injuries, or the need for additional support or guidance.

The roles and responsibilities of CCNP preceptors, CCNP faculty, and learners in clinical are reviewed. Clinical models and streams offered in the program are provided, along with clinical guidelines for the preceptor on their role within the models and clinical streams. Clinical documentation is reviewed in the manual, with appendices of the clinical documentation completed by the preceptor in clinical for reference. Examples of clinical progression are discussed to assist the preceptor with their clinical evaluation of the CCNP learner.

In keeping with preceptor and educator content suggestions, four strategies are provided to preceptors to foster critical thinking and clinical judgment in CCNP learners. These include 1) reflective learning using the FRAME and LEARN methods, 2) questioning, 3) One Minute Preceptor (OMP), and 4) the think-aloud method. All methods offer critical care specific examples to assist preceptors. Effective communication strategies and providing feedback were also identified as learning needs by preceptors and educators. Within this section of the resource, the importance of feedback for preceptors, including descriptions of effective feedback, why feedback is often withheld, and the consequences of withholding feedback for learners is emphasized. Preceptors are provided with three effective feedback models that are easy for those preceptors who are less experienced in providing feedback to use in busy clinical areas or for those preceptors who are more experienced in providing feedback and have more time for discussion. These methods are 1) the Feedback Sandwich, 2) Pendleton Rules, and 3) the R2C2 Feedback Model. Again, these methods are provided with critical care examples.

Finally, information is provided for preceptors of CCNP on the causes of difficulties that can be encountered in clinical and the impact of clinical difficulties on the learner and preceptor. Methods provided to assist preceptors in handling difficult learners and situations include 1) the

Steinart framework for dealing with difficult learners, 2) the formula for success, and 3) the P-E-T model.

Discussion of Advanced Nursing Practice Competencies

Throughout this practicum project, I have had the opportunity to demonstrate several of the advanced nursing competencies outlined by the Canadian Nurses Association (2019) framework for advanced nursing practice (ANP) for RNs. An APN is an RN or Nurse Practitioner (NP) who integrates graduate-level education with clinical knowledge and expertise to meet the health needs of individuals and populations (CNA, 2019). APNs can analyze and synthesize knowledge, explore theories, participate in and lead research, use their advanced competencies, and contribute to the nursing profession (CNA, 2019). Following graduate studies as an APN, I will consistently demonstrate my acquired competencies. As a nurse educator, I am committed to continuous professional development, a cornerstone of the ANP framework (CNA, 2019). According to the CNA (2019), the six competencies of APNs are: 1) direct comprehensive care, 2) optimizing health systems, 3) education, 4) research, 5) leadership, and 6) consultation and collaboration. Throughout this practicum project, I have demonstrated components of several of these competencies.

Research Competencies

As per the CNA (2019) framework, APNs commit to generating, synthesizing, critiquing, and applying research. For this project, an integrative literature review was conducted to evaluate, critique, and synthesize existing literature to inform the project's environmental scan and consultation portions and develop a preceptor resource for the CCNP. Data from the environmental scan was evaluated, critiqued, and synthesized to illustrate resources provided to

preceptors at the Learning Institute and across other institutions. The consultations conducted for this project provided the opportunity to evaluate the current practice of CCNP preceptors in light of the literature review and environmental scan findings. The interviews with CNEs and CCNP faculty enabled data collection and theme development.

Educational Competencies

The CNA (2019) attests that APNs are committed to the professional growth and learning of healthcare practitioners, including students. I demonstrated educational competencies in this practicum project by identifying the learning needs of preceptors in the literature review and the learning needs of CCNP preceptors in the consultation portion of this project. By identifying learning needs, I developed a resource for preceptors to CCNP learners to help meet those needs, thereby contributing to the professional growth of nurses serving as preceptors.

Leadership Competencies

APNs are organizational leaders and change agents, continuously seeking opportunities to improve care and nursing practice and promote APN (CNA, 2019). Within this competency, APNs evaluate organizational programs and apply project management theories to develop approaches to address issues (CNA, 2019). Through reviewing the literature, consultations, and collaboration with key partners, I demonstrated leadership competencies by identifying problems and initiating change by developing the resource manual to address the problems and challenges encountered by preceptors, CNEs, and CCNP faculty in critical care.

Next Steps

Following completion of the practicum project, the developed preceptor resource manual will be shared with the CCNP faculty for review. The resource will be available to CCNP

preceptors for the Fall 2024 clinical window. This resource will be provided electronically as a PDF and emailed to CCNP preceptors. The resource will also be shared with critical care CNEs and placed for reference in units. These delivery methods align with the needs assessment and recommendations from preceptors and CNEs. One goal would be to facilitate education sessions with CCNP preceptors across Nova Scotian critical care units to review the resource, offering the opportunity for questions. Future work will involve this evidence-informed resource manual adapted for use by other specialty care programs at the Learning Institute to assist preceptors broadly at Nova Scotia Health.

Resource evaluation will involve the Planning and Evaluation Consultant at the Learning Institute. With their assistance, an online anonymous survey will be distributed to CCNP preceptors via email to obtain data and feedback following the Fall/Winter/Spring 2024/2025 clinical windows. This survey will use multiple-choice and open-ended questions to obtain feedback on the usefulness and applicability of the preceptor resource manual in precepting CCNP learners.

Conclusion

Preceptors are vital in helping nurses successfully transition to independent practice and provide a positive and supportive environment within the stressful and unpredictable area of critical care nursing. In order to adequately fulfill their role, they require support and guidance, such as that offered by a resource manual. This practicum project aimed to develop a preceptor resource manual for the CCNP. With less experienced nurses fulfilling the preceptor role for CCNP learners, this manual's guidance will assist in addressing any knowledge gaps, improve the experience of preceptors and CCNP learners, and ultimately improve patient care.

Methods for this practicum project included an integrative literature review, internal and external environmental scans, and consultations with key partners. Findings supported the need to redevelop the current “CCNP Guidelines for Preceptors” document into an evidence-based resource manual reflective of learning needs, content suggestions, and preferred delivery methods.

The implementation and evaluation of the preceptor resource manual will be undertaken following the completion of this practicum project. Implementing the resource to CCNP preceptors will occur before the Fall 2024 clinical window. Following the implementation process, the Planning and Evaluation Consultant will assist in collecting evaluative feedback on the resource's usefulness for CCNP learners' preceptors.

This resource provides valuable information and strives to improve the overall preceptor/learner experience for the CCNP program. Enhancing the preceptorship experience aims to inspire continued participation among current CCNP preceptors, educate new preceptors, and contribute to the retention of skilled individuals.

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Appendix A: Literature Review

Abstract

BACKGROUND: In nursing, a preceptor is assigned to a learner to provide teaching, support, supervision, and feedback. They effectively support learners in acquiring clinical knowledge and skills often bridging the theory-practice gap. Within critical care environments, preceptors can assist learners in developing critical thinking skills, preventing transition shock, and increasing their clinical competence. However, there is a lack of clarity within specialty care areas concerning what constitutes preceptorship, the roles and responsibilities of a preceptor, suitable learning experiences/patient assignments, policies, and evaluation, given the change in nursing demographics. A preceptor resource manual will be developed to respond to these gaps in the current preceptor guide.

PURPOSE: To present a literature review that examined the need for a preceptor resource, the best practices for precepting registered nurse learners in critical care settings, and existing methods used by others in preceptor resource manual development.

METHODS: A comprehensive and integrative review of peer-reviewed and grey literature was conducted using electronic databases. Studies selected were critically appraised using the Public Health Agency of Canada (PHAC) Critical Appraisal Toolkit for analytic, descriptive studies and literature reviews (2014). Qualitative studies were analyzed using the Critical Appraisal Skills Programme (CASP) Qualitative Research Checklist (2018).

RESULTS: Sixty-three articles were selected for full-text reading after removing duplicates, applying inclusion criteria, and searching for articles in reference lists. All studies were published after the year 2000. Of these sixty-three articles, eleven were chosen for critical

appraisal. Seven were literature reviews, three were qualitative studies, and one was uncontrolled before-and-after study.

Keywords: preceptor resource, critical care, resource, best practices.

Development of a Preceptor Resource Manual for a Critical Care Nursing Program: A Literature Review

Many nursing programs incorporate clinical-based education into their curriculum, allowing learners to apply their knowledge and skills in patient-care settings (American Nurses Association, 2023). A crucial aspect of this clinical experience is the involvement of proficient preceptors, who are vital in facilitating the learning process (Duteau, 2011; McClure & Black, 2013). A preceptor is a registered nurse (RN) assigned to a learner to provide teaching, support, supervision, and feedback (Canadian Nurses Association [CNA], 2004; Duteau, 2011). When preceptors engage in a one-on-one relationship with learners in the clinical setting they can bridge the gap between theory, knowledge, and clinical practice (CNA, 2004; Duteau, 2011).

Several preceptor attributes are known to be effective in supporting learners in acquiring knowledge and skills in the clinical area (Registered Nurses Association of Ontario [RNAO], 2017). These qualities include proficiency and practical experience in their clinical roles, leadership skills, a positive outlook, and the ability to provide valuable feedback, as well as experience in teaching, serving as a role model, and facilitating various learning activities (CNA, 2004; Macey et al., 2021; McClure & Black, 2013; RNAO, 2017). According to the CNA (2004), the competencies of a preceptor include collaboration, personal attributes, facilitation of learning, professional practice, and knowledge of the setting. It is important to note that a preceptor differs from a mentor, although the terms are often incorrectly used interchangeably. A mentor engages in a voluntary and intentional relationship that focuses on the mentee's nurturing, growth, and development (CNA, 2004; RNAO, 2017). Preceptors, however, engage in a formal relationship, completing formative and summative evaluations of their preceptee, as opposed to mentors, who support nurses in a non-evaluative relationship (CNA, 2004).

Despite their important role in bridging the theory-to-practice gap of learners in the clinical setting, nursing preceptors often experience a lack of support and inadequate training for effective precepting (McClure & Black, 2013; Panzavecchia & Pearce, 2014). Preceptors have also identified workload demands, challenging learners, unclear expectations, unclear guidelines for providing feedback, and appropriate learning experiences as compounding challenges (Kalischuk et al., 2013). There has been a shift in the nursing demographic within specialty care areas, particularly critical care, since the COVID-19 pandemic as a result of burnout, post-traumatic stress disorder, and high turnover rates (Vogt et al., 2023). This shift has resulted in an influx of new graduates and less-experienced RNs practicing within critical care. Preceptorship roles, expectations, and support systems must be redefined and strengthened due to the presence of less experienced RNs who may have yet to develop the attributes and competencies of an experienced preceptor. This literature review aims to examine existing evidence on the importance of preceptorship in specialty nursing areas, specifically in critical care; best practices for precepting RN learners in critical care, and methods used by others to develop a preceptor resource will also be explored.

Background

The Nova Scotia Health Learning Institute for Healthcare Providers (Learning Institute), formerly known as the Registered Nurses Professional Development Centre (RNPDC), was established in 2003 and offers a variety of specialty programs and courses to RNs and other allied healthcare professionals. The Learning Institute is provincially funded by the Department of Health and Wellness and reports under the Interprofessional Practice and Learning (IPP&L) Portfolio at Nova Scotia Health (NSH). The Critical Care Nursing Program (CCNP), a specialty program at the Learning Institute, prepares RNs to work in critical care settings. The program

offers self-directed online learning combined with live classroom and in-person skills and simulation sessions over a 13-week (full-time) or 35-42-week (part-time) period. This program offers clinical rotations for full-time and part-time RN learners consisting of 14 12-hour precepted shifts.

Historically, the preceptorship role within specialty care areas was reserved for senior and experienced RNs. The institution often offered nurses serving as preceptors a preceptorship course before engaging in preceptorship activities. Preceptors in critical care play a vital role in assisting the transition of advanced beginner RNs into independent clinical practitioners through their guidance as colleagues and teachers at the bedside (Macey et al., 2021). However, due to the nationwide nursing shortage, there has been an increase in new graduates and RNs with less experience working in specialty care areas such as critical care. With the change in the critical care RN demographic, novice RNs are now taking on the preceptor role.

As a result, a knowledge deficit exists within these specialty care areas concerning what constitutes preceptorship, the roles and responsibilities of a preceptor, suitable learning experiences/patient assignments, policies, and evaluation. The current document provided to preceptors by CCNP learners includes information regarding the CCNP course documentation, remediation, and clinical streams, as well as brief outlines of learner, preceptor, and faculty responsibilities related to clinical. However, no information is provided regarding preceptor on their roles and responsibilities, learning theories, relationship-building, and providing feedback. Previously, nurses were required to obtain a preceptor preparation course before serving as preceptors to CCNP learners. To provide a positive preceptor-preceptee experience and ultimately improve the quality of patient care, these identified gaps in the current preceptor guide must be addressed.

The CCNP program and the Learning Institute aim to foster and enhance the preceptorship experience for critical care preceptors. Enhancing the preceptorship experience for CCNP preceptors involves improving the guide given to learners to share with their preceptors. The current preceptor guide will undergo redevelopment into a resource manual. This resource manual will be provided to preceptors by CCNP learners before entering the clinical area and shared with critical care clinical nurse educators (CNEs). In contexts with no established unit norms and support systems for preceptorship, the manual could be crucial for ensuring uniform preceptorship practices for CCNP learners across critical care units in Nova Scotia. The resource manual will be partially developed from the information gathered through this literature review. This literature review will be conducted to collect research that supports the need for the resource, highlight the importance of precepting RN learners in critical care, identify best practices for precepting RN learners in critical care settings, and describe methods used by others in the development of a preceptor resource manual. Specifically, it will provide direction for what needs to be included in a resource manual for CCNP preceptors at the Learning Institute for Healthcare Providers. This will lead to the development of an improved resource for preceptors in the CCNP program to provide valuable information and improve the overall preceptor/learner experience for the CCNP program. Enhancing the preceptorship experience aims to inspire continued participation among current CCNP preceptors, educate new preceptors, and contribute to the retention of skilled individuals.

Key questions to guide this literature review include:

- 1) What are the benefits of preceptor support in critical care environments?
- 2) What are the best practices for precepting RN learners in critical care?
- 3) What is the role of preceptor support for new practitioners in critical care?

- 4) Why are/is there a need for resources/training for preceptors in critical care?
- 5) What methods have been used by others in developing a preceptor resource manual?

Methods

A comprehensive and integrative review of peer-reviewed and grey literature was conducted using electronic databases including CINAHL, Nursing and Allied Health, PubMed, the Cochrane Library, Ovid Medline, and Google Scholar/search engines. For electronic databases, the search terms “preceptor*,” “nurs*,” “critical care,” “intensive care unit,” and “resource manual” were used. Grey literature was searched using Google's search engine, using the search phrases “preceptor resource manual” and “nursing.” Reference lists of relevant studies were searched to identify the possibility for inclusion. NSH Library services provided support through a literature search request. For grey literature, Google search results were scanned to show the title and introduction of relevant items. For this literature review, grey literature should feature preceptors and resources used to assist preceptors.

Preliminary screening of studies and abstracts was conducted to determine if studies met the inclusion criteria. Studies were retrieved for full-text review if the importance of precepting RN learners in critical care, best practices for preceptors in critical care or intensive care units (ICUs), or methods to develop a resource for preceptors were discussed. To be included in the literature summary table, studies had to include preceptor resource materials, methods, and areas for content inclusion to support preceptors. Articles were excluded if they were not relevant to the guiding questions of this review or if they were editorials and letters. Studies selected were critically appraised using the PHAC Critical Appraisal Toolkit for analytic, descriptive studies and literature reviews (2014). Qualitative studies were analyzed using the CASP Qualitative Research Checklist (2018).

Results and Discussion

A search from the CINAHL database yielded 360 results, and a search from Nursing and Allied Health yielded 34 results. Ovid Medline yielded 59 results. A search of the Cochrane Library database generated eight trials; however, they were irrelevant to the practicum project and, therefore, excluded. Google Scholar revealed ten results, which included dissertations and university reports. The reference lists of these projects were searched for appropriate articles. The following documents were found in a search of the grey literature: the Canadian Nurses Association (CNA) general guidance for preceptorship (2004) was included, as was the RNAO (2017) Mental Health and Addictions publication, CNA (2017) Code of Ethics for Registered Nurses, Canadian Association of Critical Care Nurses (2017) Standards for Critical Care Nursing Practice and the Nova Scotia College of Nurses (2023) guidelines for transition to practice, preceptorship, and mentorship. The preceptor handbooks for the University of Saskatchewan (n.d.) and Nipissing University (2018) were also reviewed.

Sixty-three articles were selected for full-text reading after removing duplicates, applying inclusion criteria, and searching for articles in reference lists. All studies were published after the year 2000. From these sixty-three articles, eleven articles were chosen for critical appraisal. Seven were literature reviews, three were qualitative studies, and one was uncontrolled before-and-after study.

Of the eleven articles, two were scoping reviews (Hardie, Darley, et al., 2022; Willers et al., 2021), three were systematic literature reviews (Schuelke & Barnason, 2017; Windey et al., 2010; Wu et al., 2018), and two were integrated literature reviews (Innes & Calleja, 2018; Smith et al., 2022). The literature reviews were appraised using the PHAC (2014) toolkit and were of medium-high quality. The three qualitative studies (Enderby et al., 2017; Luhanga et al., 2010;

Williams et al., 2021) were appraised using the CASP Qualitative Research Checklist (2018) and found to be of high quality. Luhanga et al. (2010) was a Canadian study of twenty-two RNs serving as preceptors to undergraduate nursing students in a mid-sized university. Enderby et al. (2017) and Williams et al. (2021) examined pharmacy preceptor experiences in various practice settings in the United States. Finally, the uncontrolled-before-and-after study of pharmacy preceptors in the United States (Vos & Trewet, 2012) was appraised using the PHAC (2014) toolkit as a weak design of medium quality.

Need for a Preceptor Resource

Due to nursing shortages and changes in nursing demographics, comprehensive preceptorship programs are needed to help inexperienced nurses grow and develop, especially in critical care (Canadian Federation of Nurses Unions, 2022). The growing number of untrained critical care nurses requires excellent preceptorship to ensure patient safety and quality care. When examining the role perception of ICU preceptors, Macey et al. (2021) found that preceptors are instrumental in helping new nurses become autonomous in high-stress situations. Using a mixed-methods design they also highlighted deficiencies in the knowledge and abilities of preceptors and learners, indicating the necessity for standardized and improved preceptorship experiences (Macey et al., 2021).

Insufficient resources and direction might hinder preceptors from adequately fulfilling their responsibilities, negatively impacting learners' and novice nurses' learning experiences (Kamolo et al., 2017; Luhanga et al., 2010). The lack of standardized preceptor training programs further exacerbates variations in preceptorship quality across healthcare facilities, underscoring the vital need for a comprehensive preceptor resource manual to provide consistent guidance (Chen et al., 2021; Clipper & Cherry, 2015; Innes & Calleja, 2018; Rush et al., 2019).

Benefits of Preceptor Support in Critical Care

The significance of preceptorship to a new nurse's transition to practice in critical care cannot be understated. Following the CCNP program, RN learners enter clinical practice at the advanced beginner level (Critical Care Nursing Program Syllabus [CCNP], 2023). According to Benner's (1984) definition, the advanced beginner enters a specialty care area with specialized knowledge and skills and prior exposure/experience with patients in the specialty setting. These advanced beginners benefit from the guidance of experienced preceptors to enhance their clinical judgment and critical thinking abilities, often drawing upon the preceptor's wealth of experience and knowledge (Benner, 2009). The emotional support offered by preceptors, as well as their expertise and skills, play a significant role in the learner's sense of clinical competence (Benner, 2009). Findings from one integrative literature review (Quek & Shorey, 2018) indicated that preceptorship effectively provides clinical education and transitions new graduates into clinical practice. Support for new and novice nurses in critical care requires a designated resource person to assist in transitioning to independent practice, including advancing clinical knowledge and skills (Innes & Calleja, 2018). Preceptorship facilitates inexperienced nurses' integration and professional growth (Hong & Yoon, 2021).

Transition Shock

Transition shock refers to the challenges and difficulties nurses may encounter when moving from one role or work setting to another (Clipper & Cherry, 2018; Duchscher, 2009). Transition shock can occur when a nurse moves from academic to clinical practice or transitions from one specialty to another, such as acute care to critical care (Duchscher, 2009). The recent shift in nursing demographics within specialty care areas, particularly critical care, since the COVID-19 pandemic has resulted in new graduate nurses (NGNs) and less experienced nurses

entering specialty care practice (Blackmon et al., 2023). Unfortunately, novice nurses and NGNs are at an increased risk of transition shock (Chen et al., 2021; Clipper & Cherry, 2015; Innes & Calleja, 2018). Transition shock requires the support of qualified preceptors and transition programs to ensure that RNs, or NGNs succeed in the practice area (Innes & Calleja, 2018). In a descriptive cross-sectional study, Chen et al. (2021) examined the relationship between transition shock, preceptor support, and nursing competency in NGNs at six tertiary hospitals in mainland China. Transition shock and perceptions of preceptor support were significantly correlated with nursing competency. Clipper and Cherry (2015) examined retention rates of NGNs with a trained versus untrained preceptor in an evaluation project conducted at seven acute care facilities in Texas. A slightly higher retention rate in NGNs occurred with a trained preceptor (Clipper & Cherry, 2015). An established correlation exists between effective preceptorship experiences and decreased turnover intention among NGNs (Clipper & Cherry, 2015; Duchscher, 2009; Rush et al., 2019). However, the overall impact of preceptors on retention rates requires further investigation (Aparicio & Nicholson, 2020; Szalmasagi, 2018; Wray et al., 2020).

Critical Thinking Skills

Quality precepting of NGNs and new nurses to critical care is beneficial to the development of critical thinking skills (Kaddoura et al., 2013; Swinny, 2010; Willers et al., 2021) and integrating theory into practice (Elmers, 2010; Kaddoura et al., 2013; Nyhagen & Strøm, 2016). Critical thinking skills develop with experience in nursing, and combining education, nursing knowledge, and clinical experience/expertise defines critical thinking (Swinny, 2010). Preceptorship and the development of critical thinking skills in NGNs were explored in two studies, one in the hospital setting (Sorensen & Yankech) and one in the ICU (Kaddoura et al., 2013). In both studies, NGNs' critical thinking skills were found to improve

with a skilled preceptor (Kaddoura et al., 2013; Sorensen & Yankech, 2008). Further, preceptors received education in a research-based, theory-driven preceptor development program (Kaddoura et al., 2013; Sorensen & Yankech, 2008).

Best Practices for Precepting Registered Nurse Learners in Critical Care

Best practices are based on high-quality evidence and are shown to improve the learner's experience in their entry to practice or clinical rotations (Chen et al., 2021; Elmers, 2010; Hardie, Darley, et al., 2022a; Hardie et al., 2022b; Innes & Calleja, 2018; Kaddoura et al., 2013; Nyhagen & Strøm, 2016; Sorensen & Yankech, 2008; Swinny, 2010; Willers et al., 2021). The following two sections discuss the importance of creating a supportive learning environment for learners, providing feedback, and role-modeling.

Creating a Supportive Learning Environment

The ICU is a stressful and challenging environment (Kaddoura et al., 2013), often imposing significant emotional distress on inexperienced nurses (Inayat et al., 2020; Innes & Calleja, 2018). Preceptors can reduce stress and promote professional development by providing a supportive environment to novice and NGNs (Chen et al., 2021; Innes & Calleja, 2018). Therefore, a favorable learning environment is crucial when precepting in critical care areas given the high stakes and steep learning curve of this area of nursing (Inayat et al., 2020).

Precepting in critical care requires following evidence-based methods to promote patient safety and adapting to an ever-changing clinical environment (Kaddoura et al., 2013). RN learners must be precepted in critical care settings to improve ICU patient care, consolidate learning, and foster professional growth. Learners are more likely to feel comfortable in this environment when challenged by a preceptor if their relationship is built on trust (Nyhagen &

Strøm, 2016). A significant influence on clinical practice integration can occur when a learner feels valued and experiences a high-quality preceptorship relationship (Hardie et al., 2022b).

Feedback

In addition to creating a caring and supportive learning environment, preceptors must strive to improve RN learners' critical thinking and clinical judgment (Hardie, Darley, et al., 2022a; Sorensen & Yankech, 2008) through constructive feedback. Complex patient cases and changing conditions in the ICU necessitate prompt and informed nursing judgments (Inayat et al., 2020). Preceptors must encourage learners to use their critical thinking skills to assess practice problems, prioritize solutions, and anticipate hurdles in patient care. One-way preceptors can foster students' critical thinking by leading discussions and examining case studies (Swinny, 2010; Willers et al., 2021). Being challenged by a preceptor, asking reflective questions, being pushed to oversee patient care, and taking more initiative are also characteristics of high-quality precepting in critical care (Nyhagen & Strøm, 2016).

Constructive feedback is a crucial element of successful precepting in the ICU (Elmers, 2010). Feedback during preceptorship was explored in a qualitative study using focus groups in Oman (Matua et al., 2014). Through thematic analysis, six strategies emerged for effective feedback provision. These included providing timely and regular feedback, providing clear and focused feedback, emphasizing performance and progress, starting with a positive and ending with a negative evaluation, respecting the feelings and privacy of preceptees, and listening to preceptees during feedback (Matua et al., 2014).

Elmers (2010) asserts that feedback needs to be precise and practicable, addressing a learner's strengths and areas for improvement. Positive feedback from preceptors increased learner confidence and self-esteem and encouraged learners to actively participate in patient care

(Nyhagen & Strøm, 2016). Preceptors should provide examples and offer recommendations to cultivate a mindset focused on progress among learners, thus improving their performance. Preceptors should provide comments encouragingly and impartially, avoiding negative feedback as this can impact the relationship (Elmers, 2010). By delivering constructive comments, preceptors encourage RN learners to reflect on their practice, reinforce desired performance while correcting undesirable performance areas, and identify learning needs and areas for professional growth while maintaining learner motivation (Elmers, 2010). Preceptors can foster reflection by engaging in guided dialogues, encouraging journaling exercises or self-reflection exercises, and conducting debriefing sessions after clinical encounters (Amaral & Figueiredo, 2023; Schuelke & Barnason, 2017; Willers et al., 2021).

Role Modelling

Sherrod et al. (2020) emphasize that successful preceptors are often seen as change agents, and their skills, such as role modeling, are readily transferrable to assisting with the unit or organizational transformations. Preceptors in critical care can serve as role models to learners by demonstrating professionalism, effective communication, and evidence-based practice (CNA, 2004). To guarantee clinical judgments are based on evidence, preceptors should ensure learners are familiar with recent clinical practice guidelines, procedures, and best practices for their unit and institution (CNA, 2004). As role models, preceptors empower learners to remain knowledgeable of advancements in nursing by encouraging their involvement in training programs, conferences, and professional organizations (CNA, 2004).

Hong and Yoon (2021) highlight the importance of clinical teaching practices, which involve establishing nurturing learning settings, delivering constructive criticism, and displaying nursing professionalism. A resource that highlights best practices for preceptors, including

creating a supportive learning environment, providing feedback, and effective role-modelling would provide crucial information on these practices and implementing these essential teaching behaviors in addition to offering instructions on professional conduct and adhering to ethical principles, such as the Code of Ethics of Registered Nurses (CNA, 2017) and the CACCN Standards of Practice (2017).

Methods Used in Developing Preceptor Resource Manuals or Materials

To create a useful preceptor resource, it is important to consider existing literature on the methods used by others in creating similar resources. In doing so, the following crucial steps were identified: the evaluation of current literature, conducting a needs assessment of those using the resource and considering the resource's delivery model and curriculum design.

Literature Review

A literature review is required to discover what is known about preceptorship, preceptors' needs, resources, and areas for future research. For example, Mann-Salinas et al. (2014) conducted a literature review before developing an evidence-based precepting program at a Burn Center in Texas. Similarly, two other research teams conducted literature reviews before developing preceptor training programs at two American healthcare facilities (Foy et al., 2013; Nash & Flowers, 2017). Following their literature review, Mann-Salinas (2014) noted a clinical gap in the evidence-based literature and the precepting practice of established Burn Center nurses. This review established a basis for their evidence-based precepting program (Mann-Salinas et al., 2014).

Needs Assessment

The development of a preceptor resource manual should ensure that the information provided fulfills the requirements of preceptors. Preceptor resources or programs are typically

created using various techniques incorporating educational theory, best practices in adult learning, and input from experienced preceptors and educators (Mulherin et al., 2018; Smith et al., 2022). To begin the development of a preceptor resource manual, it is essential to undertake a thorough needs assessment (CNA, 2004; Lee et al., 2017). Knowing the learning needs and difficulties preceptors encounter is crucial to creating a helpful preceptor program or resource (Vos & Trewet, 2012; Williams et al., 2021). According to Upham (2018), a comprehensive needs assessment is essential for identifying the primary areas where preceptors need assistance and growth. In doing so, preceptors' learning needs, including their preferred learning methods, can be identified (Enderby et al., 2021; Foy et al., 2013; Nash & Flowers, 2017; Williams et al., 2021).

To better understand the particular learning needs of preceptors, resource developers may use a variety of methods for needs assessments, including questionnaires, focus groups, and interviews (CNA, 2004; Foy et al., 2013; Mulherin et al., 2018; Nash & Flowers, 2017; Vos & Trewet, 2012). This evaluation usually entails interacting with preceptors to collect qualitative and quantitative data on their experiences, attitudes, and training requirements (Chan et al., 2019; Enderby et al., 2021; Luhanga et al., 2010; Vos & Trewet, 2012; Williams et al., 2021). Upham (2018) emphasizes the significance of surveying NGNs and incoming preceptors to get valuable insights into their viewpoints and priorities. Foy et al. (2013) created a survey tool, “RN Preceptor Learning Needs Assessment,” which can be used to assess topics preceptors want to learn and formats preferred for educational delivery. Nash & Flowers (2017) utilized this survey to develop a preceptor program with a 49% response rate. In addition to identifying needs, this needs assessment can assist in discovering preceptors' learning preferences and the problems they confront in their positions (Foy et al., 2013).

Using the information gathered from the needs assessment, the creation of a resource manual that caters to the various requirements of preceptors and adheres to the most effective methods of adult learning should be developed. The research conducted by Williams et al. (2021) highlights the significance of comprehending the teaching difficulties, time limitations, and resource limitations faced by preceptors. Enderby et al. (2021) emphasize integrating preceptor preferences and feedback when developing a national preceptor development program.

Delivery Models and Curriculum Design

Methods for delivery of preceptor materials can include workshops, courses, written manuals, self-directed learning packages, and web modules (Luhanga et al., 2010). By offering a choice of delivery methods, such as live sessions, on-demand modules, webinars, and online platforms, institutions can meet the preferences of preceptors for flexible and accessible learning opportunities (Enderby et al., 2021). Methods often used for preceptor development are written resource manuals, workshops, self-directed learning, and modules (Luhanga et al., 2010). Although a preceptor resource contains valuable information regarding teaching and learning and course expectations, it is dependent on the preceptor's use in addition to student provision (Luhanga et al., 2010). For example, Luhanga et al. (2010) noted that only 60% of preceptors in their qualitative study used a print-based preceptor resource, and several respondents were unaware of such a resource. Several respondents recommended print and electronic availability before the preceptorship (Luhanga et al., 2010). This is the case in many undergraduate and specialty care nursing programs, such as Nipissing University (2018) and the University of Saskatchewan (n.d.), where preceptor resource materials/education is available online and accessible to everyone.

Curriculum design is essential when developing a preceptor resource manual or learning materials. Curriculum design comprises identifying learning objectives, structuring content into modules or sections, and selecting appropriate instructional methods and assessment methodologies (Mulherin et al., 2018; Williams et al., 2021). Utilizing needs assessment, findings can further identify appropriate instructional methods (in-person, virtual webinar, website, blended learning) (Flowers & Nash, 2017; Foy et al., 2013; Williams et al., 2021). In keeping with adult learning theories, offering choice may encourage participation (Williams et al., 2021).

Online programming and delivery for preceptor programs and materials has been examined in the literature (Vos & Trewet, 2012; Wu et al., 2018; 2020). In their systematic review of online learning programs for nurse preceptors, Wu et al. (2018) revealed that offering information virtually to preceptors allows for flexibility, accessibility, and convenience to adult learners, in addition to offsetting workload and time management issues faced by attending in-person workshops. Further, Vos and Trewet (2012) found higher completion rates of web-based learning activities in their study, particularly in areas that provided new information to preceptors. Wu et al. (2020) developed a web-based pedagogy program for nurse preceptors to evaluate its effectiveness for continuing education. Their pilot study evaluation did not explore clinical outcomes, such as clinical teaching and competence improvements. However, it did offer feedback on ease of use, navigation, and content inclusion for a web-based preceptor education program. The hypothesis put forth by Wu et al. (2020) suggests that implementing an online training program for preceptors could improve the learning outcomes of preceptees. This proposition is based on prior research findings indicating that a preceptor's teaching proficiency can increase a learner's clinical competency (Wu et al., 2020).

Web-based learning is further supported in the literature, as it can provide preceptors with ongoing education and can offer flexibility to those who may be unable to attend in-person sessions, such as those who work nightshifts ensuring they are readily accessible (Nash & Flowers, 2017; Smith et al., 2022; Williams et al., 2021). In their study of the needs of pharmaceutical preceptors, Williams et al. (2021) found that educational design should feature collaboration and interaction. If on-demand programming is used, it should offer case studies, forums, or question/answer sections. In their systematic review of online learning programs for preceptors, Wu et al. (2018) noted various delivery, including virtual reality, online learning platforms, and blended learning (in-class and online classes). Offering preceptor materials and manuals online allows them to be easily updated to align with educational objectives and organizational policies as best practices evolve (McClure & Black, 2013).

Locally, the Learning Institute can utilize the findings from the needs assessment to develop a preceptor resource manual that enables preceptors to improve their teaching abilities, effectively assist learners, and contribute to an improved preceptor/preceptee relationship, ultimately enhancing patient care. This needs assessment will be undertaken in the consultations section of the practicum project. The current CCNP preceptor guide is provided to learners through the online learning platform Brightspace. They are encouraged to give and share this document with their preceptor before/upon entering the clinical area. It must be discovered if this document is being provided to preceptors as the learner's ownness lies in delivering it. This information will be obtained through consultations with preceptors. The CCNP program is offered provincially. Therefore, it is challenging for faculty to provide hard copies to all preceptors facilitating clinicals. With the increase in online learning, it may be beneficial to

provide the preceptor resource materials online, accessible to everyone, on the Learning Institute website, located on the CCNP page, and offering a printed hard copy.

Content Recommendations

Preceptor resources must cover all information necessary for the preceptorship of RN learners. A preceptor manual should be user-friendly, subject to evaluation, and reflective of practice changes (Luhanga et al., 2010). Findings from existing research can guide important content to include in a preceptor resource (Boyce et al., 2022; Chan et al., 2019; Chang et al., 2015; Foy et al., 2013; Kamolo et al., 2017; Luhanga et al., 2010; Nash & Flowers, 2017; Schuelke & Barnason, 2017; Smith et al., 2022; Swinny, 2010; Williams et al., 2021; Windey et al., 2015).

Unclear roles and expectations were frequently cited in the literature as barriers to precepting (Boyce et al., 2022; Duffy & Nash, 2017; Luhanga et al., 2010; McClure & Black, 2013; Mann-Salinas et al., 2014). Therefore, the preceptor resources must outline the roles and expectations for all parties involved in the preceptorship relationship, such as the preceptor, the RN learner, and faculty members (Billay & Myrick, 2008; Kamolo et al., 2017; Luhanga et al., 2010; Williams et al., 2021; Windey et al., 2015). For example, Boyce et al. (2022) and Luhanga et al. (2010) reported that preceptors must be aware of learners' course objectives, expectations, and goal setting. Providing preceptors with this vital information will clarify and delineate the faculty and preceptor responsibilities (Boyce et al., 2022; Kamolo et al., 2017; Luhanga, 2010; McClure & Black, 2013). In addition, preceptors have stressed the importance of faculty communication and follow-up with learners (Boyce et al., 2022; Kamolo et al., 2017; Luhanga, 2010). Enhanced communication and follow-up with faculty can ensure a learner is progressing appropriately in the clinical setting, assist preceptors with guidance regarding clinical

performance and evaluation, and help mitigate any problems that arise during the clinical rotation (Billay & Myrick, 2008; Boyce et al., 2022; Kamolo et al., 2017; Luhanga, 2010; McClure & Black, 2013). Macey et al. (2021) reported that an enabler to successful preceptorship in ICU is support from leadership and educational teams.

Strong interpersonal and communication skills are imperative in a professional nursing relationship (Hardie, Darley, et al., 2022). A literature review examined the development of interpersonal and communication skills in preceptor education and development programs (Hardie, Darley, et al., 2022a). Hardie, Darley, et al. (2022a) discovered that communication skills were essential to preceptors, and programs that included communication skills education led to positive outcomes in participants within their roles. Hardie, Darley, et al. (2022a) asserted that interpersonal and communication skills are vital to the preceptor role as they contribute to the ability of the preceptor to role model, question, deliver feedback, and assist in developing clinical judgment. Additionally, two mixed methods studies, Chang et al. (2015) and Chan et al. (2019) suggested a communication skills course as being a learning need with clinical usefulness (Chang et al., 2015) and the importance of increased emphasis on communication skills in preceptor development (Chan et al., 2019).

As previously discussed, constructive feedback is an essential element of successful precepting in the ICU (Elmers, 2010). Effective communication strategies and providing constructive feedback to learners have been highlighted as priority learning needs of preceptors (Chan et al., 2019; Foy et al., 2013; Luhanga et al., 2010; Nash & Flowers, 2017; Williams et al., 2021; Windey et al., 2015). Foy et al. (2013) and Nash and Flowers (2017) discovered that feedback and communication were top-ranked topics identified by preceptors in their surveys. Williams et al. (2021) highlight the importance of providing valuable and constructive feedback

as a learning requirement identified by pharmaceutical preceptors. The study indicated that respondents identified delivering feedback and navigating challenging conversations as critical topics. Nyhagen and Strøm (2016) found that postgraduate critical care nurses self-esteem increased with positive feedback provided by preceptors.

Windey et al. (2015) noted in their systematic review of preceptor development interventions that facilitating adult learning and the development of clinical judgment were frequently reported topics. Smith et al. (2022) echoed these findings in their integrative review of evidence-based practices for developing and maintaining preceptors, noting that “soft skills” should be the focus of program materials, such as critical thinking and clinical reasoning. Promoting student success is essential in preceptor preparedness, including improving critical thinking skills and clinical competence (Luhanga et al., 2010). Therefore, including information on developing the knowledge and skills of learners is a vital inclusion consideration for developing a preceptor resource, notably fostering the development of critical thinking skills and clinical competence. Within the ICU, NGNs were found to have improved critical thinking skills following a six-month preceptorship (Kaddoura et al., 2013).

Several methods have been put forward to assess and develop critical thinking skills in the ICU. These include clinical scenarios, questioning, conferences, construct-dependent test items, reflective learning, and interdisciplinary rounds (Schuelke & Barnason, 2017; Swinny, 2010). Reflection strategies, such as journaling, concept mapping, and critical conversations, have assisted new nurses in developing critical thinking skills in acute care (Schuelke & Barnason, 2017; Willers et al., 2021). Inquiry strategies, such as proactive questioning and employing several different teaching models, for example, the one-minute preceptor model (OMP), have also contributed to developing critical thinking skills in acute care nurses (Willers

et al., 2021). The OMP model (1992) is frequently cited as an effective clinical teaching model for learners (Gatewood & De Gagne, 2019). The OMP model is a preferred method for preceptors and learners to teach clinically within medicine. It can be adapted for use with RN learners as it improves the feedback skills of preceptors and their assessment skills of students' clinical judgment or critical thinking (Gatewood & De Gagne, 2019).

During the redevelopment of a preceptor guide within the critical care program locally, the current preceptor guide will be thoroughly reviewed in the environmental scan of the practicum project. Findings will be compared with recommendations in the literature regarding areas for inclusion regarding roles, course objectives, and expectations for learners. The current CCNP guideline for preceptors includes information regarding the CCNP course documentation, remediation, and clinical streams, as well as brief outlines of learner, preceptor, and faculty responsibilities related to clinical. Consultations conducted for this practicum project will allow CCNP preceptors, CCNP faculty, and CNEs to make content recommendations.

Currently, the faculty check-ins for CCNP learners occur via telephone for part-time learners as they are dispersed provincially and in-person/via telephone for full-time learners. Faculty make every attempt to discuss learners with their preceptors. An area for inclusion in the resource may be the addition of faculty contact information, enabling preceptors to contact faculty more directly.

Consultations may reveal that preceptors wish to receive education in essential communication and feedback techniques, consequently including them in the preceptor resource. CCNP learners are advanced beginners upon completion of the program. Therefore, facilitating the development of the RN learner's critical thinking skills and clinical reasoning is an essential role of the CCNP preceptor. Including teaching techniques for developing critical thinking skills

and clinical competence is necessary for inclusion in a preceptor resource manual for the CCNP program. It is important to note that any activities included for developing learners' critical thinking skills should meet the preceptors' and students' needs and be appropriate for busy work environments, such as the ICU (Schuelke & Barnason, 2017).

Theoretical Frameworks

Several studies included in this review highlight the importance of adult learning theories in developing preceptor programs or resources (Enderby et al., 2021; Luhanga et al., 2010; Mulherin et al., 2018; Rush et al., 2019; Smith et al., 2022; Vos & Trewet, 2012; Wu et al., 2018). However, no specific adult learning theories were presented or recommended in these studies.

Knowles' adult learning theory (1984) will provide the theoretical framework for developing the resource manual for preceptors of CCNP learners. Preceptors are adult learners, and as such, those using the resource manual are autonomous and self-directed, wanting to be involved in the planning of their learning; their teaching should be learner-centered; they are problem-driven, and have foundational and experiential knowledge to draw from (Smith, 2002). Adult learning theory has six fundamental principles: 1) Self-concept: Adults become more self-directed and independent as they mature. Educators should provide options to create a learning environment that is comfortable and collaborative based on their needs. Adult learners are self-directed and should give input into learning materials and modes of delivery. 2) Experiences: Adult learners bring a wealth of experience. Educators need to consider the previous experience and education of adult learners when developing materials 3) Readiness to learn: Adult learners' readiness to learn depends on need; this can be obtained via a thorough needs assessment of the target audience 4) Motivation, adult learners are intrinsically motivated to learn, such as

professional development, or extrinsically motivated, due to professional obligation or regulation. Educators should consider both intrinsic and extrinsic motivators of adult learners when developing materials 5) Need to know: Adult learners want to see the rationale behind learning new knowledge. Therefore, educators need to provide objectives and reasoning behind educational materials 6) Problem-centered learning: Adult learners are problem-centered, and their learning needs to apply to their real-life situations, which in turn increases their learning motivation (Purwati et al., 2022; Smith, 2002).

Using the adult learning theory as a theoretical framework for developing a preceptor resource manual for the CCNP program, consultations with preceptors and CCNP faculty are crucial to guarantee its effectiveness and relevance. Experienced preceptors possess a direct understanding of the difficulties faced in critical care environments, such as the intricacies of patient care, interdisciplinary cooperation, and decision-making. Faculty members ensure that the resource manual is in line with the program's curriculum objectives for the guidance of learners.

Limitations

Much of the literature for this review was focused on preceptor learning needs and experiences, preceptor programs, and learner outcomes of prepared preceptors. There is a gap in the literature on developing preceptor resource manuals, including content and methods. Further, there was a lack of peer-reviewed articles on preceptor resources. Preceptor programs are essential to preceptors' development and continuing education, but a preceptor resource is beneficial in areas where these programs are not feasible or offered.

Conclusions

This literature review provided useful information for developing a preceptor resource manual for the CCNP program. The importance of preceptorship in critical care, the best practices for precepting nurses, and the need for preceptor support are evident. Common themes for inclusion in a resource have been identified, in addition to considering delivery models and curriculum design. Literature findings will be combined with consultation and environmental scan results to develop and implement the plan for resource creation.

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Study/Design	Methods	Key Results	Comments
<u>Authors:</u> Enderby et al. (2017) <u>Design:</u> Descriptive study <u>Purpose:</u> To identify needs of preceptors based upon experience & determine professional development & tools to assist in conjunction with preferred education delivery methods.	N: 272 pharmacists Country/setting: United States. <u>Data collection and outcomes:</u> (1) Electronic distribution of a 30-question survey to a convenience sample of 325 American Society of Health-Systems Pharmacists (ASHP) members between December 2017 and February 2018. 272 pharmacists completed the survey in full. (2) Participants were asked questions related to experience, education, work setting, years of practice and precepting, types of learners precepted, previous professional development education, most preferred methods of development activities, learning needs, and likelihood of use of available resources. <u>Analysis:</u> Descriptive statistics and chi-square tests.	<u>Results:</u> (1) On-demand webinars were the preferred method of education for preceptor development. (2) Skill needs for precepting identified were teaching & precepting, communication, leadership, research and advising regardless of experience. (3) 88% identified preceptor training tip of the week email as most favored for an online educational resource. (4) 81% of respondents indicated they would like to use a survey to assist in self-identifying areas for developmental improvement. <u>Discussion:</u> Providing preceptor education on-demand or live is the preferred method. Desirable online resources and skills were equally distributed. High need for quality precepting development materials.	<u>Strength of Design:</u> High Strengths: A nationally distributed, anonymous, well-designed survey. Issues: • A convenience sample of only members of the ASHP community. Results may not be reflective of all pharmacy preceptors.

Study/Design	Methods	Key Results	Comments
Authors: Hardie, Darley, et al. (2022a) Design: Scoping literature review Purpose: To review and summarize existing literature on developing interpersonal & communication skills in nursing preceptorship programs.	Research question: To review and understand what is known about the development of interpersonal and communication skills amongst preceptors in training and in preceptor education programs. Methods: Systematic literature review Data collection: A search of English language articles published between 2000 & 2021 on CINAHL, SCOPUS, APA Psych INFO, ERIC & EBSCO. Peer-reviewed, empirical studies, reviews, book chapters, discussion papers, and grey literature. Key words included “preceptors”, “interpersonal & skills development” & “nursing preceptorship education & training program” Data Analysis: Six-stage review framework of Arskey & O’Malley (2005). PRISMA-ScR also used. Independent screening by 2 independent reviewers. Conflicts resolved by a 3rd independent reviewer.	Results: (1) 24 studies included for review. Quantitative (n=11), mixed-methods (n=8) & qualitative (n=2). Quantitative studies were descriptive or quasi-experimental. Mixed studies were questionnaires/focus groups. 2 studies did not report evaluation method. Identified themes: design & development of programs, learning outcomes, pedagogical approaches & interpersonal & communication skills development in preceptor education programs. Discussion: (1) Effective interpersonal and communication skills are required for preceptors. Education & programs should focus on their development (2) Communication skills training ranked highly in importance in evaluation of programs (3) Vague insight into level of focus or teaching strategies for development of these skills.	Quality: High Strengths: (1) Clearly focused study question relevant to the development of a preceptor resource. (2) Clear inclusion criteria (3) Rigorous review process. In keeping with methodology, used six-stage review framework. Studies were screened, and prepared into narrative synthesis by 2 authors. (4) Sample population & setting similar to population of interest. (5) Well-presented results with recommendations for future research as limited research in the field. (6) Multidisciplinary author team reduced potential bias. Issues: • Individual studies had small sample sizes & purposive sampling. • Lack of critical appraisal related to methodology of choice.

Study/Design	Methods	Key Results	Comments
Authors: Luhanga et al. (2010) Design: Qualitative study Purpose: To explore and describe preceptor role support & development. Aims: (a) Describe past role preceptor preparation & current support (b) Use & evaluation of current preceptor resource manual (c) Enablers/barriers to role support (d) Recommendations	N: 22 English-speaking RNs who were employed by a partnered healthcare agency and has been preceptors for 4th-yr undergraduate nursing students in current or previous academic year. Country/setting: Mid-sized university in Canada. Data collection and outcomes: (1) Data collected via focus groups & individual interviews until saturation. (2) 30-90 minute semi-structured & evolving interviews. Open-ended questions based on literature review & past experience. (3) Four themes identified. Analysis: (1) Individual & group interviews audio-taped & transcribed verbatim. (2) Content analysis based on individual lines of transcription. (3) Transcripts coded identifying 4 themes. (5) Rigor of study demonstrated by credibility, fittingness, auditability, & confirmability.	Results: Four main themes for preceptor support & development were identified: (1) accessible resources: need for effective communication with faculty, timely sharing of information & documents, preceptor resources that are available in print & electronically prior to student placement, suggestion of different resource for acute/non-acute practice. (2) role complexity: Importance of role clarity, additional guidance in/and support for evaluation, guidance on teaching/evaluating. (3) partners in precepting: more contact from faculty & university, particularly with student challenges, workload management. (4) role development: formal education for preceptors prior to selection, suggestions for preceptor development included: program overview/goals, roles & expectations, constructive feedback, conflict resolution, & student management, use of workshops & forums. Discussion: (1) Preceptors require preparation & support in their roles as teachers & evaluators. (2) Most preceptors want user-friendly, accessible resources containing program information, roles, guidance on teaching/evaluating (3) Communication between faculty & preceptors is important. (4) Preceptor needs should be determined for inclusion in a preceptor resource	Quality: High Strengths: (1) Clear research question applicable to the development of a preceptor resource manual. (2) Rigorous data analysis with a clear statement of findings. (3) Consistent with previous research findings & transferrable to this project. Description of the use of research to amend a preceptor resource. Issues: • Limited awareness of & use of current preceptor resource. • Limited sample size.

Study/Design	Methods	Key Results	Comments
<u>Authors:</u> Schuelke & Barnason (2017) <u>Design:</u> Literature review-systematic review <u>Purpose:</u> To examine interventions/strategies used by preceptors in healthcare to promote critical thinking in new graduate nurses	Research Question: To examine preceptor interventions or strategies to promote critical thinking of new graduate nurses. Aims:(1) Identify types of interventions used by preceptors and (2) examine outcomes of critical thinking by new graduates. Methods: Systematic literature review Data collection: A search of English language articles in CINAHL & PubMed using the terms: “preceptor*”, “mentor*”, “tutor” and relevant synonyms AND “transition readiness programs”, “entry into practice”, “competence”, “clinical judgment”, “clinical reasoning”, “decision making”, “clinical decision making”, or “judgment”, AND “new graduate nurses.” Inclusion criteria were studies that focused on the transition to practice of new graduates, the use of evidence-based teaching strategies, and outcome measures on the thought processes of new graduates. Exclusion criteria included dissertations. Data Analysis: Two reviewers independently reviewed nine studies that met eligibility requirements. Investigators discussed & agreed on characteristics & defined educational intervention as a deliberate action used with new graduates to develop critical thinking. Preceptor & critical thinking definitions were also discussed.	Results: Study designs were: qualitative/descriptive (n=3), quasi-experimental (n=2), mixed-methods (n=2), descriptive correlational (n=1), & pilot study (n=1). Significant improvement could not be validated due to no comparison group. (1) All studies included the use of preceptors in the implementation of the intervention but the qualifications & experiences varied. Common theme of preceptor preparation with an emphasis on feedback and evaluation and approaches to facilitate critical in training. (2) Variety of critical thinking measurement tools were used in studies making evaluation (3) All studies identified need for new graduate to develop critical thinking. Educational strategies varied: web-based, activity interaction, & experiential feedback. Discussion: Evidence-based interventions, components, preceptor, & critical thinking outcomes varied over studies. (1) Preceptor education was a key component. (2) Education interventions included general concepts of theory & components of implemented interventions. (3) Promoting critical thinking was component of all interventions (4) Use of evidence-based strategies emphasizing learning principles (5) Mastery of interactive communication by preceptors.	Quality: Medium Strengths: (1) Clear review question relevant to areas for inclusion in a preceptor resource. (2) Clear inclusion criteria. (3) Recommendations for future research to examine evidence-based educational strategies on critical thinking & development of valid & reliable tools for the measure of critical thinking by preceptors. Issues: • Lack of experimental design & control & comparison group studies.

Study/Design	Methods	Key Results	Comments
Authors: Smith et al. (2022) Design: Integrated literature review Purpose: To explore best practices for establishing & maintaining a hospital-based preceptor program.	Research Question: What are best practices to establish & maintain a hospital-based nursing preceptor program? Furthered narrowed to: (1) what are best practices to develop a hospital-based preceptor program. (2) What are best practices to provide ongoing support to hospital-based preceptors. (3) What are essential competencies for hospital-based nursing preceptors. Methods: Integrative literature review using John Hopkins (JH) EBP for Nurses & Healthcare Professionals Model. Data collection: A search of English language articles in CINAHL, PubMed, and Cochrane using the terms: “preceptorship”, “nursing” “nursing education” “staff development”, and “burnout.” Inclusion criteria were English-language articles published between 2010 & 2020 related to precepting new & experienced nurses in direct patient care. Exclusion criteria included precepting nursing students, nursing faculty, advanced-practice practitioners, precepting for management roles, abstracts, or mentorship outside precepting. Data Analysis: Full text review, formal JH evidence appraisal to assess strength & quality of evidence with independent double-check. Discrepancies discussed until consensus. Final review by 2 EBP experts. JH EBP Synthesis & Recommendations tool to synthesize results.	Results: (1) 115 “good” to “high” quality articles were identified. Of the articles meeting criteria: they discussed preceptorship in the U.S. (n=64), Singapore (n=4), U.K. (n=14), Taiwan (n=13), Australia (n=4), Canada (n=8). Brazil, Iran, Finland, Israel, Jordan, & South Africa each had 1 article. (2) 24 professional nursing tools designed to guide the development & maintenance of a nursing preceptorship program were discussed in level II articles (n=5), level III articles (n=7), level V (n=14). EBP for hospital-based preceptor programs with a focus on 3 elements: the initial education, provisions for ongoing support, & essential competencies. Discussion: (1) Preceptor development & support: focus on soft skills, including critical thinking, prioritizing, teaching techniques, conflict management, & clinical reasoning, use of cognitive apprenticeship, such as role modeling & reflection. (2) After initial education, the ongoing support: ongoing education through a variety of strategies, such as on-demand or web-based to promote adult learning & flexibility. (3) Essential competencies in preceptor selection: Importance of choosing the right preceptor, use of validated tools for preceptor selection.	Quality: High Strengths: (1) Clear review questions relevant to areas needed for preceptor support. (2) Clear inclusion criteria with relevant studies including level I & II. (3) Rigorous review process. Only “high” and “good” quality. Issues: • Small amount level I & level II evidence. • Selection bias

Study/Design	Methods	Key Results	Comments
<u>Authors:</u> Vos & Trewet (2012) <u>Design:</u> UCBA <u>Purpose:</u> To assess the impact of a preceptor development program	N: 5,000 student evaluations of preceptor performance. Country/setting: United States. Pharmacy students & preceptors at a University. Group 1: 1,900 pre-implantation evaluations on preceptor performance were completed prior to the introduction of a comprehensive preceptor development program. Group 2: 3,160 post-implementation evaluations on preceptor performance were completed following the introduction of a comprehensive preceptor development program. Data collection and outcomes: (1) 2 types of assessments were conducted: an evaluation of preceptor performance by students, & an evaluation on teaching strategy (preceptor's evaluation of preceptor programs) (2) A standardized preceptor evaluation was completed by students. (3) Data was collected in 2 time periods, pre-& post-implementation of a preceptor development program. (4) Following completion of web-based preceptor development modules, preceptors completed standardized evaluation of the program. Analysis: T-tests & chi-squared tests were used for student evaluations. $p < 0.05$ was significant. No exclusions. Descriptive statistics for preceptor evaluations.	Student Evaluations <u>Pre-implementation:</u> -Mean score of "preceptor evaluated me at mid-point & end of practice experience" =5.0 -Mean score of "preceptor evaluated me at the end of the practice experience which was helpful to me" =5.3 <u>Post-implementation:</u> -Mean score score of "preceptor evaluated me at mid-point & end of practice experience" =5.4 -Mean score of "preceptor evaluated me at the end of the practice experience which was helpful to me" =5.4 - p value= (<0.001; 0.003) - More preceptors rated as "good" and less preceptors rated as "fair" or "poor" post-implementation ($p < 0.05$ for each) Preceptor Evaluation of Program - Overall quality of program yielded mean scores of 3.7-4.3 on the Likert scale. - Over 90% of preceptors who completed the core activity believed it enhanced their knowledge, skills & attitude. 94% of respondents felt participation in the program would improve their practice.	<u>Strength of Design:</u> Weak <u>Quality:</u> Medium Issues: • Lack of control group • Preceptors may gain experience over time. • Large sample size • Preceptor & student population in both groups were different. • Change in evaluation submission mechanism which may have increased post-implementation response rates.

Study/Design	Methods	Key Results	Comments
<u>Authors:</u> Willers et al. (2021) <u>Design:</u> Scoping literature review <u>Purpose:</u> To discover how nurses promote critical thinking in acute care	Research Question: Which teaching & learning strategies are used to promote critical thinking of nurse learners in acute care? Methods: Scoping literature review using five-stage search & appraisal framework (Arksey & O'Malley, 2005). Data collection: A search of English-language articles in CINAHL, Medline, ERIC, & Google Scholar using key words: "Rapid", "teaching", "method", "nursing", & "acute setting." Inclusion criteria were studies focused on clinical, face-to-face, real-time teaching, teaching critical thinking in an acute setting to students & junior nurses. Exclusion criteria were studies concerned with teaching in a simulated setting, not in an acute setting, not real-time teaching, not face-to-face, not a journal article. Analysis: Thematic analysis conducted.	Results: 23 studies were included for review. Most studies were conducted in USA (n=13), Canada (n=5), Australia (n=2), Asia (n=2), & Middle East (n=1). Key Themes & sub-themes were identified: (1) Learner-teacher relationship: teacher-learner relationship as a factor influencing teaching & learning of critical thinking in acute care. Sub-themes included the teacher as competent, effective role modeling, feedback. (2) Reflectiveness: reflection as a teaching method to promote critical thinking in acute care. Sub-themes included concept mapping, journaling & reflective writing, & critical conversations. (3) Inquiry: Ways of knowing & thinking. Sub-themes identified were proactive questioning & multiple approaches to teaching. Discussion: Learner-teacher relationship shapes teaching & learning in acute care. Reflection & inquiry are used to promote critical thinking in junior nurses. Multiple approaches to foster critical thinking encouraged.	Quality: High Strengths: (1) Clearly focused study with key question applicable to resource development. (2) Clear inclusion criteria. Relevant studies were analyzed using five-stage search & appraisal framework. (3) Sample population and setting similar to the population of interest for resource development. (4) Results well presented & easy to follow. Barriers to promoting critical thinking also identified. Discussions point to future research. Issues: • Quality of evidence not assessed. • Focus on Jr. RNs & students • May not apply to all nurses

Study/Design	Methods	Key Results	Comments
<u>Authors:</u> Williams et al. (2021) <u>Design:</u> Qualitative <u>Purpose:</u> To assess preceptor teaching challenges & development program design preferences through qualitative needs assessment	N: 42 experiential education stakeholders (preceptors, residency program directors, faculty administrators, & practice site administrators). Country/setting: Variety of regions & practice areas in North Carolina. <u>Data collection and outcomes:</u> (1) Data collected via 60-min semi-structured, open-ended interviews. (2) Questions focused on teaching challenges encountered while precepting & barriers to development, positive & negative features of preceptor development programs, & preferences for preceptor development programs. (3) Educational researcher specialized in qualitative research served as interviewer & trained 2 additional interviews. (4) Demographics (years precepting, area, geographic, number/type learners precepted) collected. <u>Analysis:</u> (1) Individual interviews video-conferenced, audio-taped & transcribed. (2) Thematic analysis of qualitative data, codebook created. Themes confirmed by 2nd team member. Inter-rater reliability was calculated, discrepancies were discussed & resolved. Descriptive statistics for demographics	Results: (1) Participants identified various challenges to precepting & participating in preceptor development, learner, preceptor, & institutional factors. (2) Participants described positive & negative features of previously attended preceptor development programming & identified useful features. (3) Participants suggested design features for preceptor development programs. Discussion: (1) Preceptors in this study faced numerous challenges and had ideas on improving preceptor development programs. (2) Frequently identified issues were addressing difficult teaching & learning situations (learner well-being, knowledge deficits, attitudes). (3) Preceptors wish to have more knowledge of school curriculum & learner expectations. (4) Development resources at different preceptor competence levels (novice to expert). (5) Design features should involve interaction and collaborative learning. (6) More unique opportunities for development (preceptor mentoring, OSCEs). (7) Preceptor support materials in central location. (8) Institutional support for time & teaching.	<u>Quality: High</u> Strengths: (1) Clear research question applicable to the development of a preceptor resource manual. (2) Rigorous data analysis with a clear statement of findings. (3) Consistent with previous research findings & transferrable to this project. Issues: • Limited sample size. • High-quality preceptors chosen for this study may not be representative of population ranked lower in evaluations.

Study/Design	Methods	Key Results	Comments
Authors: Windey et al. (2010) Design: Systematic literature review Purpose: To help Nursing Professional Development Specialists evaluate best practices for preceptor development programs.	Research Question: To review, assess, analyze, & synthesize best available evidence of interventions that support preceptor development. Methods: Systematic review was conducted guided by processes recommended by the Evidence-Based Practice Centers. Data collection: A literature search of articles published between 2000-2014 of PubMed, CINAHL, Proquest, ERIC, Scopus, & Cochrane Library was conducted using Preferred Reporting Items for Systematic Reviews & Meta-Analyses: The PRISMA statement. Inclusion criteria were published, peer-reviewed, English-language full-text, primary studies with nursing preceptors. Exclusion criteria were unpublished dissertations & studies on advanced practice nurses. Analysis: The Medical Education Research Study Quality Instrument (MERSQI) & Best Evidence in Medical Education (BEME) tools were used to rate quality.	Results: (1) 12 articles were chosen for qualitative synthesis. 10 studies were quasi-experimental & 2 were experimental. (2) Content topics most frequently reported for preceptor development intervention were: giving & receiving feedback, effective communication, facilitating adult learning, reviewing roles & responsibilities of the preceptor, & development & evaluation of clinical judgment. Discussion: (1) Variety of instructional strategies used, many as workshops. (2) Multiple creative modalities, such as learner-directed modules, CD-ROM, & resources. (3) Most studies reported outcomes that addressed participant satisfaction rather than Kirkpatrick's levels of outcomes. (4) Critical finding was a lack of rigorous interventional studies designed with valid & reliable assessment tools, control groups, & control for extraneous variables. (5) Mean MERSQI score was 11.38, and the mean score for BEME was 3.08. Classes or workshop style development interventions combined with support material provision scored highest.	Quality: Medium Strengths: (1) Clear research question relevant to developing a preceptor resource. (2) Clear inclusion criteria, analytic studies. (3) Rigorous review process. (4) Clear conclusions and suggestions for future research. Issues: Limited search of databases. Excluded grey literature & non-English studies.

Study/Design	Methods	Key Results	Comments
<u>Authors:</u> Williams et al. (2021) <u>Design:</u> Qualitative <u>Purpose:</u> To assess preceptor teaching challenges & development program design preferences through qualitative needs assessment	N: 42 experiential education stakeholders (preceptors, residency program directors, faculty administrators, & practice site administrators). Country/setting: Variety of regions & practice areas in North Carolina. Data collection and outcomes: (1) Data collected via 60-min semi-structured, open-ended interviews. (2) Questions focused on teaching challenges encountered while precepting & barriers to development, positive & negative features of preceptor development programs, & preferences for preceptor development programs. (3) Educational researcher specialized in qualitative research served as interviewer & trained 2 additional interviews. (4) Demographics (years precepting, area, geographic, number/type learners precepted) collected. Analysis: (1) Individual interviews video-conferenced, audio-taped & transcribed. (2) Thematic analysis of qualitative data, codebook created. Themes confirmed by 2nd team member. Inter-rater reliability was calculated, discrepancies were discussed & resolved. Descriptive statistics for demographics	Results: (1) Participants identified various challenges to precepting & participating in preceptor development, learner, preceptor, & institutional factors. (2) Participants described positive & negative features of previously attended preceptor development programming & identified useful features. (3) Participants suggested design features for preceptor development programs. Discussion: (1) Preceptors in this study faced numerous challenges and had ideas on improving preceptor development programs. (2) Frequently identified issues were addressing difficult teaching & learning situations (learner well-being, knowledge deficits, attitudes). (3) Preceptors wish to have more knowledge of school curriculum & learner expectations. (4) Development resources at different preceptor competence levels (novice to expert). (5) Design features should involve interaction and collaborative learning. (6) More unique opportunities for development (preceptor mentoring, OSCEs). (7) Preceptor support materials in central location. (8) Institutional support for time & teaching.	<u>Quality: High</u> Strengths: (1) Clear research question applicable to the development of a preceptor resource manual. (2) Rigorous data analysis with a clear statement of findings. (3) Consistent with previous research findings & transferrable to this project. Issues: • Limited sample size. • High-quality preceptors chosen for this study may not be representative of population ranked lower in evaluations.

Study/Design	Methods	Key Results	Comments
Authors: Wu et al. (2018) Design: Systematic literature review Purpose: To review & synthesize the online learning programs for preceptors.	Research Question: (1) What are the current online learning programs for preceptors? (2) How effective are online learning programs? (3) What are the experiences of the participants in online learning programs? Methods: Systematic review was designed based on relevant criteria from the Preferred Reporting Items for Systematic Reviews & Meta-Analyses (PRISMA) checklist & the Cochrane Handbook for Systematic Reviews of Programs. Data collection: A literature search of CINAHL, Medline, OVID, PubMed, Science Direct, Scopus, & Web Sciences using key search terms: “online learning program”, “e-learning”, “online learning”, “train*”, “educat*”, “develop*”, “prepar*”, “support*”, “nurse preceptor”, “nurse mentor”, “nurse educator”, & “nurse leader.” Inclusion criteria were peer-reviewed articles published from 2000-2016, experimental, cohort, survey, or qualitative studies, English language publications, with a main focus of online learning programs on clinical teaching & assessment for nurse preceptors. Exclusion criteria were editorials, opinion pieces, non-research papers, conference abstracts, review papers, non-English language papers, and research focusing on online learning programs for university students. Analysis: Critical appraisal using the Qualitative Assessment & Review Instrument critical appraisal instrument & the Joanna Briggs Institute Meta-Analysis of Statistics Assessment & Review Instrument critical appraisal instrument. Data extracted, organized, & analyzed using a narrative synthesis.	Results: (1) 9 studies were chosen for review. (2) 7 studies used questionnaires to evaluate effectiveness of online programs & 3 studies used focus groups or interviews. (3) Five overarching themes to reflect: the development of the online learning programs for nurse preceptors, major contents of the programs, uniqueness of each program, modes of delivery, and outcomes of the program. Discussion: (1) 8 different programs were revealed, 7 of which were self-developed, mostly by nurse educators. More than half of the programs were theoretical-based. (2) Contents of programs focused on: roles & responsibilities of preceptors, adult learning theory, clinical teaching, clinical assessment strategies, feedback skills, handling challenging situations, & leadership. (3) Most studies used online medium for content delivery, improving flexibility & accessibility. (4) Blended learning or virtual clinical simulations were modes of delivery. (5) More than half the studies reported positive outcomes on knowledge & skills of preceptors. (6) Increased self-efficacy of preceptors was reported.	Quality: High Strengths: (1) Clearly focused study with key question applicable to resource development. (2) Clear inclusion criteria. Relevant studies were analyzed & appraised. (3) Rigorous review process. (4) Clear conclusions and suggestions for future research. Issues: • Lack of grey literature • Low-quality studies, need comparison group

Appendix B: Environmental Scan Report

Environmental Scan Report for the Development of a Preceptor Resource Manual for the Critical Care Nursing Program in Nova Scotia, Canada

Environmental scans were initially developed for the world's business sector, and their use also translates to healthcare. (Charlton et al., 2019). An environmental scan involves searching, organizing, and examining information in an organization's internal and external environment (Charlton et al., 2019). An environmental scan can assist with decision-making and future action and is imperative for planning purposes as it may reveal internal and external issues or threats to the organization (Charlton et al., 2019). In healthcare, an environmental scan can assist in decision-making and planning within a progressive and dynamic environment (Charlton et al., 2019). I conducted an environmental scan to explore the internal environment of the Learning Institute for Healthcare Providers (Learning Institute), Nova Scotia, by examining existing preceptor resources. This scan externally explored preceptor resources available at specialty care programs, undergraduate nursing programs, and other healthcare institutions. This environmental scan also revealed information on the existing delivery methods of Registered Nurse (RN) preceptor resources. The findings of the environmental scan are presented in this document.

Background

Since the COVID-19 pandemic, there has been a shift in the nursing demographic within specialty care areas, particularly critical care, resulting in burnout, post-traumatic stress disorder, and high turnover rates (Vogt et al., 2023). Consequently, there is now an influx of new graduates and less-experienced RNs practicing within critical care. With this shift in the critical care RN demographic, newer and less experienced practitioners are taking on the preceptor role. Throughout my discussions with Clinical Nurse Educators (CNEs), preceptors, and learners, I

determined that a knowledge deficit existed within specialty care areas concerning what constitutes preceptorship, the roles and responsibilities of a preceptor, suitable learning experiences/patient assignments, policies, and evaluation. A preceptor document exists for the Critical Care Nursing Program (CCNP) within Nova Scotia. However, it lacks valuable information for new preceptors on their roles and responsibilities, learning theories, relationship building, and providing feedback. Therefore, the CCNP “Clinical Guidelines for Preceptors” document will undergo redevelopment into a preceptor resource manual for the program.

A literature review revealed that preceptors are instrumental in helping new nurses successfully transition to practice in clinical environments (Chen et al., 2021; Clipper & Cherry, 2015; Duchscher, 2009; Innes & Calleja, 2018; Rush et al., 2019), especially within the high-stakes area of critical care (Macey, 2021). Preceptors can create positive and supportive learning environments through role modeling, providing constructive feedback, and displaying professionalism (CNA, 2004; Elmers, 2010; Nyhagen & Strøm, 2016). Lack of resources, time, and institutional support are frequently cited by preceptors in the literature (Boyce et al., 2022; Kalischuk et al., 2013; Luhanga et al., 2010; McClure & Black, 2013; Nash & Flowers, 2017; Quek & Shorey, 2018; Williams et al., 2021). Learning needs identified by preceptors include the awareness of the course objectives, expectations, and goal setting for learners (Boyce et al., 2022; Luhanga et al., 2010), feedback and communication skills (Chan et al., 2019; Foy et al., 2013; Luhanga et al., 2010; Nash & Flowers, 2017; Williams et al., 2021; Windey et al., 2015), and the development of critical thinking skills and judgment (Luhanga et al., 2015; Windey et al., 2015).

Specific Objectives for the Environmental Scan

This environmental scan was completed to identify existing preceptor resources, both

internal and external, to the Learning Institute. The specific objectives of the environmental scan were to:

1. Identify and analyze existing preceptor resources at the Learning Institute, including CCNP and other academic and professional institutions.
2. To describe current practices outlined in existing preceptor resources.
3. To identify gaps and mutual efforts that can be merged for inclusion in the preceptor resource manual.

Sources of Information

The Learning Institute's private internal drive (S:) was searched program by program for clinical documents related to preceptors or documents provided to preceptors. Clinical documents are available and shared within the Learning Institute. This search assisted in identifying current practices within the Learning Institute regarding preceptor resources and any differences amongst programs. Additionally, Nurse Educators (NEs) within the Learning Institute provided information on the delivery method of their preceptor materials. A comparison was made between these resources and the current CCNP preceptor guide to inform what should or should not be included in the developed preceptor resource manual.

Data was obtained via the Google search engine for external resources related to preceptorship at the academic or institutional level using the terms “preceptor resource manual,” “preceptor handbook,” “critical care nursing program,” and “preceptor resource guide.” This search aided in identifying current practices for preceptor resources external to the Learning Institute and identified differences amongst programs. An email template, see Appendix A, was sent to organizations that offer similar critical care nursing programs in Canada as specified in the Google search and on the Canadian Association of Critical Care Nurses (CACCN) website.

To ensure the consistency and quality of the scan, only specialty care program preceptor resources published or updated within the past ten years were scanned within the Learning Institute; for the external environmental scan, specialty care programs and undergraduate/institutional program resources were scanned if published within the past ten years.

Internal programs in the environmental scan, including the CCNP program, the Emergency Nursing Program (ENP), the High-Acuity Nursing Program (HANP), the Family Practice Education Nursing Program (FPENP), and the Perioperative Nursing Program (PONP), are listed in Table 1. External programs in the environmental scan, including Dalhousie School of Nursing (DAL SON), University of Prince Edward Island (UPEI SON), Nipissing University, Canadian Association of Medical Radiation Technologists, and Louis Brier Home and Hospital, are listed in Table 2. Institutions contacted offering critical care nursing programs similar to the CCNP program within Canada are listed in Appendix B. A response was obtained from two programs. Their resources were reported as internal, but their mode of delivery was shared, as per Appendix B.

Data Collection

Within the documents searched for data collection, the focus of the content, the delivery method/type of resource, and limitations were identified. The focus of the content also included any additional appendices. Delivery methods sought to obtain information on how the documents were provided to preceptors and the type of resource- manual, guideline, PDF, or website. Finally, the limitations of each resource were identified. Limitations were an important consideration for developing a preceptor resource manual for the CCNP.

Data Management and Analysis

Data collected for this environmental scan was organized into Tables 1 (Internal) and 2 (External). The table format helps display large amounts of data in an easy-to-read format (Slutsky, 2014). When there are large amounts of data to describe, such as for this environmental scan, a table allows readers to see results quickly and easily (Slutsky, 2014). For this practicum project, data management sought to reduce the large amounts of data into smaller concepts (Polit & Beck, 2017). Data was organized into Tables 1 and 2 according to program, type of resource/delivery method, and limitations.

The retrieved resources were compared using content analysis to identify similar topics (Polit & Back, 2017). For this practicum project, content analysis identified similar content of preceptor resources and the delivery modes of the resources, which could be useful for developing a preceptor resource for CCNP. Data was analyzed for the preceptor learning needs identified in the literature review, such as course objectives and expectations, communication and feedback skills, and developing critical thinking skills.

Ethical Considerations

Data obtained from the environmental scan did not include human participants. Using the Health Research Ethics Authority (HREA) Screening Tool, see Appendix C, this environmental scan is exempt from Health Research Ethics Board approval. The internal environmental scan yielded resources available to all faculty at the Learning Institute. The external environmental scan yielded results that were publicly available online via Google search. Contacts at critical care programs, see Appendix B, were advised that written permission would be requested before using any information they shared. Data was stored on a password-protected private drive associated with a work/hospital login protected by multiple firewalls.

Results

Four specialty care programs at the Learning Institute that offer a clinical component with preceptor involvement were scanned. Table 1 provides an overview of the results of the internal environmental scan.

Table 1

Data Collection for Internal Scan

Program	Name	Focus of Content	Delivery Model/Type of Resource	Limitations
Critical Care Nursing Program	“Clinical Guidelines for Preceptors”	• Clinical documentation and assignments. • Remediation • Clinical progression • Clinical streams • Clinical guidelines for the clinical streams (work experience, goals, medications, telephone/verbal orders, documentation, clinical time, switching shifts) • Mistakes/adverse events • Preceptor/learner/faculty responsibilities	• Provided to learners on Brightspace to share with the preceptor. • Document	• Unknown if learner shares document with preceptor. • Clinical progression does not provide details on learner evaluation based on clinical competencies • Mistakes/adverse events do not include how to handle them with the learner. • Identified preceptor learning needs from literature

				review not present (Communication skills, providing feedback, evaluation, developing critical thinking skills, faculty contact).
Emergency Nursing Program	“Emergency Nursing Program: Preceptor Packet”	• Faulty contact • Program description • Program competencies: copy of CCR in appendix • Proficiency level • Clinical components • Significant clinical dates • Clinical guidelines • Skills outline • Communication triad model • When to contact faculty • <u>Appendices</u>: Active listening, promoting critical thinking, R2C2 feedback model, teaching strategies, clinical reasoning • Link to Dalhousie Preceptor e-learning course	• Provided to CNE to share with preceptors • PDF	• Lengthy
High Acuity Nursing Program	“Clinical Guideline for Preceptors”	• Clinical documentation and assignments. • Remediation • Clinical progression • Clinical streams • Clinical guidelines for the clinical streams (work experience, goals, medications, telephone/verbal orders,	• Provided to learners on Brightspace to share with the preceptor. • Document	• Unknown if learner shares document with preceptor. • Clinical progression does not provide details on

		documentation, clinical time, switching shifts) • Mistakes/adverse events Preceptor/learner/faculty responsibilities		learner evaluation based on clinical competencies • Mistakes/adverse events do not include how to handle them with the learner. • Identified preceptor learning needs from literature review not present (Communication skills, providing feedback, evaluation, developing critical thinking skills, faculty contact).
Family Practice Nursing Education Program	“Preceptor Handbook: Family Practice Nursing Education Program”	• Faulty contact • Program description • Program competencies • Proficiency level • Clinical components • Clinical guidelines • Skills outline • Communication triad model • When to contact faculty • <u>Appendices</u>: Active listening, promoting critical thinking, R2C2 Feedback model.	• Provided to preceptors via email. • .PDF file	• Need preceptor’s email before clinical • Lengthy
Peri-operative	“Preceptor Packet:	• Faulty contact	• Preceptor packet	• Need preceptor

Nursing Program	Perioperative Nursing Program PONP-RN”	• Program description • Program competencies • Proficiency level • Clinical components • Significant clinical dates • Clinical guidelines • Skills outline • Communication triad model • When to contact faculty • <u>Appendices</u>: Active listening, promoting critical thinking, what do I do if the learner is?, teaching strategies, clinical reasoning, preceptor-preceptor hand-off • Link to Dalhousie Preceptor e-learning course	provided by faculty to preceptors • .PDF file	contact prior to clinical • Lengthy
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The CCNP and HANP “Clinical Guidelines for Preceptors” document is identical. Both documents are provided to learners on Brightspace to share with their preceptors at the beginning of the clinical rotation. They provide an overview of the learner/preceptor/faculty roles, clinical documentation/guidelines, remediation, and clinical streams. This document has numerous identified limitations. Firstly, whether the document is shared with the preceptor is unknown, as the learner is responsible for providing the information. Other limitations include: clinical progression does not provide details on learner evaluation based upon clinical competencies, handling adverse events with the learner, and lacks the identified preceptor learning needs from the literature review, such as communication skills, providing feedback, evaluation, developing critical thinking skills, and faculty contact information.

The FPENP and PONP “Preceptor Handbook” and “Preceptor Packet” are emailed to

preceptors by faculty in a PDF format. This ensures that the preceptors have received the information and provides a faculty contact. The ENP “Preceptor Packet” is also PDF. Faculty provide their preceptor packet to the CNE of the Emergency Department to share with prospective preceptors. All three programs offer essential information in their resources identified in the literature review, including faculty contact information, program description, competencies and proficiencies, clinical guidelines and skills, communication triad model, and appendices on active listening and promoting critical thinking. The FPENP and ENP resources use the “R2C2 Feedback model” for teaching and coaching. In contrast, the PONP resource offers various teaching strategies, such as role modeling, coaching, and reflection, all identified as preceptor and learner needs in the literature review. The PONP resource additionally offers guidance to preceptors on the “preceptor-to-preceptor” handoff. This is beneficial when a learner has more than one preceptor in the clinical area who is evaluating and supervising their progression. The limitations of these resources are the need for a preceptor contact before the clinical experience and the long documents (approximately 25 pages).

The internal environmental scan revealed that the HANP and CCNP preceptor guidelines were identical and had the same limitations. The ENP, FPNEP, and PONP preceptor resources were substantial, featuring many items identified in the literature review. These resources' limitations were their delivery mode, provided electronically by faculty to the preceptors before clinical for the FPENP and PONP programs. With the CCNP clinical, a learner’s preceptor can vary over the clinical trajectory. Given the current climate of critical care, a learner may have 2-5 preceptors, and the names provided may change throughout the 14 shifts. The preceptor names are typically provided before clinical; however, the preceptor's contact information is not.

The external environmental scan of the internet Google search revealed five resources

available at other organizations and academic institutions. Table 2 provides an overview of the results of the external environmental scan.

Table 2

Data Collection for the External Scan

Organization	Name	Focus of Content	Delivery Model/Type of resource	Limitations
Dalhousie School of Nursing	“Clinical Manual Dalhousie School of Nursing”	• Course description • Placement types • Roles (Student, faculty, preceptor) • Communication pathways • Adverse events • FAQs • Appendices: Clinical conferences, orientation, medication administration, clinical competency monitoring, critical thinking, reflection, evaluation	• Online Resource • .PDF	• Provided to learners • In preceptor placement, the student contacts the preceptor and shares information • Focus on multiple clinical placements, not solely on the preceptorship model.
University of Prince Edward Island School of Nursing	“Guide to Preceptorship”	• Preceptor triad: roles and responsibilities • Adult learning • Generational learning • Faculty • Professional boundaries/legal • Learning/personality styles • Critical thinking • Feedback • Facilitating evaluation • Unsafe practice • Cultural competence	• Online Resource • .PDF	

		• FAQs		
Nipissing University	“Preceptor Handbook”	• Program Overview • Roles and responsibilities (preceptor, learner, faculty) • Scope of practice • Learning facilitation techniques • Feedback Strategies • Facilitating evaluation • Addressing concerns • Learning goals/objectives • Problem-solving tree	• Online Resource • .PDF	• Nurse practitioner program
Canadian Association of Medical Radiologists	“Effective Preceptorship: A Guide to Best Practice”	• Establishing Effective Preceptorship • Benefits of Precepting and Preceptorship • Roles and Responsibilities • Educational Topics: Adult learning principles, communication, Feedback, clinical reasoning, conflict, reflective practice, assessment/evaluation	• Online resource	• For radiologists but helpful for all healthcare professions
Louis Brier Home and Hospital	“Preceptor Resource Guide”	• Roles • Setting the stage • Preceptor/preceptee relationship: Trust, communication, conflict. • Understanding self and learner: Adult learning, novice/expert thinking, reality shock, competence, learning styles.	• Quick reference guide • Online resource	

		• Teaching tips/tricks: Active learning, learning from mistakes, questioning/dialogue, evaluation, concerns, supporting IENS, misc. tips • Goal setting/learning plans		
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All five resources were available online as PDFs, easily accessible when searched. The Dal SON clinical manual provides an overview of the clinical trajectory of the undergraduate program for students. Additionally, the UPEI SON guide to preceptorship of their Undergraduate nursing program and the Nipissing University preceptor handbook provide information for their Nurse Practitioner program preceptors. The DAL SON manual offers information on courses and placement types. The DAL SON, UPEI SON, and Nipissing University resources clarify roles (preceptor, faculty, student) and responsibilities. All three resources provide information on adverse events/unsafe practices and frequently asked questions to guide preceptors and learners. These resources also address critical thinking, feedback, reflection, evaluation, and monitoring. Additionally, the UPEI resource offers information on adult learning/generational learning, faculty information, learning/personality styles, and cultural competence, and the Nipissing handbook provides a problem-solving tree. Limitations of the Dal SON resource are that it is provided to the learner to share with the preceptor and covers the clinical trajectory for the entire undergraduate program. The clinical models at DAL are not solely preceptorship models. Therefore, this resource offers information on all clinical streams and placements. A limitation of the Nipissing University resource is that it is developed for a post-graduate degree program. It may have different expectations of learners and preceptors than a specialty program like the

CCNP.

Utilized by the University of Saskatchewan as a resource, the Canadian Association of Medical Radiologists' "Effective Preceptorship" guide provides preceptors with keys to establishing effective preceptorship, benefits of preceptorship, roles and responsibilities, and essential educational topics featured in the academic institution resources. A limitation is its design for radiologists; however, it is transferrable to other healthcare professions.

Finally, the Louis Brier Home and Hospital preceptor resource guide assists preceptors in setting the stage for successful precepting and developing the preceptor-preceptee relationship. This resource additionally offers many of the topics noted by preceptors as learning needs in the literature review, including learning styles, novice/expert thinking, reality shock, clinical judgment, and evaluation. This resource also guides supporting Internationally Educated Nurses (IENS) in a precepting relationship. This resource's limitation is that it was created as a quick resource and is not a replacement for a preceptor course or workshop, as noted in the disclaimer.

Implications

This environmental scan provided an overview of the resources currently provided to preceptors at the Learning Institute and those provided to preceptors at Canada's academic and institutional levels. The results will assist in the development of a preceptor resource manual for CCNP. Many of the resources scanned provided information for preceptors on the learning needs identified in the literature and best practices for preceptorship. Therefore, data collected during the environmental scan also assisted in confirming the findings of the literature review.

Conclusions

An environmental scan of the internal and external preceptor materials to the Learning

Institute provided valuable information on resources currently being provided to preceptors at NSH and across Canada. The results provided information on content to consider for inclusion in the newly developed preceptor resource for the CCNP. This environmental scan determined that the CCNP guidelines for preceptors, like the HANP guidelines, lack the content of other Learning Institute preceptor resources. It was also determined that the delivery method for the CCNP preceptor resource is less than ideal. Comparing the ENP, FPENP, and PONP resources with other resources at the academic and institutional level in Canada has revealed that these resources feature content discussed as a need by preceptors in the literature. Therefore, the results of the environmental scan support the need to redevelop the current CCNP guidelines for preceptors into a preceptor resource manual that better reflects preceptor needs. Elements of the ENP, FPENP, and PONP resources may be adapted for use in the CCNP preceptor resource.

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Appendix A: Sample email letter of inquiry

To Whom It May Concern:

I am writing to inquire about your program's practicum component. Are any specific preceptor resources available to nurses serving as preceptors for your learners? If so, could you please provide a copy of your resource? I would appreciate hearing from you by February 25th. I would also be interested in knowing how the resource is provided to the nurses who serve as preceptors.

I am the Nurse Educator with the Critical Care Nursing Program at the Learning Institute for Healthcare Providers. I am presently working on obtaining my Master of Science in Nursing degree from Memorial University.

As part of the program, I am completing a practicum project to develop a preceptor resource manual for the critical care nursing program. As part of my practicum project, I am completing an environmental scan to identify specific examples of preceptor resources, guides, or information packages that are used to support nurses serving as specialty care preceptors at other institutions.

This information will only be shared with my practicum supervisor. If I wish to use this material for my project, I will contact you for your written permission before using any material you provide. I look forward to hearing from you.

Warmly,

Rachel Rizcallah

MScN Student, Memorial University

Appendix B: External Critical Care Programs & Response

Program	Response	Delivery
British Columbia Institute of Technology	Resource internal.	Preceptors complete a Health Authority workshop. Only receive information on evaluation.
Centennial College	No response	
Conestoga College	Resource internal	Provided to preceptor by learner.
Mt. Royal University	No response	
Saskatchewan Polytechnic	No response	
St. Lawrence College	No response	

Appendix C: Health Research Ethics Authority (HREA) Screening Tool

Student Name: Rachel Rizcallah

Title of Practicum Project: Development of a Preceptor Resource Manual for the Critical Care Nursing Program in Nova Scotia

Date Checklist Completed: January 19th 2024

This project is exempt from Health Research Ethics Board approval because it matches item number ____1, 3____ from the list below.

1. Research that relies exclusively on publicly available information when the information is legally accessible to the public and appropriately protected by law; or the information is publicly accessible and there is no reasonable expectation of privacy.
2. Research involving naturalistic observation in public places (where it does not involve any intervention staged by the researcher, or direct interaction with the individual or groups; individuals or groups targeted for observation have no reasonable expectation of privacy; and any dissemination of research results does not allow identification of specific individuals).
3. Quality assurance and quality improvement studies, program evaluation activities, performance reviews, and testing within normal educational requirements if no research question is involved (used exclusively for assessment, management or improvement purposes).
4. Research based on review of published/publicly reported literature.
5. Research exclusively involving secondary use of anonymous information or anonymous human biological materials, so long as the process of data linkage or recording or dissemination of results does not generate identifiable information.
6. Research based solely on the researcher's personal reflections and self-observation (e.g. auto-ethnography).
7. Case reports.
8. Creative practice activities (where an artist makes or interprets a work or works of art).

For more information please visit the Health Research Ethics Authority (HREA) at <https://rpresources.mun.ca/triage/is-your-project-exempt-from-review/>

Appendix C: Consultation Report

Consultation Report for the Development of a Preceptor Resource Manual for the Critical Care Nursing Program in Nova Scotia, Canada

Since the COVID-19 pandemic, there has been a shift in the nursing demographic within specialty care areas as a result of burnout, post-traumatic stress disorder, and high turnover rates (Vogt et al., 2023). Particularly within critical care, this shift has resulted in an influx of new graduates and less-experienced Registered Nurses (RNs). With this change in the critical care RN demographic, newer and less experienced practitioners are taking on the preceptor role.

The Learning Institute for Healthcare Providers in Halifax, Nova Scotia, offers the Critical Care Nursing Program (CCNP), which prepares RNs to work in critical care settings. This program consists of 14 12-hour clinical shifts whereby precepted nurses must demonstrate the performance of knowledge and skills acquired during the CCNP. Throughout preliminary discussions with Clinical Nurse Educators (CNEs), preceptors, and learners connected to the Learning Institute, I determined that a knowledge deficit exists locally within these specialty care areas concerning 1) what constitutes preceptorship, 2) the roles and responsibilities of a preceptor, 3) suitable learning experiences/patient assignments, and 4) policies, and evaluation. Although there is an existing preceptor document for the CCNP, it lacks valuable information for new preceptors on their roles and responsibilities, learning theories, relationship building, and providing feedback. As a result, the CCNP “Clinical Guidelines for Preceptors” document will undergo redevelopment into a preceptor resource manual for the program.

Consultations with key partners are imperative to the quality improvement process in healthcare (Concannon et al., 2019). Key partner engagement in quality improvement through consultations can involve data collection and analysis, such as those completed for this practicum

project (Concannon et al., 2019). I conducted consultations with current Program CCNP preceptors in Nova Scotia to identify their experience and familiarity with the current preceptor guide, their experience with precepting CCNP learners, and their learning needs to facilitate the clinical of CCNP learners. Consultations were also conducted with CCNP faculty to identify recommendations for course content and learning objectives to be included in the resource. Finally, CNEs were consulted on their recommendations for additions to the current preceptor guide. The findings of these consultations are presented in this document.

Background

Prior to the consultation process, a literature review and an environmental scan were completed. Findings indicated that preceptors are instrumental in helping new nurses successfully transition to practice in clinical environments (Chen et al., 2021; Clipper & Cherry, 2015; Duchscher, 2009; Innes & Calleja, 2018; Rush et al., 2019), especially within the high-stakes area of critical care (Macey, 2021). Preceptors can create positive and supportive learning environments through role modeling, providing constructive feedback, and displaying professionalism (CNA, 2004; Elmers, 2010; Nyhagen & Strøm, 2016). However, lack of resources, time, and institutional support are frequently cited by preceptors in the literature (Boyce et al., 2022; Kalischuk et al., 2013; Luhanga et al., 2010; McClure & Black, 2013; Nash & Flowers, 2017; Quek & Shorey, 2018; Williams et al., 2021). Learning needs identified by preceptors include the awareness of the course objectives, expectations, and goal setting for learners (Boyce et al. (022; Luhanga et al., 2010), feedback and communication skills (Chan et al., 2019; Foy et al., 2013; Luhanga et al., 2010; Nash & Flowers, 2017; Williams et al., 2021; Windey et al., 2015), and the development of critical thinking skills and judgment (Luhanga et al., 2015; Windey et al., 2015). The literature review and environmental scan findings informed

consultations with preceptors, faculty, and CNEs.

Specific Objectives for the Consultations

The specific objectives of the consultations were to:

4. To identify specific areas or gaps in the current CCNP preceptor guide from the perspective of critical care preceptors, CNEs, and CCNP faculty.
5. To identify specific content recommendations and delivery modes for a preceptor resource manual for CCNP learners from the perspective of preceptors.

Methods

Methods for the consultations included a survey distributed to current CCNP preceptors and interviews conducted with CCNP faculty and critical care CNEs.

Setting and Sample

The consultation setting was a large learning institute and affiliated teaching hospitals in Nova Scotia. A convenience sample of 135 preceptors working in critical care received a survey. Three educators working in critical care and three faculty members working in the CCNP were selected as participants for an interview. Recruitment of individuals involved explaining the purpose and objectives of the practicum project and asking for participation via email, see Appendix A and B.

Survey Recruitment

All preceptors affiliated with the Learning Institute completed the “Clinical Competency Rubric” (CCR) during the preceptorship of CCNP learners and provided their names and email for faculty contact purposes. The CCRs from all CCNP programs dated September 2021-

December 2023 were searched for preceptor emails. A distribution list of CCNP preceptors was compiled from this period, and these preceptors received a recruitment email (Appendix A) requesting their participation in the survey. Of the 135 preceptors who received the recruitment email, 37 completed the survey.

Interview Recruitment

A convenience sample of four critical care CNEs within one tertiary care facility in Nova Scotia were contacted for an interview. Three critical care CNEs responded to the recruitment email and agreed to participate in the interview. The CCNP program works closely with critical care CNEs; their units are where CCNP learners complete their clinical rotations. The critical care CNEs oversee the orientation of new nurses to critical care and understand the unit needs and learning needs of new preceptors.

A convenience sample of four current CCNP faculty were contacted for an interview. Three CCNP faculty responded to the recruitment email and agreed to participate in the interview. CCNP faculty were included for their knowledge of course content, learning objectives, and curriculum delivery and design expertise to facilitate adult learning. Ultimately, the CCNP faculty oversees the clinical CCNP and the precepting of CCNP learners.

Data Collection

Data was collected using two methods: a survey provided to preceptors via email and personal interviews with critical care CNEs and CCNP faculty. The preceptor survey (see Appendix C) was provided as a select survey link and QR code with the email (Appendix A) requesting participation. The preceptor survey results were readily available via a password-protected login and reflected in real time. A follow-up email was sent one week following the

initial email to increase engagement. The preceptor survey was open for twelve days, after which time it was closed to participants.

Critical care CNEs and CCNP faculty were asked if they preferred a phone or Microsoft Teams interview and were provided a variety of dates and times to fit their schedules. The interviews were scheduled for approximately 20 minutes, and participants were asked open-ended questions from a developed interview guide. Critical care CNEs were interviewed using the questions outlined in Appendix D, and CCNP faculty were interviewed using the questions outlined in Appendix E. Participant interviews involved note-taking during the interview process; they were not audio recorded. Participants were provided the current “CCNP Guidelines for Preceptors” document to review before the interview.

Data Management and Analysis

“Select Survey” is a survey design program that is available to NSH employees to create surveys for smaller, localized data collection. This survey design program was chosen for the preceptor survey. The survey results obtained through “Select Survey” are anonymous and auto-populate in a password-protected landing page available only to the survey creator. The results were downloaded and saved as a PDF file. The results of preceptor surveys were analyzed using descriptive statistics, including frequencies and percentages.

Interview notes from CNE and CCNP faculty consultations were transcribed electronically and saved in a Word document. All information collected was stored in a private drive on a password-protected computer. This computer accesses the internet via a secure network with firewalls. Content analysis was used for interviews with CNEs and CCNP faculty.

Content analysis was used to analyze the interview data, which resulted in the development of themes that captured the perspectives of CNEs and CCNP faculty.

Ethical Considerations

This project focuses on quality improvement; an Health Research Ethics Review was not required for the consultations. The Health Research Ethics Review Authority (HREA) screening tool was completed and can be found in Appendix F. Completing the preceptor survey and agreeing to an interview implied participant consent. Participation in the consultation process was voluntary. All data collected from the preceptor survey was anonymous. Participants are called “preceptors,” “faculty,” or “educators” to protect anonymity. Participants were advised that any information gathered would be stored in a password-protected private drive and shared only with the practicum supervisor. No direct participant identifiers were collected to provide anonymity and protect confidentiality.

Results

Preceptor Survey

Thirty-seven preceptors completed the survey. The response rate for the survey was 27.4%. Participants were RNs from tertiary care facilities across Nova Scotia affiliated with the CCNP.

Participant Characteristics

The collected characteristics provided information about the demographics of current CCNP preceptors related to their practice, experience, and attendance at a previous preceptor course.

The survey requested that participants select their years of nursing experience and years of critical care experience from a list of options. This information helped determine the experience level of current CCNP preceptors. Most participants (38%) had 3-5 years of experience as an RN (Figure 1). This was followed closely by 35% of participants with over eight years of RN experience. Regarding years working in critical care, 32% of participants had worked 0-2 years and 32% of participants had worked 3-5 years, respectively (Figure 2).

Figure 1

Percentage Distribution of Years Working as a Registered Nurse

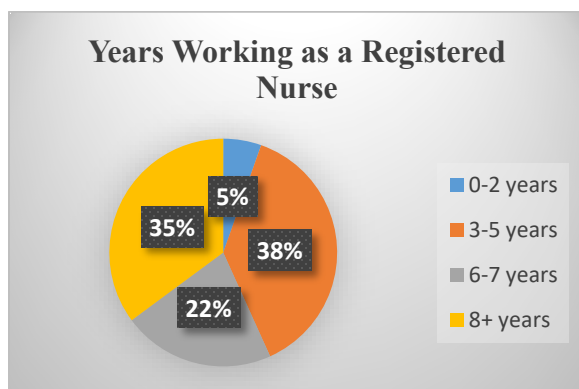
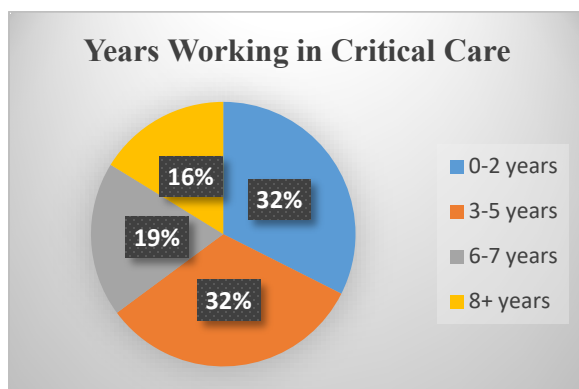


Figure 2

Percentage Distribution of Years Working in Critical Care



Participant Level of Experience

To better understand RNs' level of preparedness to precept, participants were asked whether they had completed a preceptor preparation course in the past, their time working in critical care before serving as a CCNP preceptor, and their self-reported level of preparedness to serve as a CCNP preceptor. Of the 37 participants, 54% had completed a preceptor preparation course in the past (Figure 3), and most participants (41%) had been working in critical care for more than two years before serving as a CCNP preceptor (Figure 4). However, 32% of participants had only worked for 7-12 months before serving as a CCNP preceptor. Most participants (81%) felt prepared to serve as a CCNP preceptor (Figure 5).

Figure 3

Percentage Distribution of Completion of Preceptor Preparation Course

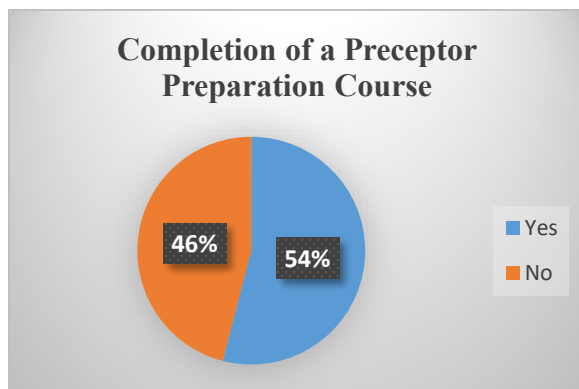


Figure 4

Percentage Distribution of Years Worked in Critical Care Before Precepting CCNP Learners

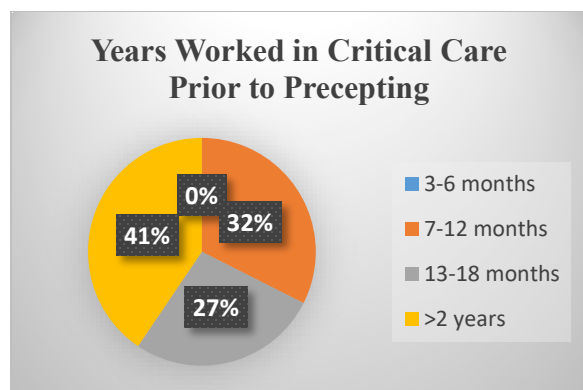
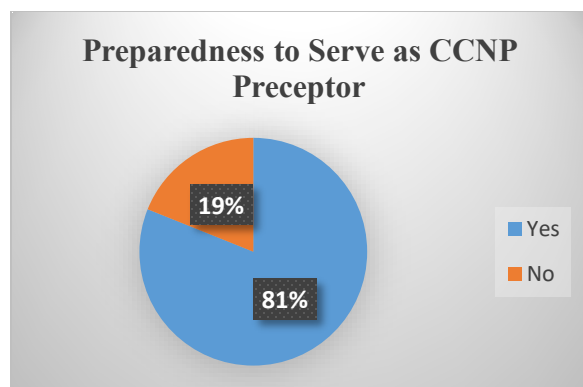


Figure 5

Percentage Distribution of Self-Reported Preparation to Serve as CCNP Preceptor



Assessment of Knowledge of CCNP Guidelines for Preceptors

The current “CCNP Guidelines for Preceptors” document is provided to CCNP learners to share with their preceptors. It was unknown by faculty if this document was being shared with preceptors. Sixty-eight percent of participants reported that they had received the current document. Five-point Likert-type scale questions were used to determine the preceptor’s level of knowledge related to the CCNP course flow and competency areas, the CCNP CCR and learner

evaluation, and the level of the advanced beginner as it relates to the CCNP learner (Table 1).

Preceptors were also asked to rate the usefulness of the current “CCNP Guidelines for Preceptors” to assist in precepting CCNP learners (Table 2). The literature review identified that one of the learning needs of preceptors is awareness of course objectives and learner evaluation. Therefore, questions regarding preceptor knowledge of course trajectory, evaluation, and clinical competencies were assessed. Participants were asked to rate their level of agreement to statements using strongly agree, agree, neutral, disagree, or strongly disagree.

Table 1

Knowledge Level of Preceptors Regarding CCNP Clinical

Knowledge Statement	Strongly Agree % (n)	Agree % (n)	Neither Agree nor Disagree % (n)	Disagree % (n)	Strongly Disagree % (n)
CCNP Course Flow/Competency Areas	32% (12)	51% (19)	5% (2)	8% (3)	3% (1)
CCNP CCR/Evaluation	30% (11)	57% (21)	3% (1)	11% (4)	0% (0)
Proficiency level of advanced beginner	30% (11)	51% (19)	14% (51)	3% (1)	3% (1)

Table 2

The Usefulness of “CCNP Guidelines for Preceptors”

Statement	Strongly Agree % (n)	Agree % (n)	Neither Agree nor Disagree % (n)	Disagree % (n)	Strongly Disagree % (n)
The guideline provides useful	19% (7)	41% (15)	38% (14)	3% (1)	0% (0)

information to precept CCNP learners					
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The first question utilized a Likert-type scale to ask *The CCNP “clinical guidelines for preceptors” provides useful information to assist in precepting CCNP learners*. Three percent of participants disagreed with this statement, 38% neither agreed nor disagreed, 41% agreed, and 19% strongly agreed. Most preceptors agreed or strongly agreed with this statement; however, 38% neither agreed nor disagreed, implying uncertainty. Ambivalence would support improving the usefulness of the current document to assist in better precepting CCNP learners.

The second Likert-type scale question was *I am knowledgeable about the CCNP course flow and program competency areas*. Three percent of participants strongly disagreed with this statement, 8% disagreed that they were knowledgeable, 5% neither agreed nor disagreed, 51% agreed that they were knowledgeable, and 32% reported that they strongly agreed that they were knowledgeable about the CCNP course flow and program competency areas. Most participants were knowledgeable in this area, which may indicate that the current “CCNP Guidelines for Preceptors” information on course flow and program competency areas is sufficient.

The third Likert-type scale question was *I am knowledgeable about using the CCNP clinical competency rubric (CCR) and learner evaluation*. Eleven percent of participants disagreed with this statement, 3% neither agreed nor disagreed, 57% agreed that they were knowledgeable, and 30% strongly agreed that they were knowledgeable about using the CCNP CCR and learner evaluation. Most participants were knowledgeable in this area, which may indicate that the current “CCNP Guidelines for Preceptors” information on the CCR and learner evaluation is sufficient. The CCR contains information for preceptors evaluating learners, which

may have assisted participants when precepting.

The final Likert-type scale question was *I am knowledgeable about the proficiency level of the advanced beginner as it relates to the CCNP learner*. Three percent of participants reported that they strongly disagreed with this statement, 3% disagreed with this statement, 14% neither agreed nor disagreed, 51% agreed that they were knowledgeable, and 30% strongly agreed that they were knowledgeable about the proficiency level of the advanced beginner as it relates to the CCNP learner. Again, most participants were knowledgeable in this area. The “CCNP Guidelines for Preceptors” document does not provide this information. Although most participants felt knowledgeable in this area, 6% identified they were not knowledgeable, and 14% were ambivalent. This would support including advanced beginner-level information related to the CCNP learner.

Topics for Inclusion in the Resource

Through a multiple-choice question, participants were asked what content would be a helpful addition to a preceptor resource for CCNP with the following options: (a) course information/objectives/roles and expectations, (b) evaluating learners, (c) dealing with challenging learners, (d) developing critical thinking skills in learners, (e) effective communication strategies and providing constructive feedback, (f) cultural competence, (g) faculty contact information, (h) other. The other answer provided an area where participants could fill in their suggestions for content additions to the preceptor resource. Participants were instructed to select all that applied (Table 3).

Table 3

Content Areas for Inclusion

Content Area	% (n)
Course information/objectives/roles and expectations	38% (14)
Evaluating learners	30% (11)
Dealing with challenging learners	54% (20)
Developing critical thinking skills in learners	70% (26)
Effective communication strategies and providing constructive feedback	54% (20)
Cultural competence	8% (3)
Faculty contact information	22% (8)
Other	3% (1)

The most popular content area for inclusion was developing critical thinking skills in learners, chosen by 70% of participants. Effective communication strategies, providing constructive feedback, and dealing with challenging learners were the second-highest options, with 54% of participants selecting these options. Course information/objectives/roles and expectations were chosen by 38% of participants, and learner evaluation was chosen by 30% of participants as a useful addition to a preceptor resource for the CCNP. Faculty contact information was chosen by 22% of participants. Only 8% of participants felt that cultural competence was a helpful addition to the preceptor resource. One participant chose *other* as an option in which they expressed their lack of advanced warning of being assigned a CCNP learner and felt that this was disrespectful.

Preferred Methods of Delivery

Through a multiple-choice question, participants were asked to select which delivery

method(s) they would prefer to receive a preceptor resource with the following options: (a) email, (b) virtually, (c) written material delivered by the learner, (d) available on the unit/from CNE, (e) other. The other answer provided an area where participants could fill in their suggestions for a delivery method. Participants were instructed to select all that applied (Table 4).

Table 4

Preferred Method of Delivery

Delivery Method	% (n)
Email	95% (35)
Virtual	8% (3)
Written material delivered by the learner	30% (11)
Available on unit/from CNE	57% (21)
Other	3% (1)

The most popular delivery method was email, chosen by 95% of participants. Available on unit/from CNE was the second most chosen option, with 57% of participants selecting this option as a delivery method. Written material provided by the learner was chosen as an option by 30% of participants. A virtual option for delivery was chosen by only 8% of participants. One participant chose *other* as an option and suggested a hard-copy resource binder available on the unit for preceptors to reference. This participant also suggested including contact information, expectations for learners/preceptors, and an overview of course flow in this binder.

Interviews with Critical Care CNEs

Of the four critical care CNEs contacted for interviews, three responded to the request, and the results of their interviews are detailed in this consultation report. Through content analysis, five themes were developed from the data.

Lack of Preceptor Preparedness

All three critical care CNEs identified that less than half of their units' current critical care staff have completed preceptor education, with two of the three reporting an average of 20% to 50%. Two educators stated that nurses may have taken a preceptor preparation course in their previous roles (i.e., in a different nursing area). However, this is not formally tracked and is self-reported. One educator suggested that the preceptor course be discussed with nurses at their six-month and one-year transition to practice check-ins to improve preceptor preparedness.

Regarding the preceptor selection process, all three CNEs stated that potential preceptors for CCNP learners are limited. Despite this, all those interviewed reported that CCNP learners will be assigned the most experienced of the preceptors from which they have to choose. Given the limited preceptor pool, two CNEs stated that “most experienced” can mean only one year of critical care experience. Learners can sometimes be assigned multiple preceptors for their clinical rotation.

Familiarity with the Document

Two of the three CNEs were familiar with the current “CCNP Guidelines for Preceptors” document. The third stated that they knew of its existence as an educator but were unaware of the document when they served as a preceptor. In their opinion, most preceptors in the unit did not know this document existed. All three educators felt that the current document was helpful and provided an overview of important information about the program as a starting point. They stated

that it covered important information that one would need to know to be a CCNP preceptor; one educator felt that this is important given the inconsistency with preceptor-preceptee assignments, such as learners having multiple preceptors.

Curriculum, Clinical, and Course Flow

Two educators felt that the current document was comprehensive, and if looking to redevelop the current guideline, a package would be a good option for preceptors. One of the educators stated that the current document could be improved to reflect the different program options and streams of the CCNP. One of the educators suggested having a visually appealing resource. All three CNEs stated that having a high overview of the program, including curriculum and clinical options, would be an improvement as many preceptors are unsure of the course trajectory and content.

Soft Skills

All three educators stated that adding soft skills to a resource for CCNP preceptors would be helpful. The soft skills mentioned by two of the three CNEs were giving and receiving feedback, developing critical thinking/clinical judgment, and prioritization. Two CNEs discussed adding information on supporting a struggling learner, handling challenging learners, and practice concerns. All three CNEs stated that preceptors struggle with providing constructive feedback to learners and have difficulty receiving feedback from their preceptee. One CNE mentioned adding faculty contact information, as well as an overview of the role of faculty in the clinical process. This CNE discussed that faculty and educator roles were often unclear during clinical, especially when practice problems arose.

Multiple Delivery Methods

All three CNEs mentioned that multiple delivery methods would be the best option for distribution. All three stated that having a hard copy in the units would be beneficial.. One educator mentioned that providing education to their unit is via as many methods as possible. All three discussed email as an effective way to reach preceptors before the clinical period. Further, two CNEs suggested an in-person discussion. One of which discussed the benefit of having a question-and-answer session and suggested using annual education days as a forum to discuss the resource.

Interviews with CCNP Faculty

Of the four CCNP faculty contacted for interviews, three responded, and the results of their interviews are included in this consultation report. Using content analysis common themes were developed from the data.

Usefulness

When asked about its usefulness, all three CCNP faculty members stated that the CCNP “Guidelines for Preceptors” document was useful. Two of the faculty stated that it assists nurses in serving as CCNP preceptors but has gaps and could be “more robust.” All three faculty members mentioned that the current document needs to be utilized and seen by preceptors to assist them. One faculty member stated that no matter how effective the document is, the preceptor is accountable for reading the information and asking questions about it. Another faculty member stated that many preceptors have never heard of the guideline document.

Lack of Understanding of CCNP Clinical

Two of the three faculty members felt that preceptors did not understand CCNP clinical well during their check-ins. Both faculty members reported that preceptors frequently voiced

concerns about learners not being advanced practitioners and that preceptors do not understand the advanced beginner level or the clinical competencies of CCNP. One faculty member stated that a variance in preceptor understanding of the program is common. This faculty member also stated that preceptors' understanding of the program is often better in peripheral hospital critical care units than in large tertiary care facility units.

Explanations and Utilization

When asked how the current document could be improved for CCNP preceptors, two of those interviewed faculty reported that the preceptors must first read the document. One of the faculty stated that this document should be distributed to preceptors for review before clinical commencing. Two faculty members felt that having information about evaluations would improve the document, such as assessment levels. Two faculty members suggested adding information on advanced beginners in critical care to clear up discrepancies. For example, two faculty members recommended making the document more visually appealing to the reader.

Additions

When asked about helpful additions to a preceptor resource manual, all three faculty members suggested different topics. One faculty member recommended adding information for preceptors on the CCR and expected outcomes. Another faculty member discussed adding information on how to evaluate learners and soft skills, such as communication skills. Finally, one faculty member mentioned information on the different clinical streams, contact information, and learning styles.

Delivery Methods

Regarding an effective method for distributing the preceptor resource manual to

preceptors, all three faculty members stated that email would be the most effective method. One faculty member recommended having multiple modes of distribution, such as a binder in the unit or virtually. Two of the three faculty members suggested having the clinical leads, CNEs, or charge nurses provide the resources to preceptors and having a question-and-answer session with preceptors in the units. One faculty member stated that having the responsibility on the learner to share the document with the preceptor was a lot to expect as they often struggle with paperwork.

Implications for the Practicum Project

The preceptor survey completed by current CCNP preceptors and the interviews with critical care CNEs and CCNP faculty provided important information that will guide the development of a preceptor resource manual for the CCNP. Aligning with the change in nursing demographics within specialty care areas noted in the literature and throughout preliminary discussions, CNE interviews and survey findings also revealed a lack of critical care experience among CCNP preceptors. Despite lacking experience in their specialty care areas, CCNP preceptors self-reported feeling prepared to serve in their roles. The interviews with CNEs suggest that many of the current CCNP preceptors do not have a preceptor preparation course, which contrasts with the findings of the preceptor survey, as most participants reported having completed a course. This may be due to the self-report factor of the course or the fact that the survey was distributed provincially and interviews were completed with CNEs affiliated with one large tertiary facility. These findings may not represent the entire CCNP preceptor population; therefore, creating a resource to assist those lacking preceptor preparation courses would be beneficial.

The current “CCNP Guidelines for Preceptors” document is provided to CCNP learners to share with their preceptors. It was previously unknown by faculty if this document was being

shared with preceptors. Important information obtained in the survey was preceptor awareness of the current “CCNP Guidelines for Preceptors” document. Sixty-eight percent of participants in the survey reported that their learners had shared the document with them. This finding differs from CCNP faculty and CNE statements as both groups stated that they were unsure of the preceptor’s knowledge of the document’s existence. The educators were familiar with the document but were unsure of its awareness in the units. Implications for the project would include ensuring the resource is provided to the preceptor by faculty via email or the unit to ensure that it is received and reviewed. Having the responsibility on the learner was mentioned by one faculty member as being too much given the amount of paperwork they also complete for clinicals.

Most surveyed preceptors felt the current CCNP “Guidelines for Preceptors” document provided useful information for precepting CCNP learners. However, many participants neither agreed nor disagreed with this statement, which would suggest uncertainty. This may be due to a lack of familiarity with the document or a lack of usefulness to their role as a preceptor. The educators and CCNP faculty felt that the current document was a good starting point to provide information a preceptor might require about the program, but it could be improved. This suggests that the course information provided adequately offers a basis for preceptors, which is in keeping with survey findings. The uncertainty found in the survey, in addition to the need for improvement noted in the interviews, suggests a need for redeveloping the guideline to increase its usefulness, which would benefit current preceptors.

Most participants reported agreeing or strongly agreeing that they were knowledgeable about the CCNP course flow, program competencies, using the CCR/evaluating learners, and the advanced beginner level related to the CCNP learner. These self-reported survey findings

contrast with faculty member interviews, which noted that preceptors often do not understand CCNP clinical well, especially at the advanced beginner level. Again, this is not supported in the survey findings, as 81% of participants reported knowledge of these statements. As reported by one faculty member, preceptors in the peripheral hospitals often better understand CCNP clinics. Therefore, these may have been the participants in the survey and not reflective of the entire preceptor pool. Implications would be to continue including information on the CCNP course flow and program competencies in the redeveloped preceptor resource manual and provide information on the level of the advanced beginner.

The suggested content for inclusion in a preceptor resource manual by preceptors, CNEs, and CCNP faculty was similar. All educators and CCNP faculty felt that providing information on the clinical streams, curriculum, and programs visually appealingly would prove beneficial; this finding is in keeping with the need for providing course objectives to preceptors. Focusing on soft skills, such as developing critical thinking skills in learners, effective communication strategies/providing constructive feedback, and dealing with challenging learners, were the topics most suggested by survey participants. The addition of soft skills, such as communication, feedback, developing critical thinking skills, and dealing with challenging learners, were all suggested by CNEs for the preceptor resource. These findings echo those of the surveyed preceptors and the literature review findings. Therefore, having appendices with information for preceptors on these soft skills would be a helpful addition to the preceptor resource.

Most participants in the survey wished to receive resources through email, followed by having a resource available in their unit. CNEs and CCNP faculty also suggested email distribution and having a unit resource. This would involve having the preceptor's email before the clinical rotation or having a distribution list for all nurses who serve as preceptors for the

units in which CCNP learners complete clinical. Having a resource on the unit would be easily accessible to preceptors; however, ensuring it was updated on each unit when future changes or additions occur could prove challenging. A living document is more readily updated when changes occur. An implication for the practicum project would be to offer multiple modes of delivery of this resource to preceptors, including email or on the unit. CNEs and CCNP faculty mentioned a question-and-answer session, which was not one of the options listed in the survey. A question-and-answer session may be an option for future education days; however, this would prove challenging as this is a provincial program. Offering a virtual session to preceptors via MS Teams may assist in answering questions provincially.

Conclusion

The consultations conducted for this practicum project provided valuable information from key partners involved in precepting CCNP learners, including preceptors, CNEs, and CCNP faculty. Surveying current CCNP preceptors provided previously unknown information regarding the use of the current CCNP guideline. Having preceptors suggest content for inclusion in a redeveloped preceptor resource ensures that their learning needs are met and are in keeping with adult learning theory. CNEs work closely with the CCNP program and assist in educating nurses. Therefore, their thoughts and opinions reflect the needs of their units. Their input ensures that issues or concerns voiced by preceptors can be addressed. Having their partnership also assists with future distribution of the resource. Finally, CCNP faculty oversee all clinicals for CCNP learners. Therefore, they are knowledgeable of the needs and knowledge deficits of CCNP preceptors from personal encounters. Faculty know the program best and are familiar with resource development. Together, the results of these consultations will guide the development of a preceptor resource manual for the CCNP program that reflects preceptor, faculty, and unit

needs, improving the preceptorship of CCNP learners and ultimately improving patient care.

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Appendix A: Survey Introduction Letter for Preceptors

Dear CCNP Preceptor,

My name is Rachel Rizcallah, and I am the Nurse Educator with the Critical Care Nursing Program (CCNP). I am a Master of Nursing student at Memorial University. I am currently completing a practicum project regarding developing a preceptor resource manual for the CCNP under the supervision of my practicum supervisor. I am requesting your involvement in this project by completing a short online survey about your experience precepting CCNP learners, your knowledge level with precepting CCNP learners, and your learning needs for precepting CCNP learners. The findings of this survey will help guide the development of a preceptor resource manual for the CCNP. Your participation is voluntary, and if you complete this survey, you consent to participate in the consultations for this project. Data is collected anonymously through the survey program, therefore, once the survey is submitted, you cannot withdraw the information. All survey data will remain anonymous in the report of the findings. The survey link can be found below and will be available until March XX 2024

Survey Link: <https://XXXX>

If you have any questions regarding the survey or the practicum project, please contact me at rachel.rizcallah@nshealth.ca or 902-717-7481

Warmly,

Rachel Rizcallah

MSc. N Student, Memorial University of Newfoundland

Appendix B: Interview Introduction Email to Critical Care Educators and CCNP Faculty

To Whom It May Concern:

My name is Rachel Rizcallah, and I am the Nurse Educator with the Critical Care Nursing Program (CCNP). I am a Master of Nursing student at Memorial University of Newfoundland. I am currently completing a practicum project regarding developing a preceptor resource manual for the CCNP under the supervision of my practicum supervisor.

I am writing to request your participation in a 20-minute interview about the CCNP preceptor guidelines document provided to preceptors. The interview may be completed via MS Teams or phone. I would like to schedule the interview between March 4th and 15th. Confidentiality will be ensured and any information shared with me during the interviews will only be shared with myself and my practicum supervisor.

As part of my practicum project, I am completing consultation interviews to identify gaps or suggestions in the current CCNP preceptor guide and topics to include in developing a preceptor resource. Thank you for your consideration.

Please do not hesitate to contact me should you have any questions or concerns.

Warmly,

Rachel Rizcallah

MSc. N Student, Memorial University of Newfoundland

Appendix C: Survey for CCNP Preceptors

1. How many years have you been working as a Registered Nurse?

- a. 0-2 years
- b. 3-5 years
- c. 6-7 years
- d. 8+ years

2. How long have you worked in Critical Care?

- a. 0-2 years
- b. 3-5 years
- c. 6-7 years
- d. 8+ years

3. Have you taken a preceptor preparation course in the past?

- a. yes
- b. no

4. How long had you worked in critical care before being a CCNP preceptor?

- a. 3-6 months
- b. 7-12 months
- c. 13-18 months
- d. >2 years

5. Did you feel prepared to serve as a CCNP preceptor?

a. yes

b. no

6. Did your CCNP learner share the CCNP “Clinical Guidelines for Preceptors” with you?

a. yes

b. no

Please rate your level of agreement with the following statements using the Likert scale of 1-4:

7. The CCNP “clinical guidelines for preceptors” provides useful information to assist in precepting CCNP learners

a. Strongly agree

b. Agree

c. Disagree

d. Strongly disagree

e. Neither agree or disagree

8. I am knowledgeable about the CCNP course flow and program competency areas

a. Strongly agree

b. Agree

c. Disagree

d. Strongly disagree

e. Neither agree or disagree

9. I am knowledgeable about using the CCNP clinical competency rubric (CCR) and learner evaluation

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Neither agree or disagree

10. I am knowledgeable about the proficiency level of the advanced beginner as it relates to the CCNP learner

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Neither agree or disagree

Please select all that apply:

11. What content would be a helpful addition to a preceptor resource for the CCNP program?

- a) Course information/objectives/roles and expectations
- b) Evaluating learners
- c) Dealing with challenging learners
- d) Developing critical thinking skills in learners
- e) Effective communication strategies and providing constructive feedback
- f) Cultural competence
- g) Faculty contact information

h.) Other _____

12. How would a preceptor resource be best provided to CCNP preceptors?

- a) Email
- b) Virtually
- c) Written material delivered by the learner
- d) Available on the unit/from CNE

Appendix D: Interview Questions for Critical Care CNEs

- 1.) How many nurses who serve as preceptors have completed preceptor education before being a CCNP preceptor?
- 2.) What is the preceptor selection process for CCNP learners?
- 3.) How effective do you feel the current CCNP “guidelines for preceptor” document is in preparing nurses to serve as CCNP preceptors? Are you familiar with this document?
- 4.) What ways do you think the current document could be improved for nurses serving as CCNP preceptors? Please explain.
- 5.) What topics do you think would be a helpful addition to a preceptor resource manual for the CCNP? Please explain.
- 6.) Which delivery method do you think would be most effective for distributing this resource manual to preceptors? Please explain.

Appendix E: Interview Questions for CCNP Faculty

- 1.) How effective do you feel the current CCNP “guidelines for preceptor” document is in providing information to CCNP preceptors?
- 2.) In your clinical check-in calls with preceptors and learners, do you feel that there is a good understanding on behalf of the preceptors regarding the CCNP clinical?
- 3.) What ways do you think the current document could be improved for nurses serving as CCNP preceptors?
- 4.) What topics do you think would be a helpful addition to a preceptor resource manual for the CCNP? Please explain.
- 5.) Which delivery method do you think would be most effective for distributing this resource manual to preceptors? Please explain.

Appendix F: Health Research Ethics Authority (HREA) Screening Tool

Student Name: Rachel Rizcallah

Title of Practicum Project: Development of a Preceptor Resource Manual for the Critical Care Nursing Program in Nova Scotia

Date Checklist Completed: February 21, 2024

This project is exempt from Health Research Ethics Board approval because it matches item number 3 from the list below.

9. Research that relies exclusively on publicly available information when the information is legally accessible to the public and appropriately protected by law; or the information is publicly accessible and there is no reasonable expectation of privacy.
10. Research involving naturalistic observation in public places (where it does not involve any intervention staged by the researcher, or direct interaction with the individual or groups; individuals or groups targeted for observation have no reasonable expectation of privacy; and any dissemination of research results does not allow identification of specific individuals).
11. Quality assurance and quality improvement studies, program evaluation activities, performance reviews, and testing within normal educational requirements if there is no research question involved (used exclusively for assessment, management or improvement purposes).
12. Research based on review of published/publicly reported literature.
13. Research exclusively involving secondary use of anonymous information or anonymous human biological materials, so long as the process of data linkage or recording or dissemination of results does not generate identifiable information.
14. Research based solely on the researcher's personal reflections and self-observation (e.g. auto-ethnography).
15. Case reports.
16. Creative practice activities (where an artist makes or interprets a work or works of art).

For more information please visit the Health Research Ethics Authority (HREA) at <https://rpresources.mun.ca/triage/is-your-project-exempt-from-review/>

Appendix D: Resource Manual



Preceptor Resource Manual

CRITICAL CARE NURSING PROGRAM

Developed by Rachel Rizcallah in partial fulfillment of the requirements for the degree of Master of Science in Nursing (Practicum Option) at Memorial University of Newfoundland

Document History

Version	Author	Date	Description of Changes
1.0	Rachel Rizcallah	July 2024	Original Document

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Welcome Message

Thank you for agreeing to be a preceptor for the Critical Care Nursing Program (CCNP). Offered by the Nova Scotia Health Learning Institute for Healthcare Providers, the CCNP prepares Registered Nurses (RNs) to work in critical care settings.

Faculty look forward to collaborating with you to ensure learners have a rewarding clinical experience. This preceptor resource manual will provide information and resources to help facilitate an effective learning relationship and assist learners in meeting course competencies.

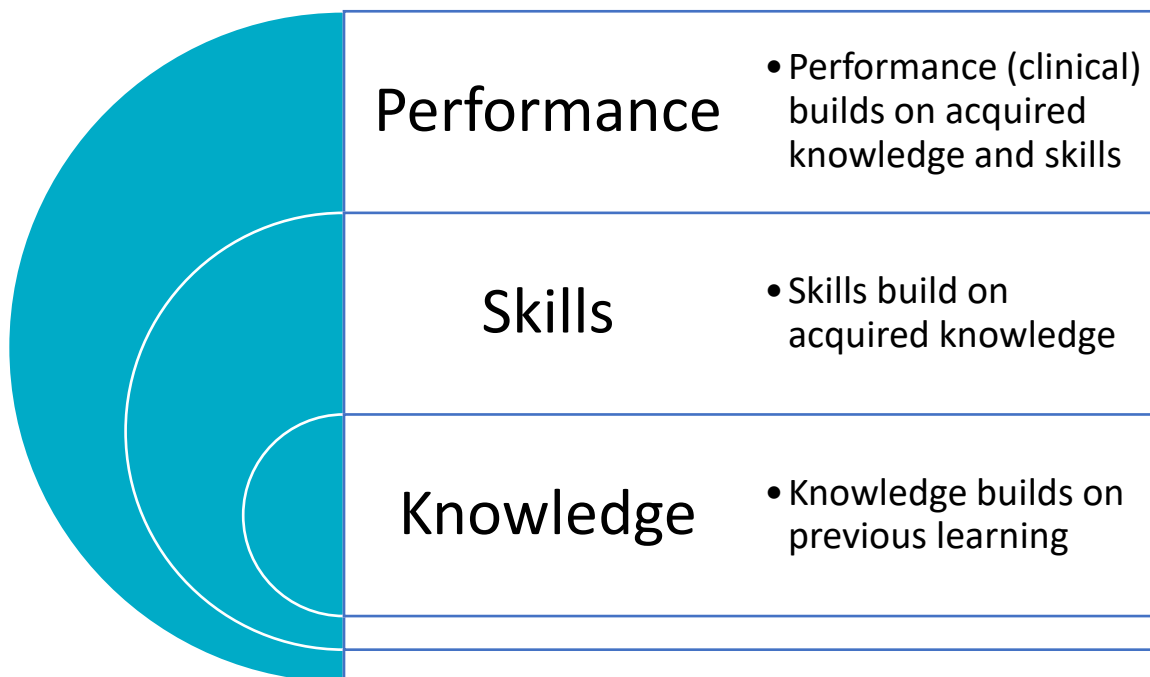
Please do not hesitate to contact faculty with any questions or concerns. We encourage open communication to optimize preceptor and learner experiences.

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Program Description

The Critical Care Nursing Program (CCNP) prepares RNs to work in adult critical care settings. CCNP utilizes competency-based education to achieve performance-based certification.

In the CCNP, learners acquire conceptual knowledge (theory) and apply the knowledge through learning opportunities, such as skill labs and simulations. Learners integrate the learned concepts (knowledge, skills) during clinical shifts. At the end of the program, graduates can apply their acquired knowledge, skills, and abilities in various adult critical care settings (CCNP, 2023).



(Adapted from Alspach, 1996)

CCNP content is structured under four key concepts:

1. Ventilation and Oxygenation
2. Pumping and Perfusion
3. Inflammation
4. Consciousness

Knowledge-based Curriculum (CCNP, 2023)

1. Foundational Concepts of Critical Care Patient Profile Concepts

- Patient, Family, Critical Illness, Critical Care Environment

Professional Nursing and Healthcare Concepts

- Patient Centered/Family Centered Professional Practice
- Evidence Informed Practice
- Informatics
- Teamwork and Collaboration
- Quality Improvement
- Safety

Foundational concepts in critical care include both patient profile concepts and health and professional concepts.

Health care and professional concepts comprise Patient-Centered Care, Teamwork and Collaboration, Evidence-based Practice, Quality Improvement, Safety, and Informatics. These concepts form the basis of all nursing care in the critical care units and are the CCNP program competencies/outcomes learners must achieve at program completion. Learners explore these concepts through discussions.

2. Ventilation and Oxygenation Concepts I

- Respiratory Physiology Review/Ventilation
- Gas Exchange and the AC membrane
- Oxygen Transport
- Acid-base imbalance/ABG interpretation
- Failure to Oxygenate/Ventilate

Learners must recognize alterations in ventilation/oxygenation and respond to optimize patients' respiratory status using strategies such as positioning, oxygen therapy, basic airway adjuncts, and suctioning. These concepts and strategies are explored through case studies and discussions.

3. Ventilation and Oxygenation Concepts II

- Mechanical Ventilation:
- Sedation, Agitation, Pain and Delirium

When patients experience a failure to oxygenate and/or ventilate, they require advanced airway adjuncts and subsequent mechanical ventilation. Learners will discuss strategies to optimize ventilation and oxygenation while working collaboratively with the interprofessional intensive care unit team (RRT, physician). Using case studies and discussions, learners explore these concepts and strategies.

4. Pumping and Perfusion I Concepts

- Cardiac Anatomy and Physiology
- Impaired HR/Electrophysiology
- Dysrhythmias
- Pacemakers

In Pumping and Perfusion I, learners review advanced physiology and the determinants of cardiac output. Each module in pumping and perfusion builds on previous knowledge, such as ventilation and oxygenation. Learners begin to recognize the consequences of impaired pumping and perfusion and the responses to alterations in heart rate, contractility, preload, and afterload.

5. Pumping and Perfusion II Concepts

- Impaired Contractility/Acute Coronary Syndromes
- Cardiac Failure

Building on the concepts of pumping and perfusion I, learners examine impaired contractility as a determinant of cardiac output through acute coronary syndrome and heart failure through case studies and discussions.

6. Pumping and Perfusion III Concepts

- Basic Hemodynamic Monitoring
- Impaired Preload – Fluid and Electrolytes

Building on the pumping and perfusion I and II concepts, learners examine preload as a determinant of cardiac output through basic hemodynamic monitoring and fluid and electrolyte concepts through case studies and discussions.

7. Inflammation I

- Inflammatory Process
- Diabetes
- Pancreatitis
- ARDS

Learners are introduced to inflammatory processes and their responses. The Inflammation I module includes glucose control in the ICU and discusses diabetes, pancreatitis, and ARDS to illustrate progressive inflammation through case studies and discussions.

8. Inflammation II

- Advanced Hemodynamic Monitoring
- Shock
- Acute Kidney Injury and Failure

Building on the concepts presented in Inflammation I, learners review advanced hemodynamic monitoring, shock states, and acute kidney injury through case studies and discussions.

9. Consciousness I

- Neuroanatomy & Physiology and Spinal Cord Injury
- Impaired Sensation and Perception-PACU

In Consciousness I, learners are introduced to a review of neuroanatomy and physiology in addition to alterations in sensation, perception, and impaired motor/sensation in spinal cord injuries through case studies and discussions.

10. Consciousness II

- Impaired Intracranial Regulation (ICP)
- Impaired Cerebrovascular Circulation (stroke, head injury, death & dying, organ donation)

Building on the concepts of Consciousness I, learners are introduced to impaired intracranial regulation and impaired cerebrovascular circulation to illustrate alterations in consciousness through case studies and discussions.

11. Consciousness III

- Impaired Metabolic Processes (liver failure)

Learners are introduced to altered metabolic processes using liver failure through a case study to illustrate how an impaired metabolic process can cause decreased levels of consciousness.

CCNP Program Competency Areas

The CCNP program competencies (outcomes) the learner must achieve by the end of the program are organized under six competency areas from the Quality and Safety Education for Nurses (QSEN) (Cronenwett et al., 2007)

Patient-Centered Care

Compassionate and coordinated care is provided based on patients' preferences as they are full partners.

Teamwork and Collaboration

Functions as an effective member of an interdisciplinary team to quality patient care.

Evidence-Informed Practice

Uses current evidence and clinical expertise with patient's values/preferences to deliver optimal care.

Quality Improvement

Integrates improvement strategies into practice to continuously improve the quality and safety of care and the health care system.

Safety

Integrates strategies to reduce the risk of harm to patients. Accountable for individual performance as a self-regulated profession. Promotes safety at the system level.

Informatics

Uses information and communication technologies to communicate, manage knowledge, prevent/handle errors, and support decision-making.

Proficiency Level

Following completion of the CCNP program, RN learners enter into clinical practice able to independently and consistently provide safe and effective nursing care to patients at the **advanced beginner** level.

According to Benner's (1984) definition:

- The advanced beginner enters a specialty care area with specialized knowledge and skills and prior exposure/experience with patients in the specialty setting.
- The advanced beginner can relate previous experiences while consistently applying knowledge and skills to stable, predictable patient situations with minimum preceptor guidance following an individualized orientation to the practice setting.
- In rapidly changing patient situations, the advanced beginner requires preceptor supervision.



Program Delivery

The CCNP offers full-time and part-time program delivery options to RN learners in Nova Scotia. Both programs offer self-directed online learning, live classroom, in-person skills, and simulation sessions (CCNP, 2023).

Full-Time Program

- Designed for RN learners entering into critical care practice
- Offered over 13-weeks
- 280 hours of study time
- 36 hours of simulation/skills lab time
- 168 hours of clinical time (14 X 12-hour shifts)

Timeline	
Phase	Content
Phase I, Week 1-2	• Foundations content • Ventilation & Oxygenation content • Skills lab & simulation labs
Phase II, Week 3-4	• Pumping & perfusion content • Skills lab & simulation
Phase III, Week 5	• Objective Structured Clinical Exam (OSCE) practice & testing
Phase IV, Week 6-7	• Inflammation content • Simulation lab
Phase V, Week 8-9	• Consciousness content • Simulation lab • Preparation for clinical • Pump training with ICU CNEs
Phase VI, Week 10-13	• 14 X 12 h clinical shifts & clinical documentation
Phase VII, Week 13+	• Transition to practice plan

Part-time Program

- Designed for RN learners working full-time on their units while studying in the program
- Offered over 34-40 weeks
- Option for integrated clinical if working in a critical care setting with minimum hours met
- 280 hours of study time
- 36 hours of simulation/skills lab time
- 168 hours of clinical time (14 X 12-hour shifts)

Timeline	
Phase	Content
Phase I, Week 1-9	• Foundations content • Ventilation & Oxygenation content • Skills lab & simulation labs
Phase II, Week 10-16	• Pumping & perfusion content • Skills lab & simulation • Clinical shifts (integrated learner- 3 shifts)
Phase III, Week 17-25	• Inflammation content • Simulation lab • Clinical shifts (integrated learner- 3 shifts)
Phase IV, Week 26-33	• Consciousness content • Simulation lab • Clinical shifts (integrated learner- 3 shifts)
Phase V, Week 34-40	<u>Clinical shifts:</u> ○ 5 X 12 h shifts for integrated learner ○ 14 X 12 h shifts for block clinical learner

Clinical Overview

The clinical component of the CCNP enables learners to apply theoretical concepts of the program while caring for individuals in the critical care setting. Learners have acquired the knowledge and skills, and clinical performance builds upon these. Clinical is considered the performance portion of the program. As a preceptor, you will guide clinical learning and assess the learner's clinical performance with faculty (CCNP, 2023).

All programs offering clinical options at the Learning Institute for Healthcare Providers follow the same principles (CCNP, 2023):

- Clinical is tailored to provide the best level of learning by aligning with program outcomes and addressing individual learner's needs.
- Through scaffolding, learned theory is applied in practice, whether in an integrated or block stream.
- Responsibility for the patient assignment and responsibilities for patient care are clearly outlined.
- Patient assignment is appropriate to assist in meeting program outcomes.
- Learners have a consistent preceptor(s) assigned to support their learning.

Clinical Models/Streams

There are two clinical streams offered in the CCNP:

Integrated Clinical Stream

The learner applies learned concepts in a clinical setting throughout the program while studying new theoretical concepts. Learners who have completed orientation and work independently, with a minimum of 975 clinical hours in the critical care setting, are suitable candidates for this clinical stream.

Block Clinical Stream

The learner applies learned concepts in a clinical setting without studying new concepts.

There are two patient assignment options offered in the CCNP:

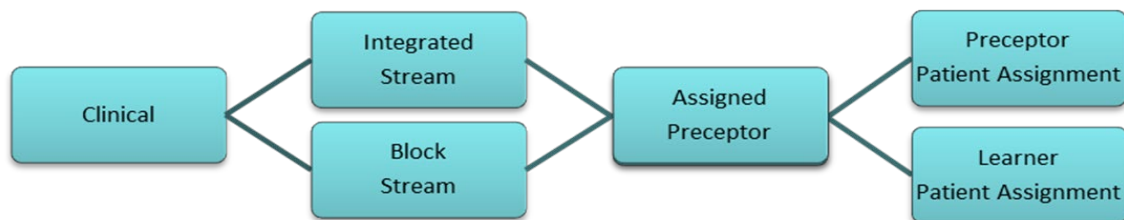
Preceptor Patient Assignment

- The learner is new to the clinical setting
- The preceptor is assigned the patient (s)
- The learner shares in the patient care responsibilities
- The preceptor assists the learner in meeting program outcomes

Learner Patient Assignment

- The learner is employed as staff in the unit (oriented to the unit, taking full patient assignments of differing acuity levels)
- A scheduled work day is chosen as a clinical shift.
- The learner is assigned a patient (s) of appropriate acuity level (s) to help support them in meeting program outcomes
- The learner is responsible for the patient care responsibilities, and the preceptor acts as a resource to assist in meeting program outcomes

Visually, the clinical models/streams can be illustrated as seen below:



Clinical Guidelines (CCNP, 2023)

Guideline	Learner-Preceptor Assignment	Learner-Patient Assignment
Work Experience	Learners and preceptors discuss the learner's work experience	Learners and preceptors discuss the learner's work experience
Goal Setting	Learners set clear goals and share goals with preceptors. Initial goals may focus on foundational concepts (communication, prioritization, time management)	Learners set clear goals. Preceptors may be able to assist learners in experiences to meet learning goals. Goals may be higher level
Preceptors and Learners	Learners and preceptors are together at <u>all times</u> when caring for patients and families: • Preceptor is always present to be a resource • Learner and preceptor take the same breaks This prevents the learner from being in a difficult situation	Learners and preceptors work the same shift. The learner is a core member of staff and is solely responsible for the care of the patient and family: • Preceptor acts as a resource • Preceptor provides assistance in meeting learning goals • Preceptor provides feedback
Medications	Learners can administer medications under the direction and supervision of their preceptor: • Learners are expected to be knowledgeable of all medications the patient is receiving • Narcotics may be signed out if co-signed by a preceptor • Learners are not to perform	Learners are core staff and administer medications to the patient: • Learners are expected to be knowledgeable of all medications the patient is receiving • Learners may sign out/administer narcotics as per policy • Learners follow policies for

	independent double checks of high-alert medications but can participate in the process as a third check Note: This does not prohibit learners from administering high-alert medications under preceptor supervision	performing independent double checks of high-alert medications.
Telephone/verbal orders	Learners do not take telephone/verbal orders Note: This does not prohibit learners from presenting their SBAR on the telephone to a healthcare team member	Learners are to follow policies for telephone/verbal orders
Documentation	Documentation reflects the care provided: • Learners participate in the documentation of their assessment findings and interventions for their patient (s) • The preceptor/learner will discuss the type/amount of documentation the learner will complete • Preceptors may need to document their own assessment findings, interventions, or evaluations based on their	Documentation reflects the care provided: • Learners participate in the documentation of their assessment findings and interventions for their patient (s) • Learners sign the transfer of accountability (TOA) at the beginning/end of the shift, as they are responsible for the care provided

	professional judgment or policy • Preceptors sign the transfer of accountability (TOA) at the beginning/end of the shift, as they are responsible for the care provided	
Clinical Time	Learners complete 168 hours of precepted clinical time (14 X 12 h shifts)	Learners complete 168 hours of precepted clinical time (14 X 12 h shifts)
Learner Absence	Attendance at all clinical shifts is mandatory: • If a learner is unable to attend a clinical shift, they are required to telephone the unit and/or their preceptor directly in advance of the shift • Learners must also inform faculty if they are ill/absent via email or telephone • Learners are required to reschedule missed clinical shifts • Absences may result in the inability to meet performance requirements requiring a program extension or disqualification	Attendance at all clinical shifts is mandatory: • If a learner is unable to attend a clinical shift, they are required to telephone the unit and/or their preceptor directly in advance of the shift • Learners must also inform faculty if they are ill/absent via email or telephone • Learners are required to reschedule missed clinical shifts • Absences may result in the inability to meet performance requirements requiring a program extension or disqualification

Switching Clinical Shifts	Learners are asked to refrain from switching clinical shifts: Any changes must be preapproved by the sponsoring manager and communicated to faculty in advance of the shift or it will not count towards the clinical time	Learners are asked to refrain from switching clinical shifts: Any changes must be preapproved by the sponsoring manager and communicated to faculty in advance of the shift or it will not count towards the clinical time
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Clinical Documentation

Learners must have clinical documentation for all clinical shifts on the unit.

Clinical documentation is comprised of the following:

- Clinical logs (completed by the learner)
- Clinical learning goals
- Repeat skills exposure checklist
- Clinical Competency Rubric (CCR)

Clinical Learning Goals

Learners will review their self-identified clinical goals with you on the first day of clinical and throughout their clinical rotation. Please provide the learner with feedback and assistance in achieving their goals throughout their clinical experience.

Repeat Skills Exposures Checklist

As a preceptor, please review the learner's *Repeat Skills Exposure Checklist* daily to ensure the dates each skill is performed are recorded. Please sign the checklist after the learner independently performs each identified skill in the clinical setting (See Appendix A).

Learner Patient Assignment:

Learners in the learner-patient assignment model may have been granted Recognition of Prior Learning (RPL) and can independently perform these skills. The *Repeat Skills Exposure Checklist* records skills performed in the clinical setting.

Preceptor Patient Assignment:

The *Repeat Skills Exposure Checklist* lists the skills the learner should focus on practicing in the clinical setting. **Although learners have practiced these skills in a laboratory setting, the preceptor should observe the learner performing the skill for the first time clinically.** If the preceptor feels the learner is competent, they can perform that skill independently.

Critical Care Nursing Program Clinical Competency Rubric (CCR)

Please sign the front page of the CCR daily and provide the learner with feedback at the designated assessment points by initialing in the appropriate columns (See Appendix B).

Beginning Assessment Point (after first 3 shifts):

- The preceptor and learner should review the clinical competencies and discuss the learner's performance, experience to date (patient assignments, acuity level), and learning needs.
- After each assessment point, please assist the learner with identifying/modifying their goals/plan to help promote their learning in the next set of clinical shifts.

Midterm Assessment Point (after the 6th and 9th shifts):

- The preceptor reviews the clinical competencies and reflects on the learner's progress from the initial assessment point.
- The preceptor identifies learning needs, provides feedback, and identifies strategies to assist learners in their remaining shifts.
- Faculty, the preceptor, and the learner will collaborate on best supporting the learner over the remaining shifts.
- If the preceptor identifies any competencies the learner is struggling with **or** regressing on (i.e., moving from Progressing back to Initial), faculty must be made aware to formulate a learning plan.

The Final Evaluation (after the 12th shift):

- The preceptor will evaluate whether the learner can independently and consistently demonstrate the competencies of the CCR. To successfully complete/pass the CCNP course, the learner must satisfactorily meet all competencies (rated at "expected"). Faculty **must** be contacted if there are concerns that the learner will not successfully meet the competencies.

Clinical Progression

Following an orientation to the area of practice, learners are expected to provide basic nursing care, such as personal care, routine vital signs, and hourly intake/output. During the first few days, learners should familiarize themselves with unit routines and

the patient population while developing organizational skills and coordinating care with you as their preceptor. The learner must ask questions, perform physical assessments, document, formulate a care plan, and identify interventions. The learner is expected to communicate any concerns/problems with you.

Beginning Shifts (1st-3rd shifts):

The goal for the first few shifts is for the learner to begin to plan and prioritize care for a stable and predictable patient. As the preceptor, you are the supervisor of the care provided. The learner performs clinical skills per the skills checklist with your supervision. Progress should be seen in all competency areas of the CCR.

At the beginning of each shift, the learner should discuss their care plan with you, and the learner's performance should be discussed at the end of the clinical shift.

As learners become more confident, knowledgeable, and skilled, they should take on more care responsibility.

Midterm Shifts (4th-9th):

The learner consistently plans, implements, and prioritizes care for a stable and predictable patient. As the preceptor, you are the supervisor of the care provided. Your guidance may be required for some care/interventions. The learner performs clinical skills per the skills checklist with the preceptor in attendance. Progress should be seen in all competency areas.

End of Course Shifts (10th-12th):

The learner independently and consistently plans, implements, and prioritizes care for a stable and predictable patient. As the preceptor, you are the supervisor of the care provided.

Shifts 13-14:

The learner independently and consistently plans, implements, and prioritizes care for a stable and predictable patient. As the preceptor, you are the supervisor of the care provided.

Developing Critical Thinking Skills in Learners

Critical thinking skills can be developed and assessed in learners through various strategies. The following section features several methods you, the preceptor, may use to foster your assigned learner's critical inquiry and clinical judgment. You are encouraged to actively engage CCNP learners in activities to promote and develop these skills.

1) Reflective Learning

Self-reflection is an important part of nursing practice. Reflecting on observations and interventions in clinical situations can assist in exploring and analyzing thinking processes. Learners may choose to use journaling as this combines information (patient data/situation/history), emotion (thoughts/feelings), and experience (interventions, what worked well/didn't work, planned versus actual outcomes). This strategy may give the learner a clearer understanding of what they have learned and how it may impact future practice. Self-reflection is also helpful in exploring the challenging emotions of critical care nursing practice (Nova Scotia College of Nurses, 2018; Swinny, 2010; Willers et al., 2021).

Utilizing the LEARN method (Lapum et al., 2019) or the FRAME method (NSCN, 2018), learners can reflect on a critical incident or event in clinical.

L: Look Back

E: Elaborate

A: Analyze

R: Revision

N: New perspective

F: Focus

R: Reflect

A: Assess

M: Make meaning

E: Explore

Learn Method

L: Look Back:

- What was the patient situation or critical incident that occurred
- Patient data/history
- Describe all details

E: Elaborate:

- What did you think?
- What presented a challenge?
- How did you feel?
- What did you see?
- Who was involved?

A: Analyze:

- How did the situation happen?
- Why did the situation happen?
- Were there differences in what you thought would happen and what happened?
- Consider the situation in the context of acquired critical care theory and clinical practice.

R: Revise:

- What would I do differently or the same next time?
- How/why should my practice change or stay the same?

N: New Perspective:

- What would help me manage a similar clinical situation?
- What do I need to learn/know?

Frame Method

F: Focus:

- Consider an event/occurrence in the past week/year/month that was challenging or rewarding in your critical care career

R: Reflect:

- What was challenging?
- What did I do well?
- What did I do that makes me proud of my critical care practice and knowledge?
- What were the learning opportunities?

A: Assess:

- What went well/didn't?
- What were my strengths in the situation/event? How could I build on these strengths?

M: Make Meaning:

- What would I do differently or the same next time?
- What feedback did I receive?
- How can this situation/event help me learn and grow as a critical care nurse?

E: Explore:

- What would help me manage a similar clinical situation?
- What do I need to learn/know for next time?
- How can I assist others to learn from my experience?

2) Questioning

Posing open-ended questions and statements can assist learners in developing critical thinking skills. Questioning should be non-judgmental and assist learners in working through problems. Questions can help determine a level of understanding and identify learning needs (Burns et al., 2006; Louis et al. and Hospital, 2019; Swinny, 2010).

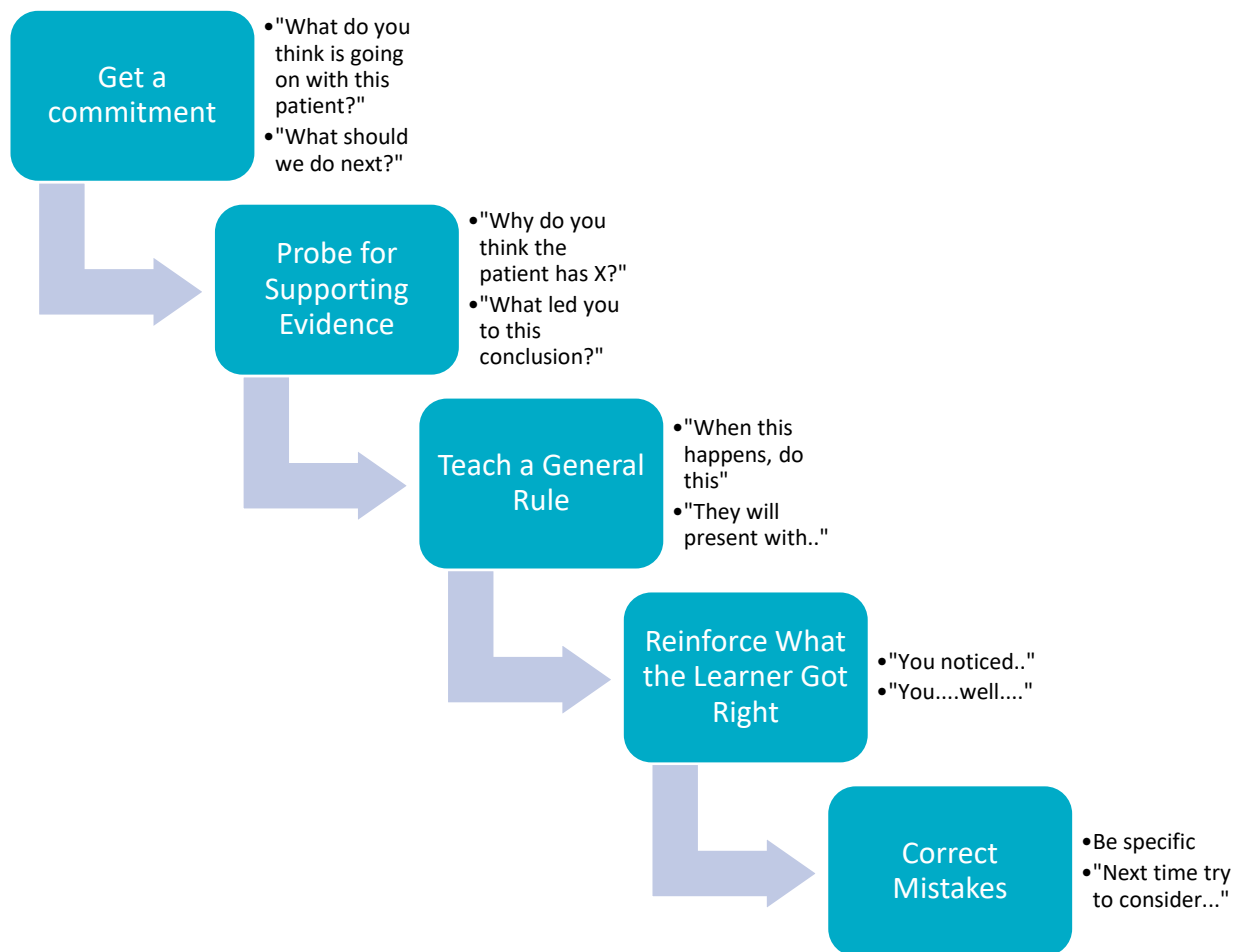
As a preceptor, you may use the clinical environment in the ICU and real-life patient situations as examples to stimulate discussions and questions.

Asking the following questions can help promote decision-making and explore clinical reasoning:

- What are we looking for to see if the patient is deteriorating?
- What are the side effects of this (medication/treatment/infusion)?
- What problems do you anticipate with (a sedation vacation/a decrease in ventilator support)?
- What are the potential complications of (a percutaneous tracheostomy/paracentesis/central line insertion)?
- What are your priorities in this situation (Rapid Sequence Intubation/decreased MAP/decreased oxygen saturations on an intubated patient)?
- What are our expected outcomes of...?
- How will we know if we achieved (adequate blood pressure or MAP/an adequate level of sedation/pain control)?
- What do you understand about.. (ventilator modes or settings/vasopressor titration/support and MAP/sedation vacations and RASS scales/CCPOT and analgesia first)?
- What do you plan to do for....?
- What are the consequences of...?
- What action should you have taken?
- I noticed that you... or did not...
- What was your thought process behind...(or not)?
- What would it look like if...?

3) One Minute Preceptor (OMP)

The OMP is a five-step clinical teaching tool used efficiently and effectively to assess knowledge and provide feedback in a busy clinical setting like the ICU (Gatewood & De Gagne, 2019; Orsini et al., 2022). Using this tool, you, as the preceptor, can get a commitment from the learner by enquiring about their care plan/nursing diagnosis. You will then ask the learner for the rationale behind their thoughts. You may teach a general rule regarding their conclusions and, finally, have a discussion reinforcing the positives and correcting mistakes (Orsini et al., 2022).



4) Think Aloud Method

The preceptor or the learner can use the think-aloud method in the clinical setting. Using this method, the preceptor or learner will share their thoughts or rationale for clinical decision-making as/before they begin and throughout the intervention (Burns et al., 2006).

For example: “I am going to titrate the propofol infusion down as the patient is too sedated and their RASS is -4. Our goal RASS is 0 to -1. We will re-evaluate their RASS scale in 20 minutes and titrate further if they still remain too sedated.”



Roles and Responsibilities

Roles and Responsibilities of the Preceptor

- Orientate learners to the clinical area.
- Facilitate a collaborative, mutually respectful, and positive learning environment.
- Assign the learner an initial workload and, in collaboration with the learner, select patients to help provide the learner with a range of critical care experiences and skills exposures (may vary depending on patient population/unit).
- Help the learner assess, plan, implement, and evaluate nursing care provided.
- Provide the learner with feedback on their nursing care throughout the shift.
- Help create learning opportunities to assist learners in areas needing improvement or identified in their goals.
- Communicate with faculty about learner behavior, skills, or progression concerns **immediately**.
- Review and complete the *Clinical Repeat Skills Exposure Checklist* each shift.
- Review, sign the front page, and complete the CCNP CCR in collaboration with learners. This should involve discussing performance and rationale with specific behaviors associated with the competency rating.

Roles and Responsibilities of CCNP Faculty

- Organizes clinical schedule to schedule clinical calls/visits.
- Communicates with the learner and preceptor throughout the clinical to facilitate collaboration and assistance in meeting program outcomes.
- Review submitted Learning goals, Clinical logs, Assignments, CCR, and Skills documentation at assessment points.
- Provides evaluative feedback to the learner regarding the clinical experience on an ongoing basis.
- Ensures ongoing communication amongst faculty, preceptor, learner, and sponsoring unit.
- Formulate a remediation plan and develop a learning plan if required.

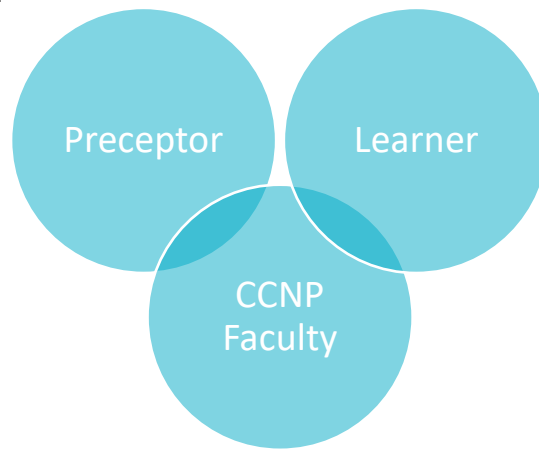
Roles and Responsibilities of Learners

- Contact the preceptor before the first clinical shift to confirm the schedule. Uploads clinical schedule in Brightspace.
- Informs faculty if there is a change in preceptor or clinical shifts.
- Arrives well-rested and prepared for learning experiences.
- Conducts self ethically and professionally and maintains compliance within scope of practice and professional guidelines.
- Maintains documentation according to requirements and obtains preceptor's signature as needed.
- Performs self-assessment at beginning, midterm, and final evaluation.
- Contributes to learning goals/plans and seeks out learning opportunities.

- Reflect on learning experiences and add comments to evaluation tools where indicated.
- Completes and submits all clinical documentation/assignments as required within the timeframe.
- Communicate with preceptor and faculty if any concerns arise.

Communication

During the clinical experience, communication is underpinned by using the triad model. This model includes a relationship between the learner, the preceptor, and the faculty to support the learner in meeting program outcomes. This relationship fosters open and transparent communication among all triad members (CCNP, 2023; Nippising University, 2018).



Learners must receive ongoing feedback on their performance during their clinical practicum. Frequent and open communication should occur between the learner, preceptor, and faculty to encourage a collaborative learning environment. At the final evaluation point, there should be no surprises if communication among all parties has been open and consistent throughout the clinical period.

Effective Feedback Strategies

Providing appropriate feedback to learners throughout clinical is an important skill for preceptors that can be learned, practiced, and improved. When done properly, it can be extremely beneficial and assist learners in achieving learning outcomes. As a preceptor, it is important to let learners know you will regularly debrief clinical situations and provide feedback throughout their shifts (Louis et al. and Hospital, 2019; Nipissing University, 2019; Orsini et al., 2022; University of Prince Edward Island, 2018).

What is Effective Feedback?

- Timely
- Specific
- Focused on behavior
- Addresses behavior that can change
- Valuable
- Supportive
- Constructive
- Uses “I statements” (“I noticed you...”)

Common Reasons for Withholding Feedback:

- Not wanting to upset a learner or hurt their feelings.
- Lack of experience in providing feedback.
- Unsure how to use/time feedback appropriately.
- Thinking that feedback is a judgment or a criticism.
- Thinking it is not required.

What Happens When We Withhold Feedback?

- No learning occurs
- They will assume they are performing correctly
- Lack of professional accountability
- Anxiety

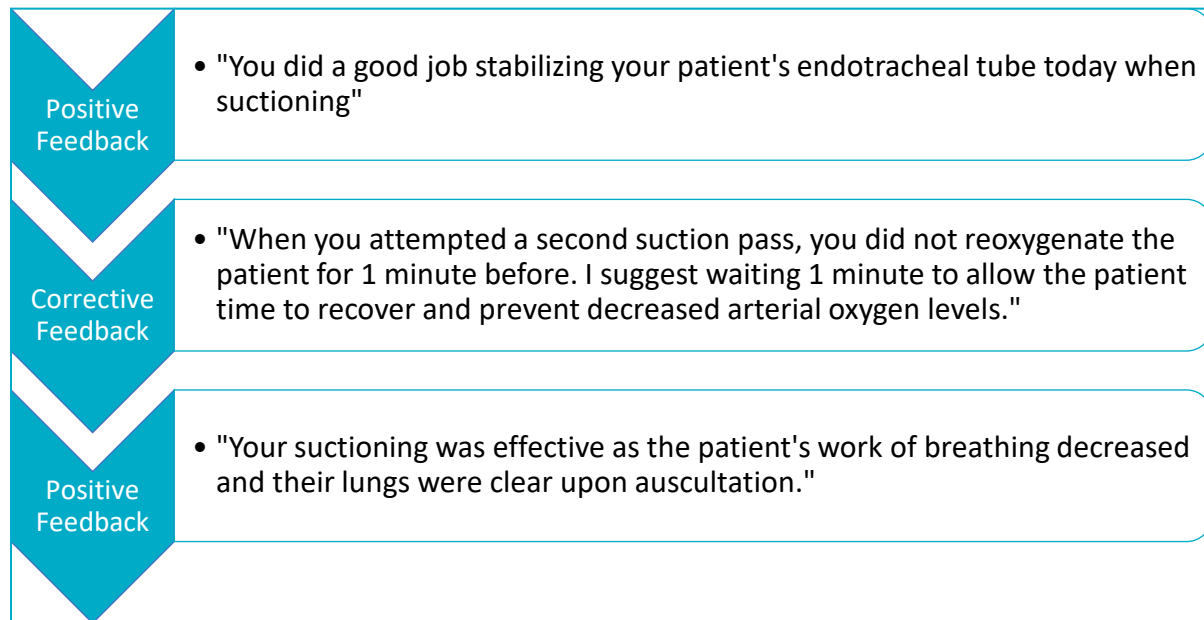
Before providing feedback, it is important to consider the following:

- a) What is the purpose of the feedback? What do you hope to achieve?
- b) An appropriate time/location. Feedback should be timely, but certain situations may warrant deferring later. For example, if a learner is upset or stressed providing feedback could occur on the next shift.
- c) The amount of feedback to provide. Too much feedback at one time can overload a learner, and feedback may need to be prioritized

This section will discuss effective feedback strategies and approaches preceptors can use with learners in clinical practice. Several models are easy for those preceptors less experienced in providing feedback to use in busy clinical areas (The Feedback Sandwich, Pendleton Rules) or for those preceptors more experienced in providing feedback who have more time for discussion (R2C2 model).

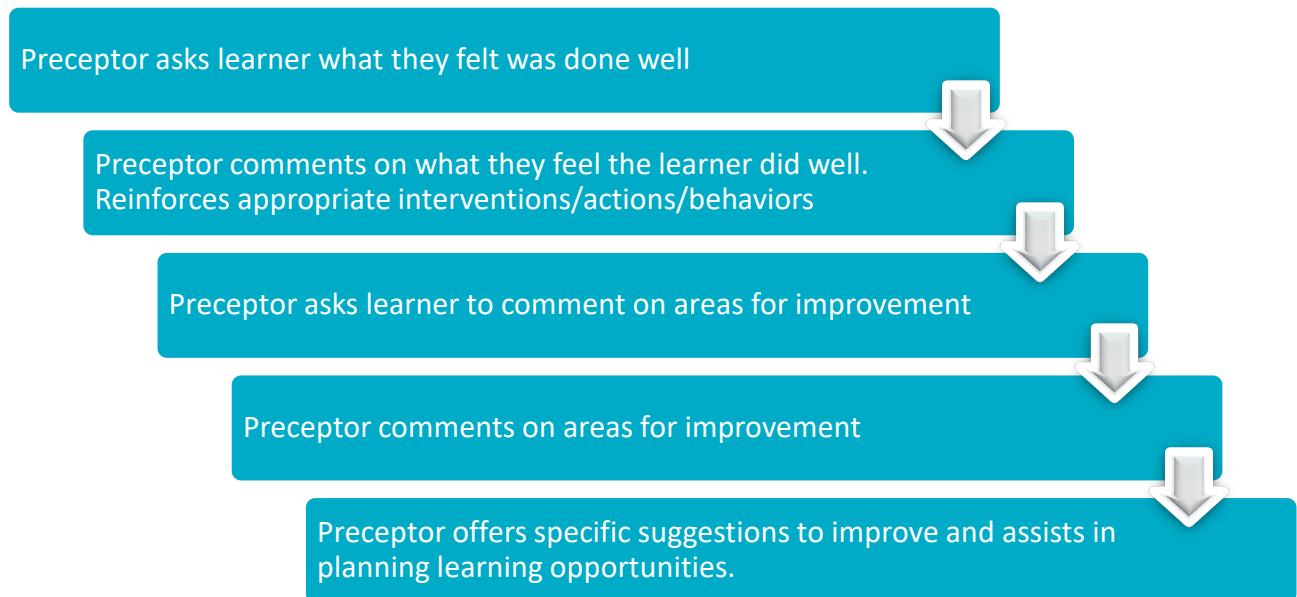
1) The Feedback Sandwich

The feedback sandwich can be a useful technique for preceptors learning to provide feedback in the clinical setting. In this model, critical feedback is “sandwiched” between positive feedback. Useful when the time to provide feedback is limited (Orsini et al., 2022; University of Prince Edward Island, 2018).



2) Pendleton Rules

Pendleton Rules offers a modification to the Feedback Sandwich model. This model covers positive aspects, followed by areas for improvement from the perspective of the learner and the preceptor. This model can be useful for preceptors new to providing learners with feedback and helps support learner reflection on clinical practice (Orsini et al., 2022).



For example:

Preceptor to Learner: “Let’s take some time to discuss your presentation in rounds today. How did you feel? What do you feel went well today?”

Preceptor to Learner: “I feel that you were systematic in your patient presentation and included all the rates of your infusions.”

Preceptor to Learner: “Were there any areas you felt you would like to improve upon for the next time you present?”

Preceptor to Learner: “I understand that presenting in rounds can be challenging. Next time, go a little slower with your patient presentation to allow the entire team to absorb the information.”

Preceptor to Learner: “Let’s practice presenting our patient tomorrow before rounds so you can make sure to include all the important information the team needs.”

3) R2C2 Feedback Model (Rapport/Reaction/Content/Coach)

The R2C2 model helps provide learners with assessment and performance-based feedback. This model can help preceptors guide discussion on an assessment, its value, and the learner's perception/reaction. This model helps support learner reflection (Orsini et al., 2022; Sargeant et al., 2015; Sargeant et al., 2018). This model is useful in assisting preceptors with providing feedback on CCR competency ratings.

Rapport/Relationship Building:

Develop a rapport with the learner (psychologically safe, trust, empathy, respect). In building a relationship, the learner is more likely to engage. Can help the preceptor understand their perspective.

1.) Be explicit about the discussion and explain the purpose (i.e., CCR evaluation).

- Explain the purpose of the evaluation report. Learners in CCNP have ongoing evaluation throughout the clinical period at pre-determined time intervals. Provide the learner with:
 - An overview and discussion of their performance/evaluation
 - An overview of their clinical experiences/exposures, skills, and acuity levels
 - Data/observations that can lead to improvement with examples
- Outline the discussion:
 - Review evaluation data and practice gaps
 - Allow time for learner reactions to the evaluation
 - Develop a learning action plan to address areas (ie, plan for higher acuity, plan for medication administration)

Sample Phrases:

- Tell me about the feedback you have received so far in clinical. What has/hasn't been helpful?
- What do you hope to get out of this evaluation?
- The purpose of this discussion is to see areas in which you are doing well and areas for improvement.
- Let's take some time to review your CCR and discuss how you are progressing with your competencies

2.) Listen to the Learner

- How has clinical been for you so far? What do you enjoy? What challenges you?

- What brought you to critical care? What do you like most about ICU nursing?
- How have your assessments/evaluations been to this point? What has helped you?
- What strategies have helped you in the past to achieve your learning goals?
- What have you done in clinical so far? What areas are you comfortable with or need more experience with?

3.) Validate their Feelings/Thoughts

- It can be challenging to....
- I can remember that feeling....
- Others have identified that area as a challenge...
- It is great to hear...

4.) Encourage Reflection

- Tell me more/can you elaborate
- That sounds like it was..difficult.. fulfilling..encouraging...exciting...

5.) Confirm

- It sounds like...
- This is important to you...
- This is disappointing for you...

Reaction:

It is important to gain the learner's perspective and provide the preceptor's perspective. This encourages self-reflection and helps them feel validated.

- What are your initial reactions to your evaluation?
- Was there anything in the evaluation that surprised you?
- Was there anything that you didn't understand?
- Can you tell me more about how you are feeling?

It can be challenging to respond to negative reactions from a learner to their evaluative feedback.

- You said you were surprised by this evaluation. Can you tell me more?
- What are you thinking about hearing my observations/evaluation?
- It can be difficult to hear feedback that differs from how we feel we are progressing in the clinical area.
- We tend to all feel (surprised or upset) when we hear feedback that differs from how we feel we are progressing/performing

Content:

Explore the feedback and evaluation data and ask clarifying questions. Identify strengths, weaknesses, gaps, or areas for improvement.

- Is there anything about the evaluation that doesn't make sense to you? Let's review each competency individually.
- Is there anything to talk about that isn't clear?
- Are there specific areas/skills you would like to improve on?
- In your learning goals, you said you would like to work on X, correct?
- You are progressing as expected in clinical. Are there any exposures you wish to gain more experience with?

Coaching:

Mutually engage the learner in developing an achievable plan or learning goal to address performance gaps. Help guide the plan development and activities to assist in meeting learning outcomes.

- What are your goals?
- What goal/area requires the most attention now?
- How will you achieve these goals?
- What do you need to be successful?
- What might be a barrier?
- What is your timeline?
- When can we follow up on this plan together?
- Can we review everything we have discussed today to ensure we are on the same page?
- How can help support you?

When to Contact CCNP Faculty

Direct contact with faculty may be necessary during clinical. This may be to give positive or constructive feedback regarding a learner's performance. Communicating these situations to unit CNEs and clinical leads is also important.

The following are situations in which faculty **must** be contacted/notified:

Patient Safety/Professional Concerns:

- Behaviour that is unethical, inappropriate, unsafe, or unprofessional.
- Behaviour that may place a patient, team, or unit at risk.
- Repeated tardiness, illness, or absenteeism.

Program Progression Concerns:

- Failure to progress.
- Regression of competencies or skills.
- Failure to follow through on feedback related to clinical practice.
- Inability to transfer knowledge between situations.
- Inability to meet objectives during an established time frame.
- Limited critical thinking and reflective practice.

Workplace Accident/Illness/Injury:

- Any learner accident/illness/injury requires notification and the appropriate documentation/treatment as per hospital policy.

Support and Feedback:

- Support or guidance for learners.

Mistakes and Adverse Events

If a learner makes a mistake, they must recognize it and inform/discuss it with their preceptor. This discussion should include a reflection on the situation and why it occurred, what could have been done to prevent it from occurring, and a plan to prevent future mistakes. Appropriate documentation/paperwork should be completed as per policy.

Faculty **must** be contacted if a preceptor has concerns about a learner's ability to practice safely and competently.

Dealing with Challenging Learners and Situations

Preceptorship is typically a rewarding and positive learning experience for preceptors and preceptees. Oftentimes, if there is an issue, it can be addressed and resolved with the appropriate steps. The most common issue encountered in clinical is related to learner performance; however, there can sometimes be challenges with poor communication, learner dissatisfaction, preceptor/learner mismatch, transition shock, and difficulties with the emotional toll that comes with working in critical care (Burns et al., 2006; Duchscher, 2009).

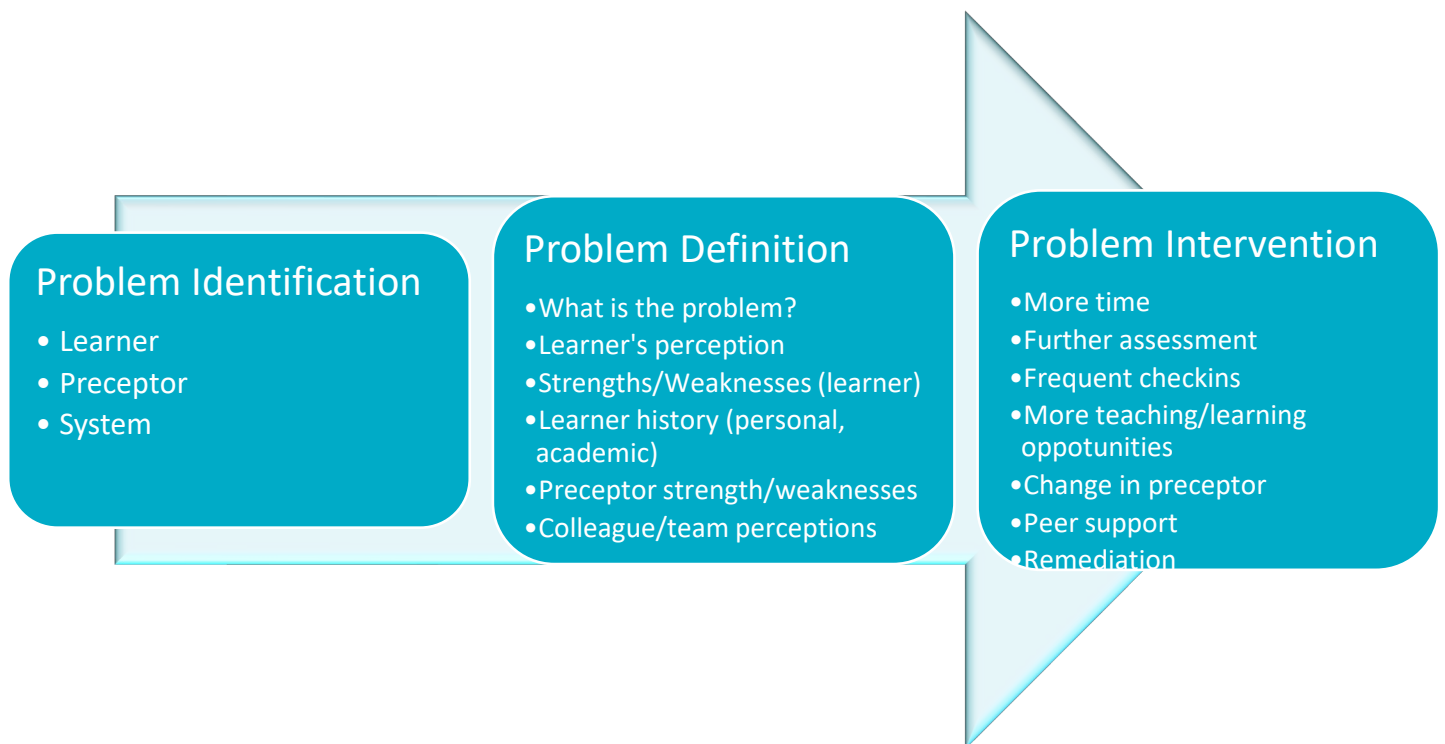
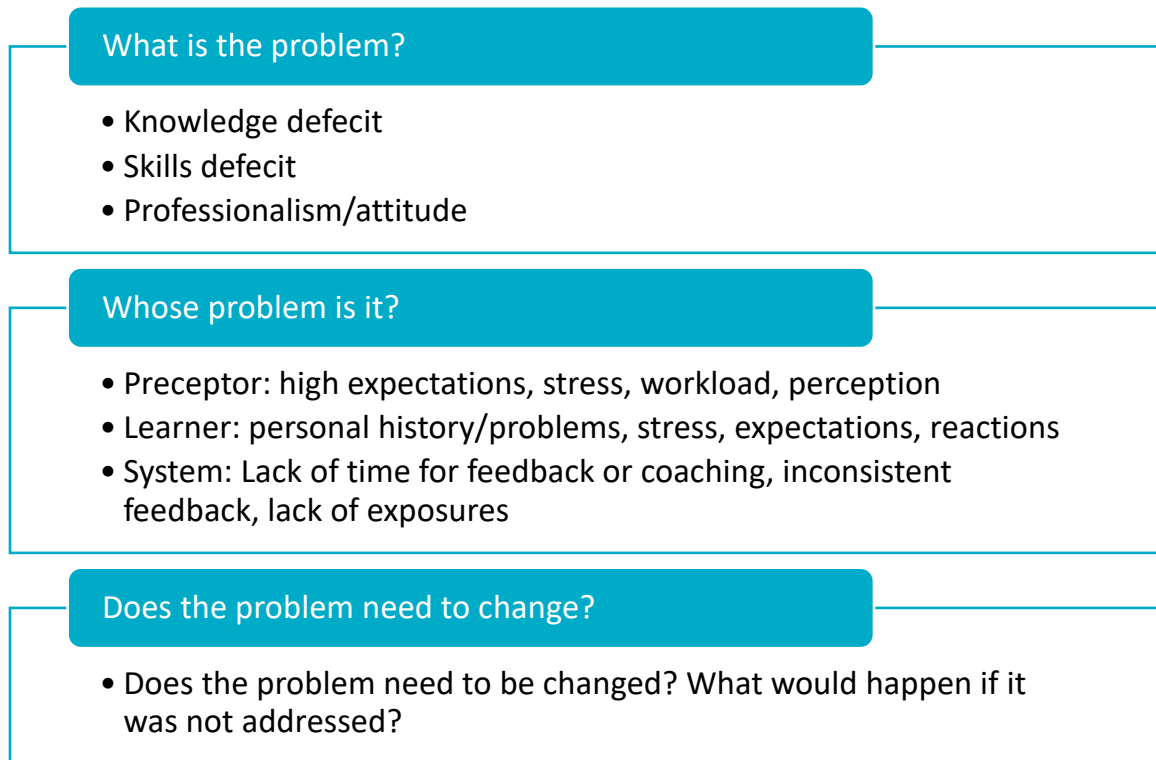
Any concerns about a learner's progress, regression in progress, or skills should be brought to the attention of faculty as early as possible to help support the preceptor and the learner. It is also important to inform unit CNEs and clinical leads when there are concerns in clinical. Together, a plan can be created and implemented for success and support.

A learner experiencing difficulty in clinical is not meeting the program outcomes due to a problem with knowledge, skills, or attitude (Steinert, 2013).

What can happen when a learner is experiencing difficulty? What is the impact on the preceptor and the learner?

Preceptor	Learner
Stress	Stress
Frustration	Frustration
Discouraged	Discouraged
Takes a lot of time/energy	Overwhelmed
Exhausted	Insecure
May not want to precept in the future	Lack of confidence/inadequacy

1) Steinart Framework for Dealing with Difficult Learners (2013)



2) Formula for Success

Consider the acronym SUCCESS for dealing with challenging learner situations in the clinical setting (Teeter, 2005).

S: See it early

- Look for "red flags"

U: Understand the learner's perspective

- Consider how they feel in the situation: how would you feel?
- Be sensitive and empathetic

C: Clarify the situation

- Explore the learner's perspective of the situation in a private setting objectively
- Assist them in seeing the actuality of the situation

C: Contract

- Similar to the R2C2 feedback model, assisting the learning with a plan or contract to meet their goals and address gaps or areas for learning

E: Evaluate

- Should be done early

S: Summarize performance

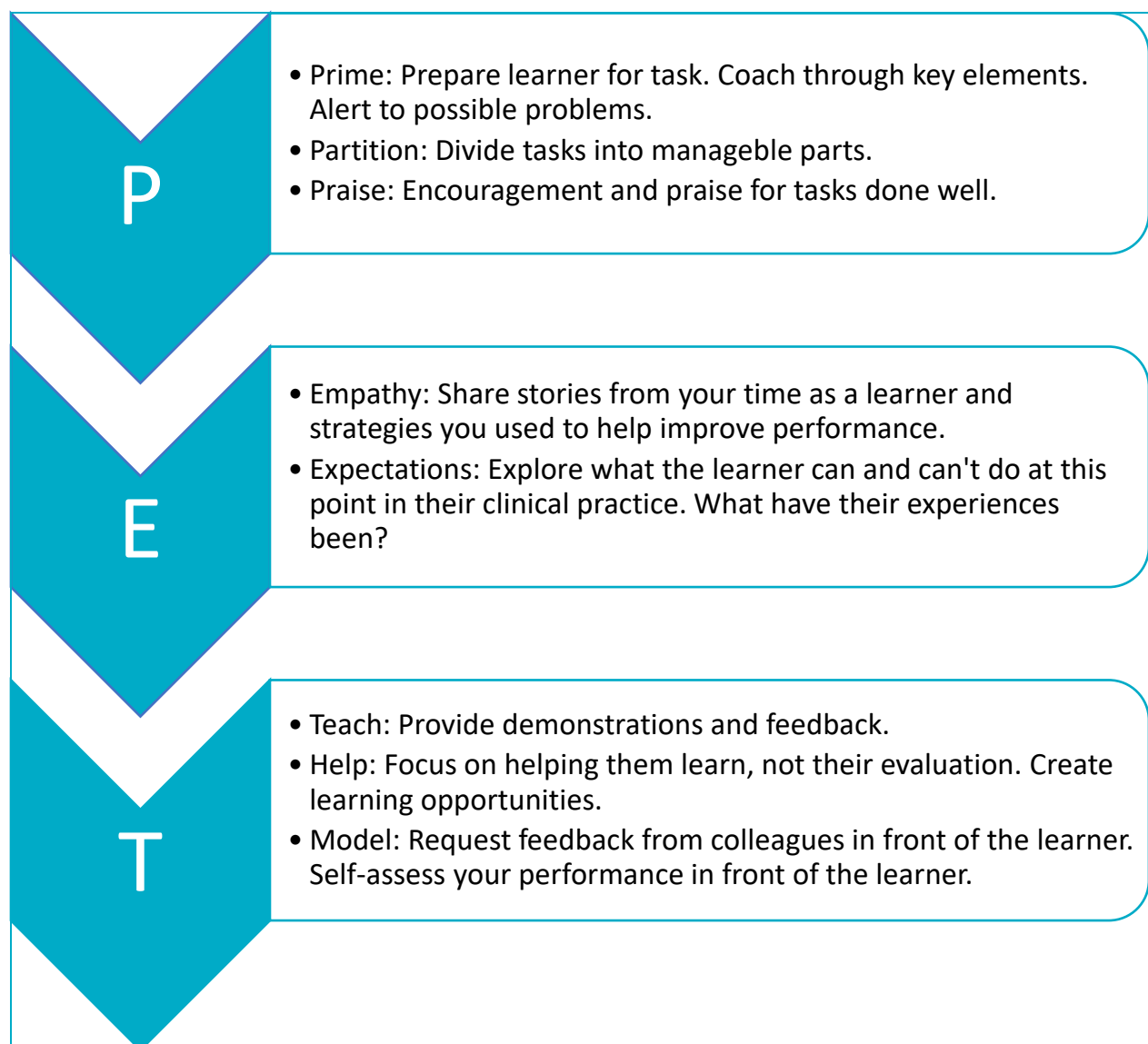
- Summarize the clinical performance: have they met the outcomes?
- Have the behaviours changed?
- The behaviours have changed, but they are still performing inconsistently to meet program outcomes/competencies

3) P-E-T Model

This model is useful for learners struggling in clinical practice, especially conscious/incompetent learners. Conscious incompetent learners are typically new to a clinical setting or novice practitioners. They know their skill, knowledge gap, or limitations and how much needs to be learned (Hendricson & Kleffner, 2002).

Conscious Incompetent Learners:

- Hesitant
- Frequent errors
- Low confidence in abilities
- Defensive, hides weaknesses



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Appendix A: CCNP Clinical Repeat Skills Exposure Checklist



Learning Institute
for Health Care Providers

Critical Care Nursing Program Repeat Exposures Checklist

Learner Name:

Cohort:

Preceptors are required to sign their initials for each skill the CCNP learner completes during each shift.
This form is to be submitted after the 3rd, 6th, 9th, 12th and 14th shift.

Repeat Exposures															
Skill	Date														
	Shift	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Precision Level Skills															
Physical Assessment															
Ventilator Assessment															
Withdrawal of Specimens from OPEN Arterial Line															
Withdrawal of Specimens from CLOSED Arterial Line															
Cardiac Monitoring (5 Lead)															
Obtaining a 12-Lead Electrocardiogram															
Ventilation of Endotracheal Tube Using Manual Resuscitation Bag (MRB)															
Open Endotracheal Tube Suctioning															
Closed Endotracheal Tube Suctioning															
Endotracheal Tube, Oral and Cuff Care															
Manipulation Level Skills															
ETT Leak and Cuff Pressure															
Extubation															
Oropharyngeal Airway Insertion															
Ventilation Using Bag Valve Mask (Two Person)															
CVP Monitoring															
Care and Maintenance of Intraosseous Devices															
Pulmonary Artery Catheter Monitoring															

Appendix B: CCNP Clinical Competency Rubric



Learning Institute
for Health Care Providers

Critical Care Nursing Program

Clinical Competency Rubric

Learner Name:
Cohort:

The following rubric outlines the essential competencies (i.e.; knowledge, skills, and judgment) that learners in the Critical Care Nursing Program must attain by the end of their clinical experience. Key competencies fall under 4 main categories (in **BOLD** print in the rubric) and include: patient-centered care, teamwork and collaboration, safety, and evidence-informed practice. All competencies have descriptors that delineate the expected behaviors for initial, progressing, and expected levels. The learner must be assessed and the rubric submitted after the 3rd, 6th, 9th, 12th and 14th shift. **The final clinical outcome is for the learner to be independently and consistently exhibiting the expected behaviors by the 12th clinical shift.**

Preceptors:

- Please date and sign below for every CCNP clinical shift
- Assessment of learners is related to stable, predictable patients. When confronted with rapidly changing patient condition/situation, the learner will require immediate supervision and support from preceptor and critical care team.
- Please initial in most appropriate column, using the following rating scale, when assessing learner performance in clinical:

Ratings:

I = Initial
P = Progressing
E = Expected

3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials		
I	P	E	I	P	E
BF				JH	

Shift	Date	Preceptor Name & Email Address <i>Please Print</i>	Unit	Preceptor signature/initials	Shift	Date	Preceptor Name & Email Address <i>Please Print</i>	Unit	Preceptor signature/initials
1					8				
2					9				
3					10				
4					11				
5					12				
6					13				
7					14				

Competency	Initial Behaviour	Progressing Behaviour	Expected Behaviour	Rating											
Patient Centered Care	Begins to plan and prioritize safe, ethical, quality care for a predictable patient.	Requires minimal preceptor support to plan and prioritize safe, ethical, quality care for a predictable patient.	Consistently plans and prioritizes safe, ethical, quality care for a predictable patient.	3 rd clinical shift Preceptor initials	6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials				
				I	P	E	I	P	E	I	P	E	I	P	E
Physical Assessment Skills	Performs individualized and holistic assessments with occasional guidance/prompts from preceptor. Extended time is required to complete assessments.	Performs individualized and holistic assessments with minimal guidance/prompts from preceptor. Completes assessment in a timely fashion.	Independently and consistently performs individualized and holistic assessment in a timely fashion. No guidance/prompts required.	3 rd clinical shift Preceptor initials	6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials				
				I	P	E	I	P	E	I	P	E	I	P	E
	Only able to distinguish between abnormal and normal assessment findings in collaboration with preceptor.	Distinguishes between abnormal and normal assessment findings with minimal support from preceptor. Validates assessment findings with preceptor.	Consistently & independently distinguishes between abnormal and normal assessment findings. Validates assessment findings with preceptor and other HCPs.	3 rd clinical shift Preceptor initials	6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials				
				I	P	E	I	P	E	I	P	E	I	P	E
Lab Data and Diagnostics	Distinguishes between normal and abnormal laboratory data/diagnostic studies with substantial support from preceptor. Requires assistance from preceptor to integrate findings into plan of care.	Distinguishes between normal and abnormal laboratory data/diagnostic studies with minimal support from preceptor. Requires minimal guidance from preceptor to integrate findings into plan of care.	Consistently and independently distinguishes between normal and abnormal laboratory data/diagnostic studies and independently integrates findings into plan care.	3 rd clinical shift Preceptor initials	6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials				
				I	P	E	I	P	E	I	P	E	I	P	E
Family	Discusses the inclusion of family in plan of care with preceptor. Preceptor role-models family-centered care for learner.	Consistently includes family in plan of care with preceptor support. Preceptor role-models family-centered care for learner.	Consistently and independently includes family in plan of care.	3 rd clinical shift Preceptor initials	6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials				
				I	P	E	I	P	E	I	P	E	I	P	E

Competency	Initial Behaviour	Progressing Behaviour	Expected Behaviour	Rating											
Communication	Begins to prioritize what needs to be communicated to the patient/family regarding the plan of care. Requires guidance from preceptor.	Prioritizes what needs to be communicated to the patient/family regarding the plan of care with minimal guidance from preceptor.	Consistently and independently prioritizes what needs to be communicated to the patient/family regarding the plan of care.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
	Begins to answer patient/family questions regarding the plan of care with preceptor guidance. Preceptor role models patient/family interactions.	Explains plan of care and answers patient/family questions regarding plan of care, using the preceptor as a resource.	Consistently and independently explains plan of care to the patient/family. Able to answer questions and prepare patient/family for predicted changes to plan of care when caring for a predictable, stable patient.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
	Begins to participate in rounds with and/or reports to other HCPs. Relays basic patient care information with prompting from preceptor.	Consistently participates in rounds with and/or reports to other HCPs. Able to prioritize and summarize patient information with minimal preceptor support.	Consistently and independently participates in rounds with and/or reports to other HCPs. Consistently and independently prioritizes and summarizes patient information.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
	No evidence of a standardized approach for transfer of patient information (e.g., use of SBAR when speaking with other HCPs). Requires preceptor guidance.	Consistently utilizes a standardized approach for transfer of patient accountability (e.g., use of SBAR when speaking with other HCPs). Requires minimal preceptor guidance.	Consistently and independently utilizes a standardized approach for transfer of patient accountability (e.g., use of SBAR).	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E

Competency	Initial Behaviour	Progressing Behaviour	Expected Behaviour	Rating											
				3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
Prioritization/ Planning of Care	Begins to identify relevant patient data for the development of an individualized plan of care. Requires preceptor guidance to analyze data, identify gaps, and prioritize the plan of care.	Consistently identifies relevant patient data for the development of an individualized plan of care. Requires minimal preceptor guidance to analyze data, identify gaps, and prioritize/re-prioritize the plan of care.	Consistently and independently identifies relevant patient data to develop an individualized plan of care. Reprioritizes plan based on changes in patient condition.												
	Requires prompting from preceptor to integrate information from others in planning and providing care.	Requires minimal preceptor guidance to integrate information from others in planning and providing care.	Consistently and independently integrates information from others in planning and providing care.												
Implementation of Care	Implements planned care in collaboration with and under close supervision of the preceptor.	Implements planned care in collaboration with and under minimal supervision of the preceptor.	Implements planned care consistently & independently while continuing to collaborate with preceptor if patient becomes unpredictable.												
Evaluation	Evaluates patient responses following interventions. Performs timely reassessments and documents findings with prompting from preceptor.	Consistently evaluates patient responses following interventions and compares findings to expected outcomes. Modifies plan of care with minimal guidance/prompts from preceptor.	Consistently and independently evaluates patient responses following interventions and compares findings to expected outcomes. Consistently and independently modifies the plan of care based on evaluation of interventions, complications, and unexpected events.												

Competency	Initial Behaviour	Progressing Behaviour	Expected Behaviour	Rating											
Teamwork and Collaboration	Establishes a collaborative working relationship with the preceptor. Identifies and begins to establish collaborative working relationships with other HCPs on the team, patients and families with minimal preceptor guidance.	Establishes collaborative working relationships with other HCPs, patients and families, while planning for and providing care. Requires minimal preceptor guidance to do so. Preceptor-learner collaboration continues.	Consistently and independently establishes/maintains collaborative working relationships with the preceptor, other HCPs, patients and families, while planning for and providing care.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
Professionalism	Introduces self & describes RN role to patient; excludes family from the discussion. Mentally differentiates RN role from other HCP roles but not able to articulate this difference to others.	Introduces self & describes RN role to patient & family. Differentiates RN role from other HCP roles and able to articulate the difference to the preceptor.	Consistently introduces self & describes RN role to patient & family. Differentiates RN role from other HCP roles and able to articulate the differences to patient, family and other HCPs.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
	Requires preceptor to explain all activities, assessments, and procedures to patient & family.	Requires minimal preceptor support to explain activities, assessments, and procedures to patient & family.	Independently & consistently explains all activities, assessments, and procedures to patient & family.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
Safety	Begins to identify unit specific safety practices. Requires prompting from preceptor to integrate safety into care (e.g. safety checks, monitor alarms).	Familiar with unit specific safety practices. Integrates safety practices into individual practice. Requires preceptor guidance when encountering new safety issues.	Consistently and independently integrates all safety practices into individual practice and daily activities for a predictable patient.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E

Competency	Initial Behaviour	Progressing Behaviour	Expected Behaviour	Rating											
Patient Adverse Events (i.e. harmful incidents, no harm incidents, and near misses)	Begins to identify potential and real patient adverse events with the assistance of the preceptor.	Consistently identifies potential and real patient adverse events with minimal assistance from the preceptor. Requires preceptor guidance to initiate required reporting.	Consistently and independently identifies potential and real patient adverse events with. Consistently and independently reflects upon, responds to and discloses patient adverse events.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
Evidence Informed Practice	Begins to recognize the importance of using evidence to support clinical practice. Requires preceptor assistance to rationalize decisions for nursing care based on current evidence.	Consistently recognizes the importance of using evidence to support clinical practice. Requires minimal preceptor assistance to rationalize decisions for nursing care based on current evidence.	Consistently and independently recognizes the importance of using evidence to support clinical practice. Consistently and independently provides rationale for nursing care/decisions, which reflect best practices.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E
Clinical Judgment	Requires guidance from the preceptor to identify the best available evidence (e.g.; patient data, best practice guidelines, current research) to plan care for critically ill patients. Requires preceptor guidance to identify rationale for nursing care decisions which reflect best practice.	Uses all available evidence (e.g.; patient data, best practice guidelines, current research) to plan care for critically ill patients but requires prompting and guidance from the preceptor to do so. Articulates rationale for nursing care decisions which reflect best practice. Discusses and clarifies collaborative interventions with preceptor.	Consistently and independently uses all available evidence (e.g.; patient data, best practice guidelines, current research) to plan care for critically ill patients. Articulates rationale for nursing and collaborative care decisions which reflect best practice.	3 rd clinical shift Preceptor initials			6 th clinical shift Preceptor initials			9 th clinical shift Preceptor initials			12 th clinical shift Preceptor initials		
				I	P	E	I	P	E	I	P	E	I	P	E



Learning Institute
for Health Care Providers

Critical Care Nursing Program Clinical Competency Rubric

Learner Name:
Cohort:

Following 3rd clinical shift

Preceptor Comments: *Areas done well, suggestions for improvement, action plan item and learning plan achievement*

Learner Comments: *Areas done well, suggestions for improvement, action plan item and learning plan achievement*

LEARNER SIGNATURE:

DATE:

PRECEPTOR SIGNATURE:

DATE:

Following 6th clinical shift

Preceptor Comments: *Areas done well, suggestions for improvement, action plan item and learning plan achievement*

Learner Comments: *Areas done well, suggestions for improvement, action plan item and learning plan achievement*

LEARNER SIGNATURE:

DATE:

PRECEPTOR SIGNATURE:

DATE:



Learning Institute
for Health Care Providers

Critical Care Nursing Program

Clinical Competency Rubric

Learner Name:
Cohort:

Following 9th clinical shift

Preceptor Comments: *Areas done well, suggestions for improvement, action plan item and learning plan achievement*

Learner Comments: *Areas done well, suggestions for improvement, action plan item and learning plan achievement*

LEARNER SIGNATURE: _____

DATE: _____

PRECEPTOR SIGNATURE: _____

DATE: _____

Following 12th clinical shift

Preceptor Comments: *Areas done well, suggestions for improvement, and learning plan achievement*

Learner Comments: *Areas done well, suggestions for improvement, and learning plan achievement*

LEARNER SIGNATURE: _____

DATE: _____

PRECEPTOR SIGNATURE: _____

DATE: _____



Learning Institute
for Health Care Providers

Critical Care Nursing Program Clinical Competency Rubric

Learner Name:
Cohort:

Faculty Comments:

FACULTY SIGNATURE: _____ DATE: _____