

**Development of a Discharge Planning Resource for Nurses Working in a Detoxification
Unit**

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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 Nursing

Faculty of Nursing

Memorial University of Newfoundland

August 2024

St. John's Newfoundland and Labrador

Abstract

Background: Successful community transition for patients with substance use disorder requires nurses to offer thorough discharge planning post-detoxification. **Purpose:** The aim of this practicum project was to develop a discharge planning resource for nurses working in a detoxification unit to improve discharge planning practices on the unit and increase discharge planning knowledge and skills among nurses. **Methods:** The practicum project utilized three methods including a literature review, environmental scan of existing resources and consultations with nursing staff and community providers. **Results:** The literature review identified factors contributing to inadequate discharge planning, which negatively impacts patients with SUD. Interventions like care linkage, pharmacological therapy, improved communication, and nursing staff education are essential for enhancing discharge planning and improving patient outcomes. The environmental scan identified six key themes: *developing best-practice guidelines, individualized discharge planning, healthcare provider education, discharge planning content, benefits of tool utilization, and implementation barriers*. Consultation with participants showed: 100% expressed a need for discharge planning resources, 50% felt somewhat uncomfortable using discharge planning, and 40% preferred face-to-face education. **Conclusion:** A discharge planning resources for nurses working in a detoxification unit was developed to strengthen discharge planning knowledge and skill

Acknowledgements

This practicum project and the journey through this master's program would not have been possible without the support from numerous people. I would like to express my deep gratitude and appreciation to the many people who have helped me along the way.

I would first like to thank my supervisor, Dr. Abubaker Hamed, for his guidance, support, and encouragement throughout the development of this practicum project.

Thank you to my colleagues at Ridgewood Detoxification Unit. Your kindness, knowledge and participation has been instrumental in the development of this resource.

Thank you to my grammie and dad, who have continued to cheer me on throughout this journey. The sacrifices you have made to allow me to pursue my academic goals have not gone unnoticed and I will forever be indebted to you. As I close out this chapter and open the next, I hope I continue to make you proud.

Thank you to my twin sister, Chelsea. Your constant belief in me, and unwavering support through the most stressful times of my life is appreciated more than you'll ever know.

Thank you to my grampie, who unexpectedly passed away during the development of my practicum project. Although you are not here to see the completion of this degree, I know you are always with me. I am forever grateful for the strength and work ethic you have instilled in me. This project is dedicated to you.

Finally, I express my profound gratitude to my loving partner Brandon who has continuously supported me, sacrificed his time, and always made my hard days easier. I am truly blessed to have you as my partner in this dance called life.

Table of Contents

Abstract	i
Acknowledgements	ii
Introduction	1
Objectives	2
Overview of Methods	2
Summary of the Literature Review	2
Summary of Consultations	4
Summary of Environmental Scan	7
Summary of the Resource	9
Discussion of Advanced Nursing Practice (ANP) Competencies	12
Next Steps	13
Conclusion	14
References	15
Appendix A: Literature Review	23
Appendix B: Literature Summary Tables	64
Appendix C: Consultation Report	85
Appendix D: Environmental Scan Report	107
Appendix E: Discharge Planning Educational Resource	132

Introduction

Substance use disorder includes a range of behaviours, such as loss of control over substance use, compulsive seeking of substances, pharmacological dependence, and escalating risky behaviours linked to substance use (Prom-Wormley et al., 2017). Substance use disorder is a prevalent condition worldwide that impacts approximately 155 to 250 million people (Connery et al., 2021). On a national level, it is estimated that 21.6% of Canadians have met the criteria for substance use disorder (Government of Canada, 2015). Globally, one in five people diagnosed with drug use disorders has accessed treatment (United Nations Office on Drugs and Crime, 2023). Residential treatment for substance use disorders often involves detoxification which is where short-term medical interventions are provided to assist the patient through acute withdrawal (Zhu & Wu, 2018). Detoxification is often the first step of treatment but is often not enough alone for patients to maintain sobriety once transferred into the community setting (Zhu & Wu, 2018). For patients to be successful when transitioning to the community it is essential to receive adequate discharge planning (Luther et al., 2019).

Discharge planning involves the use of an interdisciplinary team working together to address the needs for a patient's recovery so they can effectively transition into the community (Jenkinson et al., 2020). Discharge planning can negatively be impacted by a variety of contributing factors including poor communication between healthcare providers, lack of continuity of care and insufficient knowledge and role clarity for healthcare providers (Cruz et al., 2019; David et al., 2022; Lee et al., 2020; Noseworthy et al., 2014; Oppen et al., 2019; Rubinsky et al., 2018; Sharp et al., 2021).

Currently at Ridgewood Detoxification Unit there is no formal discharge planning utilized by nursing staff. The goal of this practicum project is to develop a discharge planning

resource for nurses working in a detoxification unit to improve discharge planning practices on the unit and increase discharge planning knowledge and skills among nurses. The practicum project has involved an extensive literature review, consultations, and an environmental scan. The information gained from these methods will be utilized to inform the development of the discharge planning resource.

Objectives

The overall goal of the practicum project was to develop a discharge planning resource for nurses working in a detoxification unit. The key practicum objectives were to:

1. To assess whether detoxification nurses' knowledge and comfortability regarding discharge planning is adequate.
2. Consult with key stakeholders to better inform the development of the educational resource for nurses.
3. To develop a resource that addresses the unique discharge planning needs of patients in Saint John, New Brunswick.
4. Identify existing educational resources, content of resources and mode of delivery utilized in discharge planning educational sessions through environmental scan.
5. To demonstrate advanced nursing practice competencies in research and leadership.

Overview of Methods

Three methods were utilized through the semester to guide the development of this practicum project. This involved a literature review of scholarly and grey literature, consultations with colleagues and community providers, as well as an environmental scan of existing websites, guidelines, and policies.

Summary of the Literature Review

The literature review involved reviewing and searching for scholarly and grey literature as it relates to discharge planning for patients with substance use disorder. This literature review consisted of an overview of the prevalence of substance use and detoxification admissions that require discharge planning, contributing factors and the impact of poor discharge planning on readmission rates, substance relapse and cost to the healthcare system. For the literature review, the following databases were used: PubMed, Cumulative Index to Nursing and Allied Health (CINAHL), Ovid Medline and Google Scholar. Grey literature was included and gathered from Government websites. The terms used to search in the various databases included: “*detoxification*”, “*substance use disorder*”, “*discharge planning*”, “*interventions effectiveness*”, “*impact of inadequate discharge planning*” and “*strategies to improve discharge planning*”. The Public Health Agency of Canada’s (PHAC) (2014) critical appraisal toolkit was used to critically appraise quantitative research studies. Qualitative research studies were critically appraised using the Joanna Briggs Institute (JBI) critical appraisal checklist (Lockwood et al., 2020). Mixed-method studies were critically appraised using the Mixed-Methods Appraisal Tool (MMAT) (Hong et al., 2018). Literature summary review tables were used to summarize key findings from the discussed studies (See Appendix B).

Literature Review Results

The findings of the literature review consisted of discovering related contributing factors, impacts, and interventions associated with discharge planning for patients with substance use disorder. Three main contributing factors were established with inadequate discharge planning including poor communication between healthcare providers, lack of continuity of care and insufficient knowledge and role clarity among healthcare providers and their organizations (Cruz et al., 2019; David et al., 2022; Lee et al., 2020; Noseworthy et al., 2014; Oppen et al., 2019;

Rubinsky et al., 2018; Sharp et al., 2021). Inadequate discharge planning has on patients. Inadequate discharge planning has several impacts including increased readmission rates, increased costs to the healthcare system and higher rates of illicit substance use (CCSA, 2023; Hutchinson et al., 2019; Running Bear et al., 2022; Morgan et al., 2020; Stein et al., 2020).

While reviewing the literature, four interventions aided in improving the discharge planning process to ensure a smooth transition for patient's post-discharge. The interventions include providing linkage to care, transition and initiation of pharmacological therapy, improving communication and education for nursing staff on discharge planning. Linkage of care to a provider following discharge was shown to increase engagement in outpatient programs (Timko et al., 2019; Byrne et al., 2020; Hutchinson et al., 2019; Lee et al., 2020), decrease readmission rates (Hutchinson et al., 2019; Reif et al., 2017; Gryczynski et al., 2021) and decrease in illicit substance use for those linked to care (Ivers et al., 2018). Initiating and transitioning patients on medication from their hospital stay into the community also was shown to have positive impacts including increased treatment engagement (Liebschutz et al., 2014; Stein et al., 2016; Smith, Hansen & Colvard, 2021), decreased emergency room visits (Wei et al., 2015), improved quality of life (Bolek et al., 2016) and decrease in illicit substance use (Liebschutz et al., 2014). Providing nursing staff with education on discharge planning was shown to improve discharge planning by increasing knowledge (El-Rafie et al., 2017; Ustache, 2021; Jehosua et al., 2023), confidence with discharge planning (Smith et al., 2018), and utilization of the discharge planning process (Roberts, Moore & Jack, 2018).

Summary of Consultations

A total of 16 participants were included in the consultation, consisting of: six registered nurses (RNs), four licensed practical nurses (LPNs); three community opioid agonist therapy

providers, one community addictions counsellor, and one staff at a non-profit housing organization and one other unspecified community provider. Data was collected through the administration of two questionnaires, one provided to the RNs and LPNs, and one provided to Community Providers. The questionnaires were developed on Microsoft Forms and the link to the questionnaire was sent via email to all participants. The questionnaires were anonymous, no identifying information was asked, and results were stored on a password-protected folder. The data included open-ended questions regarding utilization of current discharge planning resources, factors that contribute to readmissions, barriers that impact patient's success, elements to be included in the discharge planning resource and preferred methods of education. The quantitative data was analyzed as descriptive statistics and the qualitative data was transcribed into Excel and analyzed by utilizing content analysis (Lindgren, Lundman & Graneheim, 2020).

Consultation Results

The quantitative results for the nursing staff at the Ridgewood Detoxification Unit showed that half of the respondents (50%) felt somewhat uncomfortable with discharge planning, and 10% felt very uncomfortable, yet all participants (100%) agreed on the need for discharge planning education and resources. Despite this, none reported using current discharge planning documents. Preferences for educational methods showed that 40% favoured face-to-face interactions, while 30% preferred PowerPoint presentations with discussion.

Table 1

Ridgewood Detox Discharge Planning Needs (N=10)

Comfortability with Discharge Planning	(n) %
Extremely comfortable	(0) 0%
Somewhat comfortable	(2) 20%

Undecided	(2) 20%
Somewhat uncomfortable	(5) 50%
Very uncomfortable	(1) 10%
Benefit from Discharge Planning Education	
Yes	(10) 100%
No	(0) 0%
Need for Discharge Planning Resource	
Yes	(10) 100%
No	(0) 0%
Use of Current Discharge Planning Documents	
Yes	(0) 0%
No	(10) 100%
Preferred Method of Education Program	
Face-to-Face Education	(4) 40%
PowerPoint Presentation and Discussions	(3) 30%
Simulation	(1) 10%
No educational preference	(2) 20%

Four qualitative themes emerged from the analysis of the open-ended questions in the questionnaire including: *1) lack of knowledge of community resources, 2) wait times for addiction programs, 3) need for individualized care, and 4) educational strategies*. Participants expressed barriers that impacted readmission rates and patients' success in the detoxification program was a lack of knowledge of community resources. An additional theme that emerged was the wait times for addiction programs. Currently, there is a 30 to 90-day program available in the Saint John area, which is one of two public rehabilitation centers in the province. To access this program, patients must have a referral from an addictions counsellor or their family physician. Due to the lack of family physicians in the province, it can make accessing these referrals difficult. Furthermore, the program itself has an extensive waitlist that can be up to one year. Nurses also identified the need for individualized care during discharge planning. In the qualitative open-ended questions, many participants expressed the need to connect with patients individually to discuss their discharge plan, and to tailor it to the individual's needs.

Three themes emerged while analyzing the results of the questionnaire administered to community providers including *1) understanding the detoxification program, 2) the benefits and barriers of linkage to care and 3) referral processes*. In the open-ended questions, many participants were able to accurately and clearly define the purpose of the detoxification program. Participants acknowledge the benefits of linkage of care including aiding in the continuation of sobriety, improving patient safety, health outcomes and providing quicker access to long-term care. Barriers that were identified by community providers include a lack of communication between programs and different philosophies on treatment for substance use disorder. When asked how detox nurses can refer patients to their programs, all outpatient community providers indicated that their programs were based on self-referral, and nurses can also call to set up appointments on patients' behalf.

Summary of Environmental Scan

The environmental scan involved searching websites on discharge planning resources for patients with substance use disorder in New Brunswick, Canada, and the United States. Nine sources of information were evaluated, and consist of five policies and guidelines, along with four websites. The websites searched for discharge planning education and resources across Canada *include 1) Centre of Addiction and Mental Health (CAMH), 2) Canadian Mental Health Association (CMHA), 3) Canadian Research Initiative in Substance Misuse (CRISM), and 4) the Canadian Centre on Substance Use and Addiction (CCSA)*. These websites were chosen as they are recognized for providing health care information to patients and healthcare providers managing substance use disorder.

The five policies and guidelines utilized across Canada and the USA yielded during the environmental scan include: *1) IDEAL Discharge Planning* (Agency for Healthcare Research

and Quality, n.d.), 2) *My Transitional Care Plan (MTCP)* (Behavioural Supports Ontario, 2022), 3) *Re-Engineered Discharge (RED) Toolkit* (Agency for Healthcare Research and Quality, 2013), 4) *Population-specific patient-oriented discharge summary (PODS)* (PODS, 2019), and 5) *Patient-Centered Discharge Toolkit (PDTK)* (Patient Safety Learning Lab, 2019). Data collected from the discharge planning resources include the setting in which the resource was implemented, details of the resource, and benefits and limitations of implementing the resource.

Environmental Scan Results

A total of six themes emerged from the reviewed resources: three from the websites and three from discharge planning policies and guidelines. The three emerged from the four previously identified websites are: *developing a best-practice guideline for patients with substance use disorder, the importance of individualized discharge planning, and educational opportunities for healthcare providers*. Two websites (CCSA (2017) and CRISM) demonstrated the importance of developing best-practice guidelines to manage care for patients with substance use disorder to prioritize the individual's need, considerations for discharging and address issues specific to the population. All four websites identified the theme of the importance of individualized care which involves advocating for federally covered mental health and addiction services post-discharge, patient's developing individualized recovery plan and treatment goals with their provider and tailoring the discharge plan to the needs of the patient (CCSA, 2017; CMHA, 2022; CAMH, 2017; Dong et al., 2021). The final theme identified amongst the four websites is educational opportunities for healthcare providers (CCSA, 2017; CMHA, 2022; CAMH, 2017; Dong et al., 2021). Educational opportunities were discovered and included variety of strategies and methods including PowerPoint presentation, self-directed online

learning, online discussions, and webinar style. Various educational topics related to substance use disorder was identified including patient education for mental health, recovery and wellness, healthcare provider education on suicide first aid, opioid use disorder treatment, fundamentals of addiction and discharge planning using a recovery-oriented approach (CMHA, 2022; CAMH, 2017; Dong et al., 2021).

The other three themes that were identified among the five discharge planning policies and guidelines are: *content of discharge planning tools, benefits of utilizing discharge planning tools and barriers for implementation* (Agency for Healthcare Research and Quality, 2013; Patient Safety Learning Lab, 2019; PODS, 2019). All discharge planning tools had similar content focusing on follow-up appointments post-discharge, applicable community resources, and patient education on medication and potential complications (Agency for Healthcare Research and Quality, 2013; Patient Safety Learning Lab, 2019; PODS, 2019). The benefits of implementing various discharge planning tools were assessed in four tools and included improved clinical outcomes, decreased readmission rates, increased patient knowledge and self-management skills, improved connection with primary care providers, reduced healthcare costs and enhanced communication (Agency for Healthcare Research and Quality, 2013; Patient Safety Learning Lab, 2019; PODS, 2019). Barriers were also identified in three discharge planning tools and included staff acceptance, fear of change, low awareness of the tool and technical issues (Agency for Healthcare Research and Quality, n.d; PODS, 2019; Patient Safety Learning Lab, 2019).

Summary of the Resource

The discharge planning resource is a 4-hour workshop designed for nurses working in a detoxification unit. During the consultations, face-to-face education and PowerPoint

presentations with discussions emerged as the preferred methods for delivering education, which led to the development of the in-person workshop to align with these preferences. The teaching methods included PowerPoint presentation, a reflection exercise, three case studies and pre-and post workshop questionnaires. This resource focuses on defining discharge planning, identifying the importance of discharge planning, discussing negative impacts of inadequate discharge planning and identifying appropriate resources for patients with substance use disorder.

Preparation for the Workshop

For instructors to be prepared to facilitate the workshop it will be essential for the instructor to have previously attended any of the workshops and be familiar with the educational material. The instructor must ensure they have the presentation on a thumb drive, and the appropriate equipment such as a projector and computer. The instructor will be compensated for their time preparing and administering the workshop. For the educational environment, the instructor should book a room that can comfortably fit 3-10 people with enough tables and chairs. The educational workshop consists of theoretical content, case studies, reflection on previous clinical experiences and pre and post questionnaire on discharge planning.

Introductions/Pre-test

The four-hour workshop starts with introductions between the facilitator and attendees. After the introduction, participants are provided with a pre-test questionnaire to assess baseline knowledge, skills and role clarity surrounding discharge planning. The pre-test questionnaire consists of ten multiple choice questions that examine knowledge of pharmacological treatment for substance use disorder, benefits of discharge planning, negative impacts of inadequate discharge planning and nurse's role in discharge planning.

Lecture

The lecture component of the workshop is an interactive PowerPoint presentation that provides the majority of the theoretical content for the workshop. The contents of this lecture were derived from the literature review, consultation with nursing staff and the environmental scan. This portion of the workshop will take approximately an hour. The theoretical content includes prevalence of substance use disorder, defining discharge planning, examining the benefits and barriers to adequate discharge planning, the impact of inadequate discharge planning and strategies to improve discharge planning practices.

Reflection

Following the PowerPoint presentation, the participants will have an opportunity to reflect on their previous experiences with discharge planning. This exercise will take approximately 20 minutes, 10 minutes to reflect on the questions and 10 minutes to discuss the identified questions as a group. Reflecting on previous clinical experiences provides an opportunity to identify barriers and facilitators for discharge planning in the facility. Additionally, participants will have applied strategies for improving discharge planning processes.

Case Studies

After participants reflect on previous clinical experiences, they will apply knowledge gained in the lecture while participating in case studies. Participants will have 30 minutes to break into groups to complete the questions attached to one of the three case studies. Once groups have finished discussing their assigned case study, they will present their answers to the group. After completing the case studies, the groups will come together to discuss answers. The

case studies aim to promote critical thinking and problem-solving skills among nurses to establish an appropriate discharge plan.

Post-test and Workshop Evaluation

The final component of the discharge planning workshop is completion of a post-test questionnaire and evaluation of the workshop. The post-test is a ten-question multiple choice questionnaire that asks the same questions as the pre-test questionnaire. The goal of this is to assess and compare the participants' level of knowledge pre and post-test. Participants will have a total of 20 minutes, 10 minutes to complete the post-test questionnaire and 10 minutes to complete an evaluation form to provide feedback to improve the workshop.

Discussion of Advanced Nursing Practice (ANP) Competencies

Research

According to the Canadian Nurses Association (CNA) (2019), advanced practice nurses are responsible for synthesizing, developing and incorporating research into nursing practice. In this practicum project, the competencies I engaged in included consultations with peers, review current literature related to my topic, conduct a comprehensive literature search and synthesis, and critically appraise relevant studies. I collected and analyzed data from consultations and environmental scans, using this information to inform the development of my project.

Leadership

Advanced practice nurses are also responsible for being leaders in their workplaces, and communities to improve care and spark change in nursing practice (CNA, 2019). One competency includes “identifying problems and initiating change to address challenges at the clinical, organizational and system level” (CNA, 2019 p. 33). This goal was accomplished by

conducting consultations and environmental scans to identify issues and barriers to developing the resource. The second competency of the project is to “apply theories and principles of project and change management” (CNA, 2019 p.33). The theoretical framework used for this project is Kotter’s (1996) Eight-Step Change Model. The steps in this model include creating a sense of urgency, forming a guiding change team, creating a vision, and planning for change, communicating the vision, removing barriers that impact change, providing short-term wins, building on the change, and making it stick (Appelbaum et al., 2012).

Education

The educational competencies for advanced practice nurses involve dedication to professional development and providing education for nurses, students, patients and families (CNA, 2019). An educational competency I achieved through this practicum project is to “plan, initiate, coordinate and conduct client, community or health-care educational programs based on needs, priorities and organizational resources” (CNA, 2019 p.31). This was accomplished through the completion of the practicum proposal, literature review, environmental scan, and consultations with colleagues and community partners to develop an educational resource regarding discharge planning for nurses in the detoxification unit. Through the practicum project, I achieved the competency of optimizing patient care through learning with and from other healthcare professionals through environmental scans of other discharge plans and consultations with colleagues.

Next Steps

Following the development of the resource the next steps would focus on the implementation of the resource into nursing practice. This would involve consulting the unit manager, clinical lead, and administration to receive approval and discuss the logistics on the

implementation. To promote a discussion about the resource I would provide management with a copy of the resource manual. Once the resource and training are approved by the manager it would be necessary to discuss how often the education program should be offered and providing training instructors for teach the educational workshop. Until additional instructors are trained for the educational workshop I will serve as primary instructor.

Conclusion

In conclusion, discharge planning is a crucial aspect of a patient's admission to a detoxification unit. Through review of literature, consultations with nursing staff and community partners and performing an environmental scan it was determined that discharge planning education is a need for healthcare providers. Literature also discussed the consequences of inadequate discharge planning and the negative impacts for patients and the healthcare system. The results of the literature review, consultations and environmental scan was the initial point for recognizing the need for change within the detoxification facility. To promote improved discharge planning and better patient outcomes a resource and educational workshop on discharge planning was developed.

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Appendix A: Literature Review

Development of a Discharge Planning Resource for Nurses Working in a Detoxification

Unit: A Literature Review

Substance use disorder encompasses various conditions dependent on the type of substance use. These include alcohol use disorder (AUD), opioid use disorder (OUD), stimulant use disorder, cannabis use disorder, caffeine use disorder, hallucinogen use disorder, inhalant use disorder, tobacco use disorder, and sedative, hypnotic or anxiolytic use disorder (Substance Abuse and Mental Health Services Administration, 2016). On a global scale, the number of individuals using drugs such as cannabis, opioids, amphetamines, cocaine, and ecstasy stands at 296 million, marking a 23% increase over the past decade (United Nations Office on Drugs and Crime, 2023). Substance use disorder is also a prevalent condition in Canada, where it impacts approximately 6 million Canadians throughout their lifetime (21%) (Canadian Mental Health Association, 2024). According to the Canadian Alcohol and Drugs Survey conducted in 2019, the prevalence of cannabis use was 21%, which increased from 15% in 2017. The provinces with the highest prevalence of cannabis use were Nova Scotia at 33% (Government of Canada, 2023). Furthermore, problematic opioid use increased from 3% in 2017 to 6% in 2019 impacting 269,000 Canadians (Government of Canada, 2023). The prevalence of substance use disorder in New Brunswick is significant, impacting more than one in five people (Government of New Brunswick, 2016). The most common substance use disorder is alcohol use disorder which impacts 20% of New Brunswickers (Government of New Brunswick, 2016). Substance use disorder has been demonstrated to be prevalent globally, which illustrates the need for services to treat this disorder.

Detoxification is one of the initial steps on the continuum of care aimed at managing substance use disorder (Zhu & Wu, 2018). Although this is the initial step, it is often not enough

to treat substance use disorder and maintain long-term sobriety (Zhu & Wu, 2018).

Detoxification focuses on short-term medical interventions to reduce signs and symptoms of substance withdrawal with the overall goal of reducing or ceasing substance use (Zhu & Wu, 2018).

Globally, one in five people diagnosed with drug use disorders has accessed treatment (United Nations Office on Drugs and Crime, 2023). In the United States, there were 1,666,366 discharges from substance use treatment facilities that were both inpatient and outpatient, of those discharges 16% were discharged from inpatient detoxification units in 2018 (HHS, 2018). Similarly, across six Canadian provinces between 2015 and 2016, 146,885 individuals accessed treatment for substance use disorder (CCSA, 2019). Of those individuals, 24.6% were admitted to both residential and non-residential withdrawal management programs (CCSA, 2019). On a local level, in New Brunswick, 1 in 366 people accessed treatment for substance use disorder between 2017 and 2018 (CCSA, 2021). At the Saint John Ridgewood Detoxification unit, a total of 544 patients were admitted in 2023 for withdrawal management. As patients access residential withdrawal management programs for the treatment of substance use disorder, it is essential to develop a discharge plan to ensure the patient successfully transitions into the community.

Discharge planning aims to provide patients and their families the ability and resources to care for themselves as they transition from inpatient settings into the community (Luther et al., 2019). For quality discharge planning to occur it requires a patient-centred approach that utilizes an individualized care plan based on the patient's individual needs (Luther et al., 2019). Nurses play a key role in discharge planning as they spend the most time with patients and their families and can provide insight into the factors that may impact discharge (Luther et al., 2019). Adequate discharge planning has been demonstrated to provide significant value to patients and families

and is attributed to reduced readmissions, a decrease in all-cause mortality and an improvement in patient's quality of life (Burke et al., 2014; Lockwood & Mabire, 2020; Zhu et al., 2015).

This literature review aims to determine the importance of discharge planning in healthcare and examine strategies to improve discharge planning in the detoxification unit setting. Additionally, this literature review will examine nurses' role in discharge planning and assess the need for an educational resource to assist nurses in the discharge planning process. To ensure clarification, the terms detoxification and inpatient withdrawal management are used interchangeably.

Methods of Literature Review

For this literature review, the following databases were used: PubMed, Cumulative Index to Nursing and Allied Health (CINAHL), Ovid Medline and Google Scholar. Grey literature was included and gathered from Government websites. The terms used to search in the various databases included: *“detoxification”*, *“substance use disorder”*, *“discharge planning”*, *“interventions effectiveness”*, *“impact of inadequate discharge planning”* and *“strategies to improve discharge planning”*. The criteria for literature discussed in this literature review consisted of peer-reviewed articles published between 2014 and 2024 that focused on discharge planning for patients with substance use disorder admitted either in a hospital or a detoxification setting. Articles from the past ten years were included to ensure the literature included was recent and relevant. The Public Health Agency of Canada's (PHAC) (2014) critical appraisal toolkit was used to critically appraise quantitative research studies. Qualitative research studies were critically appraised using the Joanna Briggs Institute (JBI) critical appraisal checklist (Lockwood et al., 2020). Mixed-method studies will be critically appraised using the Mixed-Methods Appraisal Tool (MMAT) (Hong et al., 2018). Appendix A will consist of literature summary tables of literature discussed throughout the review.

This literature review will consist of an overview of the prevalence of substance use and detoxification admissions that require discharge planning, contributing factors and the impact of poor discharge planning on readmission rates, substance relapse and cost to the healthcare system. Furthermore, discussions of interventions to improve processes will be discussed. This includes the proposed intervention of developing an educational resource for nurses in the detoxification unit to assist in linking patients to appropriate services.

Contributing Factors of Inadequate Discharge Planning

Although discharge implementation is a vital component when dealing with individuals with substance use disorder, various factors may contribute to inadequate discharge planning. Examining the contributing factors that negatively influence discharge planning can ensure that interventions implemented mitigate these factors to ensure a successful transition. Several studies have recognized that inadequate discharge planning can be attributed to factors such as insufficient communication among healthcare providers, a lack of continuity of care, and insufficient knowledge and role clarity among healthcare providers and organizations (Cruz et al., 2019; David et al., 2022; Lee et al., 2020; Noseworthy et al., 2014; Oppen et al., 2019; Rubinsky et al., 2018; Sharp et al., 2021).

Poor Communication Between Healthcare Providers

One of the most common factors that contribute to inadequate discharge planning is poor communication between healthcare providers (Lobchuk et al., 2021; Gholizadeh et al., 2016). There are several benefits to good communication within the interprofessional team including increased quality of care, patient safety, and satisfaction (Lobchuk et al., 2021). Inadequate

communication during discharge planning has been linked to avoidable adverse effects after the discharge process (Lobchuk et al., 2021).

Nava et al. (2022) conducted a systematic qualitative review to examine the experiences of mental health patients accessing emergency departments. The author identified three key themes: interpersonal factors, environmental factors, and system-level factors (Nava et al., 2022). They found the patients valued clear and timely communication about their care, but unfortunately, many reported decreased satisfaction due to communication issues (Nava et al., 2022). Providers also expressed concerns and difficulty with communication, particularly for patients with co-existing mental health and substance use disorders (Nava et al., 2022). Similarly, Gholizadeh et al. (2016) conducted a qualitative study to examine the challenges of discharge planning in the healthcare system in Iran. Five themes emerged including leadership, service delivery, information, financing, health workforce and medical production (Gholizadeh et al., 2016). Regarding communication, participants report a major challenge to discharge planning is a lack of communication among healthcare providers, and between hospital care and community care (Gholizadeh et al., 2016).

Lack of Continuity of Care

Continuity of care involves patient care being continued or provided by the same provider (Cole et al., 2021). Ensuring continuity of care is associated with positive outcomes including improved patient outcomes and quality of care (Cole et al., 2021). Lack of continuity of care following discharge from a detoxification unit has been identified as a contributing factor to inadequate discharge planning (Lee et al., 2020). The authors of three studies conducted in the United States found that there was a poor continuity of care when it comes to the transitioning

from detoxification units into the community (David et al., 2022; Lee et al., 2020; Rubinsky et al., 2018).

Rubinsky et al. (2018) assessed continuity of care rates and transition barriers among 63 US veterans' residential programs for substance use disorder and 34 programs for mental health with a substance use disorder component. The study revealed 63% mean rate of continuing care within 30 days of discharge for programs solely focusing on substance use disorder, compared to a 32% mean rate for programs addressing both mental health and substance use. Both Rubinsky et al. (2018) and David et al. (2022) examined barriers that impacted patients' transition from detoxification units into the community through semi-structured interviews. Rubinsky et al. (2018) conducted 59 semi-structured telephone interviews with representatives from different residential facilities to discuss barriers and facilitators for continuity of care. In contrast, David et al. (2022) focused on patients' perspectives and 24 patients underwent semi-structured interviews. Rubinsky et al. (2018) discussed several themes that emerged as barriers to continuing care including inadequate staff accountability, lack of program staff accountability, and poor accessibility to outpatient treatment. David et al. (2022) identified that there was a lack of continuity of care, which caused barriers to transition from the inpatient detoxification unit into the community. Patients also disclosed that they felt as though detoxification did not serve as the initial point for substance use care as there was an unclear plan going forward (David et al., 2022). The lack of continuity of care caused several challenges for patients upon discharge including difficulty obtaining outpatient appointments for follow-up care for medications such as buprenorphine, medications for opioid use disorder, and extended-release naltrexone (David et al., 2022).

Lack of Healthcare Provider Knowledge and Role Clarity

Lack of knowledge and role clarity among healthcare providers hinder adequate discharge planning. Two qualitative studies (Sharp et al., 2021; Noseworthy et al., 2014) explored healthcare providers' experiences in discharge planning, one in a US detoxification unit and the other in a Canadian teaching hospital. Noseworthy et al. (2014) focused on participants with extensive mental health experience, using semi-structured interviews, while Sharp et al. (2021) employed in-depth interviews.

Common themes that arose in both studies included engagement in the discharge planning process and ensuring a smooth transition between inpatient and community care (Sharp et al., 2021; Noseworthy et al., 2014). In the study conducted by Sharp et al. (2021), participants discussed barriers to treatment planning which included a lack of role clarity and feeling not well informed about the treatment planning processes. Additionally, there were diverse perceptions of what treatment planning was, and who was responsible for facilitating treatment planning (Sharp et al., 2021). There were only a few participants who believed that treatment planning was an important component of continuity of care while transitioning into the community (Sharp et al., 2021). Similarly, participants in Noseworthy et al. (2014) shared experiences of feeling confused, and unclear about the discharge planning protocols. Furthermore, participants acknowledged a lack of knowledge regarding resources available in the community to link patients to post-discharge, and how those resources functioned (Noseworthy et al., 2014).

Impact of Inadequate Discharge Planning

As previously identified, several contributing factors can contribute to inadequate discharge planning. If discharge planning is inadequate, there are negative consequences for the individual and the healthcare system. In this section, I discuss the impacts of inadequate

discharge planning including increased readmission rates, relapse in sobriety, and costs to the healthcare system.

Increased Readmission Rates

An indicator of inadequate discharge planning is the need for patients to be readmitted to detoxification programs. In Canada, it is estimated that approximately 500 Canadians are hospitalized daily due to harm related to substance use. (CIHI, 2023). The provinces with the highest rates of substance-related harm include the Northwest Territories, Nunavut, Yukon, Saskatchewan and Alberta (CIHI, 2023). Two studies provide evidence of the association between inadequate discharge planning and high readmission rates (Running Bear et al., 2022; Hutchinson et al., 2019). For instance, Hutchinson et al. (2019) investigated 76 facilities in the United States offering psychiatric care, substance use disorder hospitalization and residential detoxification involving 1724 individuals and found 417 readmissions within 30 days of discharge. Patients who received the intervention had lower rates of readmission to detoxification and substance use facilities (4% vs 7%, $p=.0012$) (Hutchinson et al., 2019). Similarly, Running Bear et al. (2022) conducted a cohort study in an inpatient detoxification unit in Alaska, involving 1014 patients with alcohol use and 267 with opioid use, revealing that 44% of alcohol-use patients and 25% of opioid-use patients were re-admitted within a year.

Relapse in Sobriety

An additional impact of inadequate discharge planning in a detoxification unit is that patients are more likely to relapse into substance use and are unlikely to maintain sobriety post-discharge. Two studies provide evidence to support that patients who are connected to the community before discharge are less likely to relapse into substance use (Morgan et al., 2020;

Stein et al., 2020). Both studies were conducted in detoxification units in the United States (Morgan et al., 2020). Stein et al. (2020) determined that patients who were linked with buprenorphine treatment as an outpatient had significantly lower rates of illicit opioid use at 35 days ($p<.001$) and at 95 days ($p<.001$). In contrast, the cohort study conducted by Morgan et al. (2020) examined engagement in treatment and opioid overdose rates while navigating care. The study determined that following discharge from detoxification, 25% of patients assessed were engaged in further substance use treatment, 25% of patients left detoxification and did not access any additional care and 52% were readmitted to detoxification within two years (Morgan et al., 2020). Overall, 10% of patients discharged from the detoxification experienced an opioid overdose following discharge, and 40% of those overdoses occurred within 4 months of discharge (Morgan et al., 2020). Both studies demonstrate inadequate discharge planning and access to treatment post-discharge care resulted in an increased rate of illicit substance use, and a higher likelihood of opioid overdose (Morgan et al., 2020; Stein et al., 2020).

Cost to Healthcare System

As previously discussed, inadequate discharge planning can lead to increased readmissions to both hospitals and detoxification units, higher rates of illicit substance use and opioid overdoses (Hutchinson et al., 2019; Running Bear et al., 2022; Morgan et al., 2020; Stein et al., 2020). Due to the high rates of readmissions and complications of continued substance use an additional negative consequence includes cost to the healthcare system. Cost of substance use disorder was examined in one high-quality cohort study conducted by the CCSA (2023) and one medium-quality cohort study conducted by Peterson et al. (2021). The study conducted by the CCSA (2023) examined the cost in Canada, while Peterson et al. (2021) examined the cost in the United States.

The overall cost for substance use in Canada was estimated to be \$49.1 billion and included expenses to healthcare, criminal justice and loss of productivity (CCSA, 2023). Compared to the cost in 2007, there was a 30% increase in overall cost related to substance use (CCSA, 2023). This equated to \$1291 per person in Canada, the substances with the highest cost included alcohol and tobacco (CCSA, 2023). The cost of substance use on the healthcare system accounted for 27% of the overall cost which equated to \$13 billion (CCSA, 2023). Several health conditions were associated with substance use including cancer, cardiovascular disease, communicable disease, digestive conditions, motor vehicle collisions, endocrine conditions, neuropsychiatric conditions, respiratory conditions, and intentional and unintentional injuries (CCSA, 2023). In 2020, there were a total of 262,494 hospitalizations related to substance use which cost the healthcare system \$386 per person (CCSA, 2023). The provinces with the highest healthcare cost due to substance use included Nunavut, Northwest Territories, and the Yukon (CCSA, 2023). Outside of the territories, relatively high costs occurred in the Atlantic Provinces (CCSA, 2023). The cost to the New Brunswick healthcare system was \$428 per person (CCSA, 2023).

The total cost of substance use disorder on the healthcare system in the United States in 2017 was \$13.2 billion (Peterson et al., 2021). The authors of the study conducted an economic evaluation by analyzing data from the National Inpatient Sample and the Healthcare Cost and Utilization Project Nationwide Emergency Department Sample across the United States. They also found that the median medical cost for emergency department visits with a primary diagnosis of substance use disorder was \$1985, while for inpatient admissions, it increased to \$9636 (Peterson et al., 2021). Similar to the CCSA (2023), the highest cost was attributed to alcohol use disorder and the second highest cost was related to opioid use disorder. There were

limitations identified in the study, one limitation is that the cost was only assessed in a hospital setting (Peterson et al., 2021). Furthermore, it is likely that substance use was underreported by patients and therefore the cost was underestimated (Peterson et al., 2021). To conclude, both studies identify substance use as a significant cost to the health care system.

Interventions to Improve Discharge Planning

To combat the negative impacts of poor discharge planning, healthcare organizations must focus on implementing effective strategies to improve the discharge planning process. Some strategies can improve the discharge planning process and ensure a smooth transition for patients post-discharge. The strategies that have been identified to assist in transition pre-discharge include discussing treatment options, scheduling appointments, providing patients with available resources in the community, completing referrals to community providers and linking patients to care (Krawczyk et al., 2023; Hogue et al., 2024). Post-discharge strategies include bridging prescriptions, providing transportation assistance, conducting follow-up calls or texts, providing peer support and care navigation (Krawczyk et al., 2023). The most common interventions that will be discussed in the next section include the implementation of strategies such as establishing linkage to care in the community, facilitating the transition of pharmacological therapy, and providing education for nursing staff on discharge planning.

Linkage to Care

Hogue et al. (2024) define linkage of care as a range of services that aims to assist the individual with substance use disorder access necessary treatment, engaging in recovery support services and maintaining access to medications. Linkage to care requires that the individual has been formally connected to outpatient care for the continuation of treatment (Hutchinson et al.,

2019). While reviewing the literature, nine studies examine linkage to care as a component necessary for discharge planning. This includes three high-quality randomized controlled trials (Gryczynski et al., 2021; Byrne et al., 2020; Timko et al., 2019), two medium-quality non-randomized controlled trials (Hutchinson et al., 2019; Lee et al., 2020), two medium-quality cross-sectional studies (Ivers et al., 2018; Reif et al., 2017), one medium-quality uncontrolled before-after study (Wei et al., 2015) and one medium-quality retrospective cohort study (Jack et al., 2022). Eight studies were conducted in the United States (Byrne et al., 2020; Gryczynski et al., 2021; Hutchinson et al., 2019; Jack et al., 2022; Lee et al., 2020; Timko et al., 2019; Reif et al., 2017; Wei et al., 2015) and one was conducted in Ireland (Ivers et al., 2018). Four studies were conducted in detoxification units (Ivers et al., 2018; Hutchinson et al., 2019; Lee et al., 2020; Timko et al., 2019), four were conducted in inpatient hospital units (Byrne et al., 2020; Gryczynski et al., 2021; Jack et al., 2022; Wei et al., 2015), and one was conducted in both inpatient units and detoxification units (Reif et al., 2017).

Diverse interventions, including the utilization of recovery coaches, patient navigation services, peer navigation services and enhanced telephone monitoring programs have been employed to enhance linkage to community services for individuals with substance use disorder (Byrne et al., 2020; Gryczynski et al., 2021; Timko et al., 2019). Gryczynski et al. (2021) and Timko et al. (2019) both evaluated the outcome of readmission rates. The intervention implemented by Gryczynski et al. (2021) resulted in a statistically significant decrease in both 30-day hospital readmissions and 12-month readmission rates. The 30-day readmission rate in the intervention group was 15.5%, compared to 30% in the control group ($p < .001$) (Gryczynski et al., 2021). In comparison, Timko et al. (2019) determined the telephone follow-up intervention

that was implemented resulted in significantly lower readmission rates at three months ($p=.014$), but rates were not statistically significant at six months ($p=.197$).

Three of the studies examined patient engagement following the implementation of their interventions (Byrne et al., 2020; Jack et al., 2022; Timko et al., 2019). Both studies evaluated engagement at six months in different recovery programs. The rate of engagement with the intervention group in the study conducted by Byrne et al. (2020) was 80% compared to the control group which was 24% ($p<.001$). In comparison, Timko et al. (2019) determined that engagement was significantly lower in the intervention group at six months compared to the control group (53.28% vs 63.97%, $p=.043$). Jack et al. (2022) determined that the peer interaction did not result in any significant change in follow-up rates ($p=.89$) or initiation of buprenorphine prescriptions within 30 days of discharge ($p=.75$). All studies had similar limitations including utilization of a single site, which may limit the generalizability. Additionally, the studies by Timko et al. (2019) and Byrne et al. (2020) used self-reports on questionnaires which could have led to bias.

Similar to the randomized controlled trials, the non-randomized controlled trials conducted by Hutchinson et al. (2019) and Lee et al. (2020) evaluated the implementation of care managers and recovery support navigators. Hutchinson et al. (2019) implemented the use of a care manager who was responsible for examining barriers to transition into the community and providing linkage to appropriate services post-discharge. Similarly, Lee et al. (2020) implemented recovery support navigators who were also responsible for linkage to care post-detoxification. Both studies aimed to evaluate the outcome of continuity of care in the community following the patient's discharge (Hutchinson et al., 2019; Lee et al., 2020). Both studies collected data by reviewing patient's charts (Hutchinson et al., 2019; Lee et al., 2020).

Studies conducted by Hutchinson et al. (2019) and Lee et al. (2020) demonstrated that there was a significant increase in continuity of care in the intervention groups. Lee et al. (2020) determined that continuity of care occurred in 45% of the intervention group, compared to 38% of the control group ($p < .05$). Hutchinson et al. (2019) determined that 32% of the intervention group accessed follow-up treatment within 30 days of discharge, compared to 25% of the control group ($p = .0045$). Both studies had the limitation that there was an inability to randomize the sample. Additionally, Lee et al. (2020) only conducted sampling at one site which could limit generalizability.

The two cross-sectional studies conducted by Ivers et al. (2018), Reif et al. (2017), and the uncontrolled before-after study by Wei et al. (2015) had different aims. Ivers et al. (2018) examined the impact of inpatient care, outpatient care and no formal care on abstinence rates. In comparison, Reif et al. (2017) whether receiving follow-up care within two weeks of discharge had an impact on readmission rates. Wei et al. (2015) implemented a discharge planning protocol for inpatients admitted for AUD to assess the impact on readmission rates and emergency room visits. Ivers et al. (2018) determined that substance abstinence was higher at 3, 6 and 9 months in patients who received inpatient and outpatient care compared to individuals who received no formal care. At 9 months, 67% of in-patients were abstinence from substances and 50% of patients receiving outpatient care-maintained abstinence (Ivers et al., 2018). In comparison, 6% of patients who had no formal care-maintained abstinence (Ivers et al., 2018).

Reif et al. (2017) examined the outcomes of accessing follow-up services within 14 days and readmission rates within 90 days of discharge. The results determined that only 22.8% of patients received outpatient services within 14 days of discharge (Reif et al., 2017). The rates of readmissions were significantly lower in patients who accessed residential services (Reif et al.,

2017). Additionally, patients who were on medication-assisted treatment were associated with a reduced risk of readmission ($p < .001$) (Reif et al., 2017). Similarly, Wei et al. (2015) determined that readmission rates were lower in patients who received the discharge planning protocol than those who did not (23.4% vs 8.2%, $p = .042$). Additionally, there were significantly fewer emergency rooms among patients who received the discharge planning protocol (18.8% vs 6.1%, $p = .056$). A limitation noted by Ivers et al. (2018) is the utilization of self-reports to establish abstinence rates which could have led to bias. Both Reif et al. (2017) and Wei et al. (2015) identified the limitation of decreased generalizability due to sampling at a single center.

Transition and Initiation of Pharmacological Therapy

A negative impact of inadequate discharge planning is a relapse of sobriety or an increase in substance use post-discharge. An intervention that has been shown to reduce rates of relapse and substance use following discharge from either hospital or detoxification is initiating and continuing medication for substance use. Six studies examine the impact of initiating and continuing medications for substance use and include two randomized controlled trials (Pfeifer & Fehr, 2019; Liebschutz et al., 2014), two cohort studies (Wang et al., 2021; Smith, Hansen & Colvard, 2021) and two cross-sectional studies (Bolek et al., 2016; Stein et al., 2016). Four studies were conducted in the United States (Liebschutz et al., 2014; Smith, Hansen & Colvard, 2021; Stein et al., 2016; Wang et al., 2020), one was conducted in Turkey (Bolek et al., 2016) and one in Germany (Pfeifer & Fehr, 2019). Three studies were conducted at detoxification units (Bolek et al., 2016; Pfeifer & Fehr, 2019; Stein et al., 2016) and three studies were conducted on inpatient medical units (Liebschutz et al., 2014; Smith, Hansen & Colvard, 2021; Wang et al., 2020).

The two randomized controlled trials focused on different types of substance use and different medications to determine the effect on abstinence and engagement in treatment (Pfeifer & Fehr, 2019; Liebschutz et al., 2014). Liebschutz et al. (2014) had a sample of 139 participants, 72 received the intervention, and 67 received usual care. Pfeifer and Fehr (2019) had a sample of 171 participants, 86 of whom received the intervention and 85 received a placebo. Pfeifer and Fehr (2019) implemented the use of varenicline on patients with AUD admitted to a detoxification unit. Liebschutz et al. (2014) implemented the initiation of buprenorphine for patients with OUD in an inpatient medical unit and ensured linkage to care to continue the prescription. Pfeifer and Fehr (2019) utilized various questionnaires including the European Addiction Severity Index, Fagerstrom test for nicotine dependence, the Hamilton Depression Scale, the Beck Depression Inventory, and the Obsessive-Compulsive Drinking Scale. Liebschutz et al. (2014) utilized self-reporting and chart reviews on health electronic records. Both studies examined substance use, and Liebschutz et al. (2014) additionally examined the outcome of treatment engagement.

Liebschutz et al. (2014) determined that patients who received buprenorphine during hospitalization and linkage to care were more likely to enter community treatment (72.2% vs 11.9%, $p < .001$). Additionally, patients who received the intervention were less likely to report opioid use (9.0% vs 37.5%, $p < .01$) (Liebschutz et al., 2014). In comparison, Pfeifer and Fehr (2019) determined that initiation of varenicline had no significant difference in alcohol (83.3% vs 87.9%, $p = .58$) or nicotine abstinence (5.4% vs 0.7%, $p = .40$). Both studies had similar intervention including utilizing self-reporting which may lead to bias responses. Additionally, both studies were conducted at a single site which may limit generalizability. Using the PHAC

(2014) critical appraisal toolkit, the study by Pfeifer and Fehr (2019) was high-quality, while the study by Liebschutz et al. (2014) was medium quality.

Two cohort studies assessed the impact of the initiation of medications for OUD during hospitalization on readmission rates and engagement in treatment (Smith, Hansen & Colvard, 2021; Wang et al., 2020). There were 147 participants were assessed before and after implementation of a buprenorphine-based protocol (Wang et al., 2020). Smith, Hansen and Colvard (2021) evaluated the impact of a pharmacist-led substance use disorder transition of care following the initiation of medication in the hospital. There were 150 participants, 54 participants received the intervention while 96 received the usual care (Smith, Hansen & Colvard, 2021). Both studies collected data through chart reviews and prescription refill records (Wang et al., 2020; Smith, Hansen & Colvard, 2021).

Outcomes were different between the studies. Smith, Hansen and Colvard (2021) assessed the outcome of retention on medications for OUD. At three months post-discharge, participants who received the pharmacist-led substance use disorder medication transition were more likely to be engaged in treatment (77.3% vs 56.8%, $p<.01$) (Smith, Hansen & Colvard, 2021). Furthermore, at six months retention of medication was significantly more likely in the intervention group (71.4% vs 48%, $p<.01$) (Smith, Hansen & Colvard, 2021). Wang et al. (2020) assessed against medical discharge (AMA) discharge rates and readmission rates to the hospital within 30 days. The results demonstrated that the buprenorphine-based protocol resulted in a significant difference in readmission rates (35.1% vs 18.8%, $p=.03$) (Wang et al., 2020). There were no significant difference in AMA discharge rates (42.2% vs 40.8%, $p=.85$) (Wang et al., 2020). A limitation in both studies is that data was collected at a single site, limiting the generalizability of results. Smith, Hansen and Colvard (2021) also identified that manual chart

reviews were a limitation, which was subject to human error. Using the PHAC (2014) critical appraisal toolkit, both studies had moderate study designs that were medium quality.

Two cross-sectional studies also evaluated the impact of initiating medication for OUD and transitioning care into the community (Bolek et al., 2016; Stein et al., 2016). Bolek et al. (2016) assessed 50 participants and Stein et al. (2016) assessed 62 participants. Bolek et al. (2016) used questionnaires including the Perceived Stress Scale, Addiction Severity Index, Visual Analog Scale and Quality of Life questionnaire. Stein et al. (2016) collected data through a chart review of participants' electronic health records. Bolek et al. (2016) assessed the outcomes of opioid cravings and quality of life after 6 months of buprenorphine/naloxone treatment. In comparison, Stein et al. (2016) assessed the patient engagement in treatment after receiving naltrexone during inpatient detoxification.

Bolek et al. (2016) determined that opioid cravings significantly decreased between baseline and six months of treatment ($p < .001$). Additionally, quality of life was significantly improved in physical functioning ($p = .001$), mental health ($p = .007$), bodily pain ($p < .001$) and general health ($p = .032$) at six months compared to baseline. In comparison, Stein et al. (2016) determined that the proportion of patients who followed up with their naltrexone injection within one month was 54.8% and at three months, 32.2% of participants received their injection. A limitation of Stein et al. (2016) is that they were unable to determine the reasons why participants discontinued their naltrexone injections as they utilized chart reviews. Bolek et al. (2016) identified a limitation in that their study relied on self-reporting which could lead to biased responses. Additionally, Stein et al. (2016) had a small sample size with poor retention rates. Due to the limitations identified, using the PHAC (2014) critical appraisal toolkit, both study designs were weak and of medium quality.

Improving Communication

A cross-sectional study (Cruz et al., 2016) and an uncontrolled before-after study (Oppen et al., 2019) were conducted in the United States with a focus on enhancing communication within the healthcare team to tackle problems associated with suboptimal discharge planning. Cruz et al. (2016) used a variety of interventions to address poor communication leading to inadequate discharge planning including the implementation of the Teams Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS), team meetings, bi-weekly huddles, and an additional tool to help identify barriers to discharge. In comparison, Oppen et al. (2019) utilized a daily interprofessional team bedside rounding, briefing checklists, in-room communication whiteboard and training for both nurses and physicians on utilizing the interventions. Both studies reported a significant decrease in readmissions after the implementation of interventions (Cruz et al. 2016; Oppen et al., 2019). Furthermore, Oppen et al. (2019) reported a decrease in ER visits for discharged patients comparing pre-and-post intervention (4.4% vs 1.5%, $p < .001$). Regarding communication, Cruz et al. (2019) reported that patients described improved communication with their healthcare providers, and increased communication regarding discharge planning (71.4% vs 83.7%). In comparison, Oppen et al. (2019) had conflicting results regarding improvement in communication. Physicians described an improvement in communication between nursing staff, whereas nursing staff did not feel communication improved (Oppen et al., 2019).

Education for Nursing Staff on Discharge Planning

A contributing factor to inadequate discharge planning is a lack of knowledge and role clarity for nurses. Five studies assessed the impact of discharge planning education to enhance knowledge and role clarity among nurses (Jehosua et al., 2023; Ustache, 2021; Smith et al.,

2018; El-Rafie et al., 2017; Roberts, Moore & Jack, 2018). Studies included three uncontrolled before-after studies (Jehosua et al., 2023; Roberts, Moore & Jack, 2018; El-Rafie et al., 2017) and two cross-sectional studies (Ustache, 2021; Smith et al., 2018). Three studies were conducted in the United States (Ustache et al., 2021; Smith et al., 2018; Roberts, Moore & Jack, 2018), one took place in Egypt (El-Rafie et al., 2017), and another in Indonesia (Jehosua et al., 2023). Among them, three studies were carried out in inpatient units (El-Rafie et al., 2017; Jehosua et al., 2023; Roberts, Moore & Jack, 2018), one in an educational center (Smith et al., 2018) and one in a community health center (Ustache, 2021).

Two uncontrolled before-after studies implemented different educational interventions and assessed the impact on nursing knowledge. Jehosua et al. (2023) implemented an educational intervention that focused on discharge planning and occurred over eleven sessions that lasted between 60 to 120 minutes. In the study, there were 165 nurses and midwives who were administered a discharge planning questionnaire pre and post-intervention (Jehosua et al., 2023). In comparison, Roberts, Moore and Jack (2018) implemented an educational program for a discharge planning protocol called re-engineered discharge (RED). There were 69 participants, which consisted of Registered Nurses and Licensed Practical Nurses (Roberts, Moore & Jack, 2018). The RED program encompasses twelve components including ensuring language transition upon admission, coordinating appointments for follow-up care post-discharge, developing a plan for communication of results that may be pending upon discharge, organizing appropriate outpatient services, reconciling discharge plan as needed, ensuring a plan is in place for medication, providing education to patients and assess the patient's understanding, ensuring the patient knows what to do if issues arise post-discharge, send discharge planning summary to clinicians in community care, and provide telephone reinforcement of the discharge planning

instructions (Roberts, Moore & Jack, 2018). The educational intervention implemented regarding the RED program included a PowerPoint presentation to teach what it is and how to document it in the electronic record (Roberts, Moore & Jack, 2018). To assess the impact of the educational intervention, the Directed Learning Readiness Scale- Adult and the Learning Preference questionnaires were utilized along with chart reviews to assess whether the RED program was being used (Roberts, Moore, Jack, 2018).

Jehosua et al. (2021) assessed the outcome of knowledge regarding discharge planning. Prior to the study, only 50.32% of nurses possessed good knowledge of discharge planning (Jehousa et al., 2021). The study demonstrated that knowledge levels significantly improved following the intervention for both nurses and midwives ($p=.001$) (Jehosua et al., 2021). In comparison, Roberts, Moore and Jack (2018) assessed two outcomes, which included documentation of the RED program and correct utilization of RED steps. The results demonstrated that there was a significant improvement in documentation of the twelve components of the RED program ($p=.000$ [CI 3.13-3.93]) (Roberts, Moore & Jack, 2018). Furthermore, there was an improvement in the correct utilization of the specific RED steps which included making follow-up appointments before discharge ($p=.000$), reviewing pending results prior to discharge ($p=.009$) and providing a telephone call to follow up post-discharge ($p=.001$) (Roberts, Moore & Jack, 2018). One limitation in both studies is that self-reported questionnaires were utilized, although Roberts, Moore and Jack (2018) supported those questionnaires with chart reviews. Both studies also were conducted at a single site and used convenience sampling, which may affect generalizability. Using the PHAC (2014) critical appraisal toolkit, the study design in both studies was weak, while the quality was medium.

Similar to Roberts, Moore and Jack (2018), the mixed-methods study conducted by El-Rafie et al. (2017) examined the impact of RED education on nurses' knowledge of discharge planning. Two educational sessions consisted of a PowerPoint presentation about the discharge planning intervention developed as the RED program and the impacts of poor discharge planning (El-Rafie et al., 2017). Semi-structured interviews ranging from 15 to 30 minutes included a questionnaire that assessed the issue of readmission, and the importance of a proper discharge planning process (El-Rafie et al., 2017). The results demonstrated the knowledge of the discharge planning process improved post-intervention ($p=.001$) (El-Rafie et al., 2017). Furthermore, understanding the importance of scheduling follow-up visits post-discharge significantly improved post-intervention (0% vs 79.2%, $p<.001$). Knowledge of the impact of readmissions also significantly improved regarding the definition of readmission ($p<.001$), most common re-admitted disease ($p<.001$) and perception of readmission as a problem ($p=.004$) (El-Rafie et al., 2017).

Two cross-sectional studies also examined the use of educational interventions regarding discharge planning and the impact associated with intervention for nurses and other healthcare professionals (Smith et al., 2018; Ustache, 2021). Ustache (2021) implemented an educational intervention specifically regarding patients with substance use disorder for 14 clinicians, 50% were Advanced Practice Registered Nurses (APRNs). The intervention was conducted over three sessions and included information regarding assessment guidelines, medication adherence and patient education for discharge (Ustache, 2021). In comparison, Smith et al. (2018) utilized a simulation-based learning experience for 132 students including physical therapy, nursing and social work students (Smith et al., 2018). The intervention by Smith et al. (2018) included a one-hour session where students conducted a pre-discharge planning meeting based on a case

scenario, groups were video-recorded and de-brief occurred with facilitators post-simulation. Data was collected using the Interprofessional Collaborative Competencies Attainment Survey (ICCAS) (Smith et al., 2018). In comparison, Ustache (2021) utilized questionnaires regarding knowledge of discharge planning guidelines, medication adherence and knowledge of the Addiction Severity Index.

Smith et al. (2018) demonstrated that a simulation-based educational experience improved confidence with discharge planning among 69.1% of students. Additionally, critical thinking skills were improved among 67% of students. Ustache (2021) demonstrated an improved knowledge of assessment guidelines, medication adherence and patient education for patients with substance use disorder. Pre-intervention 65% of participants agreed that patients should have an active role in discharge planning compared to 68% post-intervention (Ustache, 2021). There were limitations identified in both studies including the use of simple statistics and being conducted at a singular site (Ustache, 2021; Smith et al., 2018). Ustache (2021) also identified that the sample size was small, and the power of the study was not assessed. Smith et al. (2018) also acknowledge that the majority of participants in the study were physical therapy students which may contribute to a professional bias. Due to the limitations, of using the PHAC (2014) critical appraisal toolkit, the cross-sectional study design is weak. The quality of the study conducted by Ustache (2021) was low, while the study conducted by Smith et al. (2018) was medium quality.

Summary of Interventions and Gaps in Literature

Many interventions were identified in the literature as having a positive impact on discharge planning. The literature identifies that linkage to care during hospitalization as part of the discharge plan can result in increased engagement in outpatient programs (Timko et al.,

2019; Byrne et al., 2020; Hutchinson et al., 2019; Lee et al., 2020), decrease readmission rates (Hutchinson et al., 2019; Reif et al., 2017; Gryczynski et al., 2021) and decrease in illicit substance use for those linked to care (Ivers et al., 2018). The intervention of initiating and continuing medications for substance use disorder while in hospital or detoxification units was also identified as an intervention to improve discharge planning. The benefits related to medication initiation and transition into the community post-discharge include increased treatment engagement (Liebschutz et al., 2014; Stein et al., 2016; Smith, Hansen & Colvard, 2021), decreased emergency room visits (Wei et al., 2015), improved quality of life (Bolek et al., 2016) and decrease in illicit substance use (Liebschutz et al., 2014). The intervention of implementing discharge planning education for nursing staff was also identified as an intervention used to improve discharge planning by increasing knowledge (El-Rafie et al., 2017; Ustache, 2021; Jehosua et al., 2023), confidence with discharge planning (Smith et al., 2018), and utilization of the discharge planning process (Roberts, Moore & Jack, 2018).

Despite several studies identifying the significant impact of an education intervention on discharge planning, a limitation is that none of the studies included in the review that assessed an educational program were conducted in detoxification units. All studies provided in-person education sessions, and two studies specifically used PowerPoint presentations (El-Rafie et al., 2017; Roberts, Moore & Jack, 2018). One study utilized simulation-based education with debriefing post-stimulation (Smith et al., 2018). Based on the results of the interventions discussed, my proposed best practice for addressing discharge planning is the development of discharge planning educational resource for nurses working in the detoxification unit. The educational resource will incorporate both strategies identified such as providing linkage of care, and transition of medications into community care. As all the studies regarding education had an in-

person component the educational resource will also have a workshop component to provide education to nurses in person.

Theoretical Framework

Two theoretical frameworks (Kotter's eight-step change model and Kolb's experiential learning theory) will be used to guide the development of the discharge planning program.

Kolb's Experiential Learning Theory

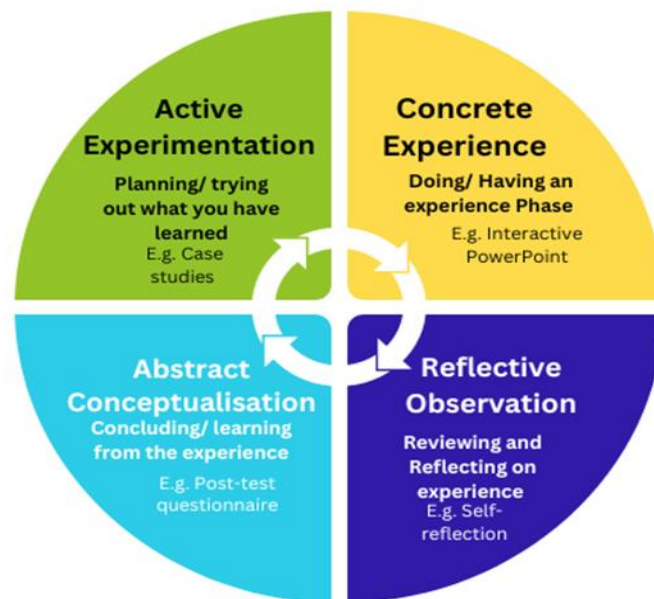
Kolb (1984) developed a theory of experiential learning which states that "learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" p.41. As shown in Figure 1, there are four components to Kolb's (1984) theory that create the learning cycle which includes concrete experience (CE), reflective observation (RO), abstract conceptualization (AC) and active experimentation (AE). The learning cycle demonstrates that knowledge is the process of grasping and transforming experience (Kolb, 1984). Each stage of the cycle feeds into the next (Kolb, 1984). Concrete experiences occur when an individual or group experiences a situation, or reinterpreted an existing experience in a new light (Kolb & Kolb, 2018). The individual or group then participates in reflective observation when they reflect on that new experience (Kolb & Kolb, 2018). Abstract conceptualization then occurs when the individual group learns and gains new meaning from the experience (Kolb & Kolb, 2018). The next step which is active experimentation then occurs when the individual or group tries out what they have learned (Kolb & Kolb, 2018).

This theory will inform the different aspects of the workshop that will be implemented for nurses working on the detoxification unit. The next stage of Kolb's (1984) that will be

implemented is abstract conceptualization, the group will come together to de-brief and share what they have learned from the stimulation. Finally, participants will demonstrate active experimentation when individuals experiment with what they have learned throughout the workshop in their practice.

Figure 1

Kolb's Experiential Learning Theory



Kotter's Eight-Step Change Model

For the implementation of a new process, it is important to have a model to encourage adaptation to change. As shown in Figure 2, Kotter's eight-step model of change involves "establishing a sense of urgency, creating a guiding coalition, developing a vision, communicating the change vision, empowering broad-based action, generating short-term wins, consolidating change to generate more change, and anchoring new approaches in the corporate

change” (Appelbaum et al., 2012, p.766). Establishing a sense of urgency will be established through the PowerPoint portion of the workshop when education regarding the importance of discharge planning is shared. Creating a guiding coalition is gathering the appropriate people to engage in the discharge planning process such as people in positions of power such as managers, people in positions of leadership such as team leads, and people with credibility such as nurses implementing the discharge planning process. Communicating the change vision will also occur through the PowerPoint presentation where the discharge planning process is shared, and the impact of adequate discharge planning is provided. Participants will be empowered to participate in broad-based action through successful communication of the vision and reviewing barriers to implementation as a team. Short-term wins will be generated as the short-term goals are established and met. Short-term goals occur when the group sees change happening and recognizes that the work being done is paying off (Appelbaum et al., 2012). Appelbaum et al. (2012) recognize that leaders may be tempted to declare the success of the implementation when short-term wins are met, at this point it will be essential to reassess systematical and structural barriers that negatively impact the new implementation. The final step of Kotter’s model is to anchor the new approach in corporate culture, this will be done by providing creating a document that new and old staff can refer back to.

Figure 2

Kotter’s Eight Step Change Model



Overall Goal of Discharge Planning Education

The discharge planning program for nurses will be delivered during a half-day workshop. As the literature demonstrated, in-person classroom-based learning was conducted in all five studies, and the workshop will include several educational strategies. The overall goal of this program is to enhance knowledge of discharge planning and develop discharge planning processes practice among nurses, thus improving patient care. This workshop will consist of a PowerPoint educational component that discusses what discharge planning is, the benefits of using it in practice, the consequences of inadequate discharge planning, resources in the local

community, and strategies to improve discharge planning in the detoxification unit. After foundational education in discharge planning is established through the lecture, there will be an opportunity to participate in a case studies and reflection on nursing experience. The case study component involves providing a scenario where nurses will be required to identify the barriers to discharge planning, resources that may be relevant to the discharge plan and strategies to mitigate the barriers identified.

Conclusion

To conclude, discharge planning is an essential process that prepares patients and their support systems to function outside of inpatient settings. It requires a holistic approach, and the discharge planning process must be initiated during admission. Substance use disorder is a prevalent condition that impacts 296 million people globally. People with substance use disorder often connect with the healthcare system, and in Canada, 500 people are admitted daily with substance use disorder. Due to the increased utilization of healthcare services and the complexity of care, adequate discharge planning services must be implemented. Inadequate discharge planning is caused by several contributing factors including poor communication, lack of continuity of care and poor knowledge of discharge planning and role clarity among healthcare providers. Inadequate discharge planning has several negative consequences including increased rates of readmissions, cost to the healthcare system and a higher likelihood of relapse.

Interventions that improve discharge planning processes involve providing linkage to appropriate services post-discharge, initiation and continuation of pharmacological therapy and education on discharge planning for nurses. The educational program aims to enhance knowledge of discharge planning for nurses and incorporate strategies to promote linkage to care

and transition of pharmacological therapy post-discharge. To address the various learning needs of participants, several learning strategies will be implemented including lectures, case studies and a reference document to use post-intervention. Utilizing different strategies will promote engagement in the program. The overall goal of this educational program is to ensure nurses feel empowered and confident in discharge planning to promote increased quality of care for patients.

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Appendix B: Literature Summary Tables

Study/Design	Methods	Key Results	Comments
<p>Authors: Bolek et al. (2016)</p> <p>Designs: Cross-sectional</p> <p>Purpose: Examine effects of buprenorphine/naloxone maintenance treatment post-discharge</p>	<p>N: 50 participants</p> <p>Setting: Detoxification Unit, Turkey</p> <p>Intervention: Initiation of buprenorphine/naloxone during detoxification and then transition to outpatient treatment</p> <p>Data Collection:</p> <ul style="list-style-type: none"> • Perceived Stress Scale • Addiction Severity Index • Visual Analog Scale • Quality of Life Questionnaire <p>Outcomes:</p> <ul style="list-style-type: none"> • Quality of Life • Opioid Cravings <p>Data Analysis</p> <ul style="list-style-type: none"> • Descriptive statistics 	<p>Opioid Cravings</p> <ul style="list-style-type: none"> • Significant decrease in opioid cravings between baselines and 6 months on treatment ($p<.001$) <p>Quality of Life</p> <ul style="list-style-type: none"> • Improvement in physical functioning ($p=.001$), mental health ($p=.007$), bodily pain ($p<.001$) and general health ($p=.032$) at six months on treatment compared to baseline 	<p>Strengths of Design Weak</p> <p>Quality Medium</p> <p>Comments</p> <ul style="list-style-type: none"> • Poor retention rates • Small sample size • Relied on self-reporting

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Byrne et al. (2020)</p> <p>Designs: Randomized Control trial</p> <p>Purpose: To evaluate the impact of recovery coaching intervention on engagement in treatment post-discharge</p>	<p>N: 98</p> <ul style="list-style-type: none"> Intervention: 51 Control: 47 <p>Setting: Inpatient hospital, South Carolina, USA</p> <p>Intervention: Recovery coach</p> <p>Control: Social worker with list of community resources</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Addiction Severity Index 12-item Short Form Health Survey Chart Review 10-item Drug and Alcohol Screening Test <p>Outcomes:</p> <ul style="list-style-type: none"> Engagement in Recovery Support Services Substance Use Frequency Outcomes measured at 30, 60, 90 and 180 days post-baseline. <p>Data Analysis</p> <ul style="list-style-type: none"> Intention-to-treat analysis. 	<p>Engagement in Recovery Support</p> <ul style="list-style-type: none"> At 180 days engagement: Intervention: 80% Control: 24% p<.001 <p>Substance Use Frequency</p> <ul style="list-style-type: none"> No significant difference in substance use between groups Intervention: 4.93 days per month Control: 6.79 days per month p= .80 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Strong <p>Quality</p> <ul style="list-style-type: none"> High <p>Comments</p> <ul style="list-style-type: none"> Data obtained through self-reporting. Limited psychosocial factors assessed.

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: El-Rafie et al. (2017)</p> <p>Designs: Uncontrolled Before-After</p> <p>Purpose: To evaluate the impact of RED education on nurses' knowledge of discharge planning</p>	<p>N: 24</p> <ul style="list-style-type: none"> Nurses working in acute care <p>Setting: 3 Internal Medicine floors, Cairo, Egypt</p> <p>Intervention: Two educational sessions through PowerPoint about discharge planning intervention, created from the RED toolkit</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Semi-structured Questionnaire <p>Outcomes:</p> <ul style="list-style-type: none"> Knowledge of Impact of Readmissions Knowledge Discharge Planning Process <p>Data Analysis</p> <ul style="list-style-type: none"> McNemar test 	<p>Knowledge of the Impact of Readmission</p> <ul style="list-style-type: none"> Significantly higher knowledge compared to pre-intervention regarding: <ul style="list-style-type: none"> Definition of Readmission ($p<.001$) Most common readmitted diseases ($p<.001$) Perception of readmission as a problem ($p=.004$) <p>Knowledge of Discharge Planning Processes</p> <ul style="list-style-type: none"> Knowledge regarding discharge planning process significantly improve post-intervention ($p=.001$) Importance of scheduling follow-up visits post-discharge <ul style="list-style-type: none"> Pre-intervention: 0% Post-intervention: 79.2% $P<.001$ 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Weak <p>Quality</p> <ul style="list-style-type: none"> Medium <p>Comments</p> <ul style="list-style-type: none"> Convenience sampling The validity of questionnaire is unknown

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED; Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Gryczynski et al. (2021)</p> <p>Designs: Randomized Controlled Trial</p> <p>Purpose: To determine if the implementation of patient navigation service reduces acute care use for patients with SUD</p>	<p>N: 400</p> <ul style="list-style-type: none"> Intervention n=200 The intervention consists of navigation services delivered by social workers Control group n=200 <p>Setting: Hospital in Baltimore, Maryland, USA</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Follow-up interviews at 3, 6 and 12 months EHR <p>Outcomes:</p> <ul style="list-style-type: none"> 12-month readmission rates 30-day hospital admissions and ED use <p>Data Analysis</p> <ul style="list-style-type: none"> Logistic regression Cox regression 	<p>12-month readmission rates</p> <ul style="list-style-type: none"> The intervention group had 136 fewer readmissions than those receiving usual care (HR, 0.74 [CI, 0.58 to 0.96]; P=.020) <p>30-day hospital admissions</p> <ul style="list-style-type: none"> Intervention: 15.5% Control group: 30.0% p<.001 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Strong <p>Quality</p> <ul style="list-style-type: none"> High <p>Comments</p> <ul style="list-style-type: none"> Single site study Small sample size Limit generalizability due to robust addictions program

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Hutchinson et al. (2019)</p> <p>Designs: Non-randomized controlled trial</p> <p>Purpose: Evaluate implementation of care management impact on readmissions</p>	<p>N: 1724</p> <ul style="list-style-type: none"> Intervention: 1243 Control: 481 <p>Setting: Inpatient SUD Facility, Pennsylvania, USA</p> <p>Intervention: A care manager who provides a connection to appropriate resources and examines barriers to transition into the community</p> <p>Control: Usual Care</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Medicaid administrative database Chart review <p>Outcomes:</p> <ul style="list-style-type: none"> Readmission to hospital Follow-up to outpatient treatment <p>Data Analysis</p> <ul style="list-style-type: none"> Logistic regression 	<p>Readmission Rate</p> <ul style="list-style-type: none"> Intervention: 4% Control: 7% P=.0012 <p>Follow up Rates at 30 days</p> <ul style="list-style-type: none"> Intervention: 32% Control: 25% P=.0045 	<p>Strengths of Design Strong</p> <p>Quality Medium</p> <p>Comments</p> <ul style="list-style-type: none"> No randomization Smaller control group

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Ivers et al. (2018)</p> <p>Designs: Observational Study</p> <p>Purpose: The aim is to determine substance use post-discharge in 3 streams of care: inpatient after-care, outpatient aftercare or no formal care</p>	<p>N: 143</p> <ul style="list-style-type: none"> Adults aged 18-65 Underwent detoxification. <p>Setting: Drug Dependency Units, Ireland</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Demographic questionnaire Interviews <p>Outcomes:</p> <ul style="list-style-type: none"> Abstinence of substance use at 3, 6, and 9 months. <p>Data Analysis</p> <ul style="list-style-type: none"> Descriptive Statistics Cox adjusted model 	<p>Abstinence at 3 months</p> <ul style="list-style-type: none"> Inpatient- 86% Outpatient- 85% No formal care- 28% <p>Abstinence at 6 months</p> <ul style="list-style-type: none"> Inpatient- 75% Outpatient- 53% No formal care- 16% <p>Abstinence at 9 months</p> <ul style="list-style-type: none"> Inpatient- 67% Outpatient- 50% No formal care- 6% 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Weak <p>Quality</p> <ul style="list-style-type: none"> Medium <p>Comments</p> <ul style="list-style-type: none"> Self-reported substance use which could lead to bias High follow-up rate

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Jack et al. (2022)</p> <p>Designs: Retrospective Cohort Study</p> <p>Purpose: Examined impact patients who receive low-intensity peer-delivered interaction during hospitalization on continuation of care</p>	<p>N: 111</p> <p>Intervention: Seen by peer provider during hospitalization</p> <p>Setting: Medical Center, Washington, USA</p> <p>Data Collection:</p> <ul style="list-style-type: none"> • Chart reviews <p>Outcomes:</p> <ul style="list-style-type: none"> • Buprenorphine prescription within 30 days of discharge • Follow-up with buprenorphine provider within 30 days of discharge <p>Data Analysis</p> <ul style="list-style-type: none"> • Descriptive analysis • Modified Poisson regression 	<p>Buprenorphine Prescription within 30 days</p> <ul style="list-style-type: none"> • No statistically significant difference in rates of buprenorphine prescription within 30 days between those who had peer-support interaction vs those who did not • (RR=1.06, 95% CI: 0.74-1.51, P=.75) <p>Follow-up with provider within 30 days</p> <ul style="list-style-type: none"> • No statistically significant difference in rates of buprenorphine prescription within 30 days between those who had peer-support interaction vs those who did not • (RR 1.03, 95% CI: 0.68-1.57, p=.89) 	<p>Strengths of Design</p> <ul style="list-style-type: none"> • Weak <p>Quality</p> <ul style="list-style-type: none"> • Medium <p>Comments</p> <ul style="list-style-type: none"> • Non-randomized study • Difficult to demonstrate causality • Single-site which may limit generalizability

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Jehosua et al., (2023)</p> <p>Designs: Uncontrolled-before after</p> <p>Purpose: Evaluate the effect of educational intervention program to improve the knowledge of nurses and midwives on discharge planning</p>	<p>N: 165</p> <ul style="list-style-type: none"> Nurses and midwives <p>Setting: Inpatient units, Indonesia</p> <p>Intervention: 11 sessions that lasted approximately 60 to 120 minutes</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Discharge planning questionnaire <p>Outcomes:</p> <ul style="list-style-type: none"> Knowledge of Discharge Planning <p>Data Analysis</p> <ul style="list-style-type: none"> Univariate analysis Bivariate analysis 	<p>Knowledge of Discharge Planning</p> <ul style="list-style-type: none"> Knowledge levels significantly improved following intervention for nurses and midwives (p= .001) 	<p>Strengths of Design Weak</p> <p>Quality Medium</p> <p>Comments</p> <ul style="list-style-type: none"> High-response rate Single-site study Self-reported data

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Liebschutz et al. (2014)</p> <p>Designs: Randomized Controlled Trial</p> <p>Purpose: To determine if buprenorphine administration during hospitalization and linkage to community OAT increases sustained engagement and decreases substance use</p>	<p>N: 139</p> <ul style="list-style-type: none"> No intervention: 67 LTC: 72 <p>Setting: Inpatient medical unit, USA</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Interviews at baseline, 1, 3 and 6 months EHR <p>Outcomes:</p> <ul style="list-style-type: none"> Entry into buprenorphine treatment Self-reported opioid use <p>Data Analysis</p> <ul style="list-style-type: none"> Descriptive statistics Cox proportional hazards regression model 	<p>Entry into Buprenorphine treatment</p> <ul style="list-style-type: none"> No intervention: 11.9% LTC: 72.2% p<.001 <p>Self-reported opioid use</p> <ul style="list-style-type: none"> No intervention: 37.5% LTC: 9.0% p<.01 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Strong <p>Quality</p> <ul style="list-style-type: none"> Moderate <p>Comments</p> <ul style="list-style-type: none"> Single institution Low follow-up rates Self-reporting could lead to response bias

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Lee et al. (2020)</p> <p>Designs: Non-randomized controlled trial</p> <p>Purpose: Evaluate the impact of implementing recovery support navigators for continuity of care post-detox</p>	<p>N: 4236 patients</p> <ul style="list-style-type: none"> Intervention (RSNs): 2520 Control (TAU): 1716 <p>Setting: Community setting, Massachusetts, USA</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Charles Comorbidity Index MassHealth general medical care administrative data Massachusetts Behavioral Health claims data <p>Outcomes:</p> <ul style="list-style-type: none"> Continuity of care post-discharge <p>Data Analysis</p> <ul style="list-style-type: none"> Logistic regression model 	<p>Continuity of Care Post-Discharge</p> <ul style="list-style-type: none"> Intervention: 45% Control: 38% $p < .05$ 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Strong <p>Quality</p> <ul style="list-style-type: none"> Medium <p>Comments</p> <ul style="list-style-type: none"> Unable to randomize sample due to small sample sites. Occurred in one state which may limit generalizability.

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Pfeifer & Fehr (2019)</p> <p>Designs: Randomized-controlled trial.</p> <p>Purpose: To investigate the feasibility and acceptability for varenicline for AUD post-detoxification</p>	<p>N: 171</p> <ul style="list-style-type: none"> Intervention= 86 Control= 85. <p>Setting: Detoxification Unit, Germany</p> <p>Intervention: Medicated with Varenicline</p> <p>Control: Placebo</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Self-reported alcohol use European Addiction Severity Index Fagerstrom test for nicotine dependence Hamilton Depression Scale Beck Depression Inventory Obsessive Compulsive Drinking Scale <p>Outcomes:</p> <ul style="list-style-type: none"> Days of Alcohol Abstinence Days of Nicotine Abstinence <p>Data Analysis</p> <ul style="list-style-type: none"> Descriptive Statistics Fisher exact test 	<p>Alcohol Abstinent Days</p> <ul style="list-style-type: none"> Intervention: 83.3% Control: 87.9% P=.58 <p>Nicotine Abstinence Days</p> <ul style="list-style-type: none"> Intervention= 5.4% Control= 0.7% P=.40 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Strong <p>Quality</p> <ul style="list-style-type: none"> High <p>Comments</p> <ul style="list-style-type: none"> Small sample size Restrictive sample with multiple exclusion criteria

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Reif et al. (2017)</p> <p>Designs: Cross-Sectional Study</p> <p>Purpose: Examined whether follow-up services received within 14 days of discharge reduced readmissions</p>	<p>N: 9378 patients with SUD</p> <p>Setting: Inpatient units and detoxification units, USA</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Medicaid Analytic data set <p>Outcomes:</p> <ul style="list-style-type: none"> Follow-up Services within 14 days of discharge Inpatient readmissions within 90 days of discharge <p>Data Analysis</p> <ul style="list-style-type: none"> Cox proportional Hazard Regression model 	<p>Follow-up Services within 14 days of discharge</p> <ul style="list-style-type: none"> 75.1% had no residential, intensive outpatient or outpatient services within 14 days of discharge. 22.8% received outpatient services. <p>Inpatient readmissions within 90 days of discharge</p> <ul style="list-style-type: none"> Medication assisted treatment was associated with a reduced risk of 90-day behavioural admission ($p<.001$) Residential services were associated with lower risk of readmission ($p<.001$) 	<p>Strengths of Design Weak</p> <p>Quality Medium</p> <p>Comments</p> <ul style="list-style-type: none"> Limited generalizability Exclusion criteria reduced examination to 10 states Potential incomplete data as relied on Medicaid claims

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Roberts, Moore & Jack, (2018)</p> <p>Designs: Uncontrolled Before After</p> <p>Purpose: To determine whether an educational intervention affected delivery of RED program to patients prior to discharge</p>	<p>N: 69</p> <ul style="list-style-type: none"> Registered Nurses and Licensed Practical Nurses <p>Setting: Inpatient units, Georgia, USA</p> <p>Intervention: PowerPoint presentation to teach RED processes, and how to document in electronic record</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Chart review Directed Learning Readiness Scale-Adult Learning Preference Assessment <p>Outcomes:</p> <ul style="list-style-type: none"> Documentation of RED program Correct Utilization of RED program <p>Data Analysis</p> <ul style="list-style-type: none"> Single-samples t-test 	<p>Documentation of RED Program</p> <ul style="list-style-type: none"> Significant improvement in documentation of 12 RED components Pre-intervention: <ul style="list-style-type: none"> (RED score) n=60, M=6.55 (SD 1.478) Post-intervention : n=60, M=10.88 (SD 1.544; t= 17.730, p=.000 [CI 3.13-3.93]) <p>Correct Utilization of RED Program Steps</p> <ul style="list-style-type: none"> Making follow up for patients prior to discharge (p=.000) Reconciliation of treatment plan with national guidelines (p=.000) Nurses' review of pending results prior to discharge (p=.009) Telephone follow up post-discharge (p=.001) 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Weak <p>Quality</p> <ul style="list-style-type: none"> Medium <p>Comments</p> <ul style="list-style-type: none"> Self-reported questionnaire Single-site study may limit generalizability. Conducted at rural hospital

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED; Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
Authors: Smith et al. (2018) Designs: Cross-sectional Purpose: To evaluate the use of a simulation-enhanced interprofessional discharge planning learning experience	N: 132 students <ul style="list-style-type: none"> 57 physical therapy students 36 Bachelor of nursing students 2 doctor of nursing practice students 37 Bachelor of social work students Setting: Educational center, Michigan, USA Intervention: 1 hour simulation that was video-recorded and debriefing post-simulation Data Collection: <ul style="list-style-type: none"> Interprofessional Collaborative Competencies Attainment Survey Outcomes: <ul style="list-style-type: none"> Confidence with discharge planning Perceived Critical thinking skills Data Analysis <ul style="list-style-type: none"> Descriptive statistics 	Confidence with Discharge Planning <ul style="list-style-type: none"> 69.1% of participants either strongly or somewhat agreed that the simulation experience improved discharge planning skills. Perceived Critical Thinking Skills <ul style="list-style-type: none"> 67% of participants either strongly or somewhat agreed that the simulation experience improved their critical thinking skills. 	Strengths of Design <ul style="list-style-type: none"> Weak Quality <ul style="list-style-type: none"> Medium Comments <ul style="list-style-type: none"> Majority were physical therapy students which could result in a professional bias. Single-center study Low response rate (62%)

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
Authors: Smith, Hansen & Colvard (2021) Designs: Cohort Study Purpose: To evaluate impact of pharmacist-led SUD transition of care following initiation during hospital admission	N: 150 <ul style="list-style-type: none"> LTC: 54 UC: 96 Setting: Inpatient unit at VA hospital, USA Data Collection: <ul style="list-style-type: none"> Manual chart review Computerized prescription fill records Outcomes: <ul style="list-style-type: none"> Retention on MOUD at one month Retention on MOUD at three months Data Analysis <ul style="list-style-type: none"> Descriptive statistics T-test 	Retention on MOUD at one month <ul style="list-style-type: none"> LTC: 77.3% UC: 56.8% p<.01 Retention on MOUD at three months <ul style="list-style-type: none"> LTC: 71.4% UC: 48% p<.01 	Strengths of Design <ul style="list-style-type: none"> Moderate Quality <ul style="list-style-type: none"> Medium Comments <ul style="list-style-type: none"> Manual chart review which could have been subject to human error Alternatives to buprenorphine such as naltrexone, acamprosate and disulfiram were not included

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED; Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Stein et al. (2016)</p> <p>Designs: Cross-sectional study</p> <p>Purpose: Examine rates of follow-up after receiving naltrexone injection during inpatient detoxification</p>	<p>N: 62</p> <p>Setting: Detoxification Unit, Massachusetts</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Chart review using EHR <p>Outcomes:</p> <ul style="list-style-type: none"> Proportion of participants receiving 2nd naltrexone injection in community <p>Data Analysis</p> <ul style="list-style-type: none"> Descriptive statistics T-tests 	<p>Proportion of Participants receiving Naltrexone Injection in Community</p> <ul style="list-style-type: none"> 54.8% received followed up within one-month to receive injection. 32.2% of participants received 3rd injection. 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Weak <p>Quality</p> <ul style="list-style-type: none"> Medium <p>Comments</p> <ul style="list-style-type: none"> Recruited from single site. Unable to obtain information about the reasons for discontinuing injection.

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Timko et al. (2019)</p> <p>Designs: Randomized Controlled Trial</p> <p>Purpose: Examine effect of enhanced telephone monitor with detoxification patients</p>	<p>N: 298</p> <ul style="list-style-type: none"> Enhanced Telephone Monitoring (Intervention): 148 Usual care (Control): 150 <p>Setting: Detoxication Unit, USA</p> <p>Intervention: consists of ETM 12 weekly 15-minute telephone sessions, one in person session during detoxification + UC</p> <p>Control: usual care which consisted of offer for referral to community treatment services</p> <p>Data Collection:</p> <ul style="list-style-type: none"> Addiction Severity Index Brief Addiction Monitor survey Situational Confidence Questionnaire <p>Outcomes:</p> <ul style="list-style-type: none"> Readmission to detoxification unit Engagement in outpatient treatment <p>Data Analysis</p> <ul style="list-style-type: none"> Logistic regression ANCOVAs for dependent variables 	<p>Readmission to Detoxification Unit</p> <ul style="list-style-type: none"> 3-months evaluation: <ul style="list-style-type: none"> Intervention: 24.43% Control: 38.60% P=.014 6-month evaluation <ul style="list-style-type: none"> Intervention: 26.02% Control: 33.33% P=.197 <p>Engagement in 12-step program</p> <ul style="list-style-type: none"> 3-month evaluation: <ul style="list-style-type: none"> Intervention: 72.09% Control: 66.41% p= .218 6-month evaluation <ul style="list-style-type: none"> Intervention: 53.28% Control: 63.97% p=.043 	<p>Strengths of Design Strong</p> <p>Quality High</p> <p>Comments</p> <ul style="list-style-type: none"> High retention rates Use of self-reports One hospital utilized which may limit generalizability

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
Authors: Ustache (2021) Designs: Cross-Sectional Purpose: To assess the impact of educational intervention on SUD knowledge in HCP	N: 14 clinicians Setting: Community Health Clinic, Arizona, USA Intervention: Educational program over 3 sessions that focused on assessment guidelines, medication adherence and patient education Data Collection: <ul style="list-style-type: none"> Questionnaires regarding knowledge of discharge guidelines, medication adherence, patient education, knowledge of Addiction Severity Index Outcomes: <ul style="list-style-type: none"> Knowledge of Assessment guidelines Knowledge of Medication Adherence Knowledge of Patient Education Data Analysis: <ul style="list-style-type: none"> Descriptive statistics 	Knowledge of Assessment guidelines <ul style="list-style-type: none"> Pre intervention 54% of participants were conversant with one screening tool vs 100% post-intervention Knowledge of Medication Adherence <ul style="list-style-type: none"> Pre-intervention 65% understood what medication adherence is Post-intervention 78% understood what medication adherence is Post-intervention 100% of participants indicated they would utilize a standardized tool to assess patient adherence and discharge instructions. Knowledge of Patient Education <ul style="list-style-type: none"> Pre-intervention 65% strongly agreed that patients should have an active role in discharge planning Post-intervention 68% 	Strengths of Design <ul style="list-style-type: none"> Weak Quality <ul style="list-style-type: none"> Low Comments <ul style="list-style-type: none"> Small Sample size Single-Centre study Weak data analysis

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
<p>Authors: Wang et al. (2020)</p> <p>Designs: Retrospective cohort study</p> <p>Purpose: Assess the impact of a buprenorphine-based protocol on AMA discharges and readmission rates</p>	<p>N: 147</p> <ul style="list-style-type: none"> Patients admitted to hospital with OUD 71 admissions prior to protocol 76 following protocol implementations <p>Setting: Hospital, New Hampshire, USA</p> <p>Data Collection:</p> <ul style="list-style-type: none"> New Hampshire Department of Vital Records Chart review <p>Outcomes:</p> <ul style="list-style-type: none"> AMA Discharge Rates Readmission Rates <p>Data Analysis</p> <ul style="list-style-type: none"> Chi-squared 2-sided t-test 	<p>AMA Discharge Rate</p> <ul style="list-style-type: none"> Pre-intervention: 42.2% Post-intervention: 40.8% P=.85 No statistical significance <p>Readmission Rates</p> <ul style="list-style-type: none"> Readmission within 30 days all-cause Pre-intervention: 35.1% Post-intervention: 18.8% p=.03 	<p>Strengths of Design</p> <ul style="list-style-type: none"> Moderate <p>Quality</p> <ul style="list-style-type: none"> Medium <p>Comments</p> <ul style="list-style-type: none"> Limit generalizability Data collected at single-site

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU: Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Study/Design	Methods	Key Results	Comments
Authors: Wei et al. (2015) Designs: Uncontrolled Before- After Purpose: To implement and evaluate a discharge planning protocol for patients admitted with alcohol dependence	N: 542 <ul style="list-style-type: none"> Pre-intervention group: 250 Post-intervention group: 292 Setting: Internal medicine unit, San Francisco USA Data Collection: <ul style="list-style-type: none"> Gathered from EHR and chart review Outcomes: <ul style="list-style-type: none"> Rates of readmission within 30 days ED visits within 30 days Data Analysis <ul style="list-style-type: none"> Data analysis method not discussed 	Hospital Readmission within 30 days <ul style="list-style-type: none"> Pre-intervention: 23.4% Post-intervention: 8.2% p=.042 ED Visits within 30 days <ul style="list-style-type: none"> Pre-intervention: 18.8% Post-intervention: 6.1% p=.056 	Strengths of Design <ul style="list-style-type: none"> Weak Quality <ul style="list-style-type: none"> Low Comments <ul style="list-style-type: none"> Causality cannot be proven Data collected at single site Data analysis method not identified

Note. AUD: Alcohol Use Disorder; ED: Emergency Department; HER: Electronic Health Record; ETM: Enhanced Telephone Monitoring; HCP: Health Care Provider; LTC: Linkage to Care; OAT: Opioid Agonist Treatment; OUD: Opioid Use Disorder; RED: Re-Engineered Discharge; RSN: Recovery Support Navigator; SUD: Substance Use Disorder; SD: Standard Deviation; TAU; Treatment as Usual; UC: Usual Care; USA: United States of America, VA: Veterans Affairs

Appendix C: Consultation Report

Development of a Discharge Planning Resource for Nurses Working in a Detoxification

Unit: Consultation Report

Substance use disorder is a prevalent condition that impacts approximately 155 to 250 million people worldwide (Connery et al., 2021). Globally, one in five individuals diagnosed with substance use disorder has accessed treatment (United Nations Office on Drugs and Crime, 2023). Detoxification is the initial step for treatment for substance use disorder and involves medical management of withdrawal symptoms (Zhu & Wu, 2018). Unfortunately, detoxification alone is not often enough for patients to achieve long-term sobriety (Zhu & Wu, 2018). For patients to be successful when transitioning to the community it is essential to receive adequate discharge planning (Luther et al., 2019).

Discharge planning is an essential interdisciplinary approach that aims to provide continuity of care following discharge from inpatient settings (Lin et al., 2012). The discharge plan encompasses the patient's ongoing medical care, required patient education, housing needs, socialization needs and the individual's short-term and long-term goals following discharge (Xiao et al., 2019). Inadequate discharge planning is caused by several contributing factors, among the common factors include poor communication between healthcare providers, lack of continuity of care and lack of healthcare provider knowledge and role clarity (David et al., 2022; Oppen et al., 2019; Rubinsky et al., 2018; Cruz et al., 2019). Several negative consequences can occur without adequate discharge planning including increased readmission rates, emergency room visits, and cost to the healthcare system (Hunt-O'Connor et al., 2021; Morgan et al., 2020; Thompson et al., 2020). However, these negative consequences of inadequate discharge planning can be prevented by ensuring appropriate linkage to community services, initiation and continuation of pharmacological therapy and education for nurses on discharge planning (Bolek

et al., 2016; Smith, Hansen & Colvard, 2021; Roberts, Moore & Jack, 2018).

The purpose of this practicum project is to develop a discharge planning resource for nurses working in a detoxification unit to 1) improve discharge planning practices on the unit, and 2) increase discharge planning knowledge and skills among nurses. The discharge planning resource will be developed based on information gathered in the literature review, environmental scan, and consultation plan.

Specific Objective(s) for the Consultations

1. Identify the learning needs of nurses regarding discharge planning in the detoxification settings.
2. Examine nurses' perceptions on the need for a discharge planning resource.
3. Determine current discharge planning practices among staff.
4. Examine potential barriers and facilitators for the implementation of discharge planning resource.
5. Seek feedback on the preferred mode of delivery for educational resource.

Sample and Methods

The consultation sample included participants distributed as follows: one clinical lead, seven registered nurses (RNs), five licensed practical nurses (LPNs), three community opioid agonist therapy providers, two community addictions counsellors, and three staff at a non-profit housing organization. The clinical team lead was consulted as they are responsible for ensuring discharge planning processes are followed by staff. The team lead also plays a significant role in transitioning patients into longer-term treatment programs, so their input on required discharge planning content provided valuable input regarding developing a resource. The RNs and LPNs

were included because they are responsible for conducting discharges for patients in the facility and provided insight into gaps in current policies and potential barriers to implementation. It is essential to also engage with RNs and LPNs to assess their training levels, understand their perspectives, and determine their preferred methods for program delivery. The stakeholders were chosen for their ability to offer valuable insights into discharge planning content. These insights may include information about their agency, guidance on patient referrals, and identification of barriers that could affect the transition into community care. These contributions will be integrated into the educational resource. All participants in this project were recruited via email (see Appendix A).

Data Collection

Data was collected through the administration of two questionnaires to the RNs and LPNs (Appendix B) and to Community Providers (Appendix C). The questionnaire included both open-ended and close-ended questions. The open-ended questions asked participants about barriers that impact patients' success in sobriety and factors that contribute to readmissions. The close-ended questions included questions about their demographic data such as their age, gender, years of experience and use of discharge planning. Furthermore, the questionnaire included some questions regarding the desired content for inclusion in the discharge planning resource, as well as the preferred mode of delivery. The link to the questionnaire was sent via email to all participants. This link was valid for 7 days to ensure participants were provided time to respond. Participation in the questionnaires was voluntary, and participants had the right to withdraw at any time. The questionnaire was developed through Microsoft Forms and is stored in a password-protected folder. The participants' responses to the questionnaire remained anonymous, and no identifying information was asked.

Data Management and Analysis

Two types of data were collected through the questionnaires including qualitative and quantitative data. The quantitative data was analyzed as descriptive statistics such as frequencies and percentages, using Microsoft Forms program. The qualitative data was transcribed into excel and analyzed by utilizing Lindgren, Lundman and Graneheim's (2020) process of qualitative content analysis. The steps include selecting meaning units, condensing, coding and creating categories and themes on various levels (Lindgren, Lundman & Graneheim, 2020).

Results

Overall, there were 16 participants from Ridgewood detoxification who completed the questionnaire. Among these participants, six were registered nurses (37%), four were licensed practical nurses (25%), three were community opioid agonist (19%), one was a community addiction counsellor (17%), and one was a staff member at a non-profit housing agency (6%). The majority of the participants were aged 50-59 (44%), with 81% being female and 19% male. Nursing participants had varying years of nursing experience, with the majority having between 1-5 years (40%) and 5-10 years (40%) of experience. Most community providers worked in healthcare (83%), while the remainder were involved in housing (17%).

Table 1

Participants' Characteristics (N=16)

Participants' Characteristics	(n) %
Position at Ridgewood Detox	
Registered nurse	(6) 37%
Licensed practical nurse	(4) 25%
Community opioid agonist provider	(3) 19%
Community addiction counsellor	(1) 6%
Staff at non-profit housing agency	(1) 6%

Other	(1) 6%
Gender	
Female	(13) 81%
Male	(3) 19%
Age	
21-29	(2) 12%
30-39	(4) 25%
40-49	(1) 6%
50-59	(7) 44%
60 or older	(2) 12%
<u>Years of Experience (nurses)</u>	
1 year or less	(0) 0%
1-5 years	(4) 40%
5-10 years	(4) 40%
15 years or more	(2) 20%
<u>Type of Agency (community providers)</u>	
Housing	(1) 17%
Healthcare	(4) 83%
Other	(1) 0%

As shown in Table 2, half of the participants (50%) indicated they were somewhat uncomfortable with engaging in discharge planning. Two participants (20%) expressed a degree of comfort with discharge planning, while another two (20%) remained undecided. Notably, all participants (100%) acknowledged the potential benefit of education related to discharge planning and expressed a need for discharge planning resources. Regarding currently discharge planning practices, none of the participants (0%) reported using any discharge planning documents.

Table 2: Ridgewood Detox Discharge Planning Needs (N=10)

Comfortability with Discharge Planning	(n) %
Extremely comfortable	(0) 0%
Somewhat comfortable	(2) 20%
Undecided	(2) 20%
Somewhat uncomfortable	(5) 50%
Very uncomfortable	(1) 10%
Benefit from Discharge Planning Education	
Yes	(10) 100%
No	(0) 0%
Need for Discharge Planning Resource	
Yes	(10) 100%
No	(0) 0%
Use of Current Discharge Planning Documents	
Yes	(0) 0%
No	(10) 100%
Preferred Method of Education Program	
Face-to-Face Education	(4) 40%
PowerPoint Presentation and Discussions	(3) 30%
Simulation	(1) 10%
No educational preference	(2) 20%

Qualitative Results for Ridgewood Detox Nursing Staff

There were four themes identified in the open-ended questions asked in the nursing questionnaire which include *1) lack of knowledge of community resources, 2) wait times for addiction programs, 3) need for individualized care and 4) educational strategies.*

Lack of Knowledge of Community Resources

A theme that was identified as a barrier impacting readmission rates and patients' success in the detoxification program was a lack of knowledge of community resources. One nurse stated when asked about factors that contribute to readmission rates, "no post care after being discharged. Ideally going straight to rehab or a recovery program would be beneficial, as a client would have a safe space for the most vulnerable time after being discharged". Five nurses also acknowledged that there is a lack of knowledge of what community resources are available, how

to access community programs and lack of education provided to patients on the resources.

When asked what elements participants would like to see included in the discharge planning document, nine participants reported they would like to see community resources, their contact information and programs offered included.

Wait times for the Rehabilitation Program

An additional theme that was identified included long wait times for the 30 to 90-day rehabilitation program. This program currently has a one-year waitlist and individuals must either be referred by their family physician or mental health counsellor. In the province of New Brunswick, there is a shortage of family physicians which can also create a challenge for individuals to access referrals. When asked about factors that contribute to frequent readmissions, one nurse stated “long waitlist for rehab program resulting in not helping them when they are ready to get into recovery. Due to long waitlist in rehabs, it results in frequent admissions to the detox while they wait for admission to longer care”. Furthermore, another nurse stated “longer waitlist of at least a year, if not longer to get into a long-term treatment program. They need more foundation than a week in detox to get into recovery, which is where rehab comes in”. The majority of participants discussed the wait times for the rehabilitation program as a significant barrier that impedes patients’ success in maintaining sobriety. Many complex factors contribute to the wait times for accessing the rehabilitation program, while patients wait it is essential that nursing staff understand what community programs are available to connect patients to while they wait.

Need for Individualized Care

The third theme that was identified in the qualitative responses is the need for individualized care during discharge planning. One nurse stated, “Clients may come for more of a harm reduction approach, and we need to meet patients where they are at”. Another nurse stated, “I feel that all clients would benefit from a sit-down meeting with social work during their stay to discuss their needs if they know what those may be to plan to be made on individual bases”. The majority of participants expressed the need to connect with patients individually to discuss their discharge plan, and to tailor it to the individual’s needs. The resources patients are connected to may vary depending on factors such as their type of substance use, mental health needs, social requirements, and support network.

Educational Strategies

When participants were asked about the educational strategies they prefer to see when learning about discharge planning there were two common responses. Four participants expressed that they would prefer to have face-to-face education. Three participants expressed that their preferred method included a PowerPoint presentation, with the ability to have discussions about what they learned. One participant acknowledged that they are a hands-on learning and would benefit from a simulation component. Two participants indicated that they had no preference for the method of education.

Qualitative Results for Community Providers

While assessing the questionnaires administered to community providers, three themes emerged. The themes included *1) understanding the detoxification program, 2) the benefits and barriers of linkage to care and 3) referral processes.*

Understanding of Detoxification Program

Community providers were asked about their understanding of the inpatient detoxification program. The responses were similar and consistent among participants and included a medical detoxification program that aims to get patients with substance use disorder to get sober. One nurse working at an opioid agonist clinic provided more detail stating “7-day medical detoxification occurs with group learning to aid in the understanding of addiction under the supervision of RNs and LPNs”. A mental health counsellor acknowledged that the program is available by self-referral and is an abstinence-based program. This question demonstrated that community providers have the correct understanding of what the program entails, this ensures the appropriate patients are referred to the program.

Benefits and Barriers to Linkage of Care

Community providers were asked about the benefits and barriers they anticipate in detoxification unit patients being referred to their service. Benefits that were consistently discussed among participants are that coordinating care among services will improve patient care, patient safety, and health outcomes and provide quicker access to long-term care. One nurse from an opioid agonist therapy clinic stated, “Patients benefit by being able to be connected with our community program to help with the continuation of sobriety in the community”. A nurse practitioner and a nurse from an opioid agonist clinic also highlight potential barriers in connecting patients to their service post-discharge. One barrier is among the programs there are different philosophies on treatment, detoxification is an abstinence-based program while opioid agonist programs are more harm reduction-based. Additionally, there is a lack of communication between the programs which could create barriers. A nurse at an opioid agonist clinic stated “A potential barrier is not being able to directly start on OAT/SRT from detox. Sometimes appointment times can vary and be up to one week before patients can see a

healthcare provider for treatment start”. Identifying the benefits and barriers can aid in building relationships with community partners to provide better access to substance use disorder in the community.

Referral Processes

Community providers were asked how to refer patients to their service from the detoxification program. All six participants acknowledged that their programs are self-referral and patients can call to refer themselves. Besides self-referral, opioid agonist programs and housing agencies stated that nurses in the detoxification program can call and set up an appointment on the patient’s behalf. This information will be beneficial to include in the educational resource as nurses in the detoxification program identified a lack of knowledge in understanding what resources were available and how to connect patients to them.

Ethical Considerations and Confidentiality

The Health Research Ethics Authority (HREA) screening tool was completed to assess the need for ethics approval (Appendix D). This practicum project is a quality improvement study used for improvement purposes and therefore is exempt from Health Research Ethics Board approval. Consent for participation was voluntary and assumed by completion of the questionnaire. The results of the questionnaire were anonymous, and no identifying information was asked. To maintain confidentiality, the information gathered in the questionnaires was stored on a password-protected file and only discussed with my practicum supervisor. Permission for administration of the questionnaire was approved by facility management.

Implications for the Practicum Project

The response rates for both surveys were high, and participants provided similar responses across both surveys. The barriers identified in the detoxification program that contribute to readmission rates and relapse among patients include a lack of knowledge of community resources, increased wait times in the rehabilitation program and a need for individualized care while discharge planning. Nurses in the detoxification program identified that understanding the community resources, what programming they offer and how to link patients to the community resources will be valuable information to include in the educational resource. This consultation also provided insight into the preferred methods of education among nursing staff. Regarding the questionnaires administered to community providers, there were many things learned that will be valuable to the practicum project. Community providers identified their understanding of the detoxification program, benefits and barriers to linking detoxification patients to their care and how to refer patients to their program. Understanding the barriers that exist provides the ability to tailor educational resources to mitigate existing barriers. The benefits of linkage of care also will be beneficial to share in the resource as it creates buy-in to engage in discharge planning from nursing staff.

Conclusion

In conclusion, this consultation with nursing staff and community providers has provided valuable information that will be included in the education resource. Assessing nursing staff comfortability and knowledge on discharge planning demonstrated a need for developing the resource. All employees emphasized that they are currently not using any discharge planning documents. The preferred methods of education were established, and utilizing a face to face, PowerPoint presentation was the most requested method. The goal of this project is to use these

findings to develop a discharge planning resource that eliminates the gaps of current practice and provides nurses with increased knowledge.

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Appendix A: Recruitment Email

Dear Colleagues and Community Partners,

My name is Paige Feltmate, I am a student in the Master of Science in Nursing program at Memorial University. I am in the process of completing my practicum project, which involves the development of a resource based on the unit I work on. My project involves developing a resource on discharge planning for nurses working in the detoxification unit. The goal of this project is to improve discharge planning processes and increase discharge planning knowledge and skills among nurses working in the detoxification unit. Consulting with colleagues and partners in the community will provide insight into current discharge planning processes, barriers and facilitators for discharge planning, and factors that contribute to readmissions to the detoxification unit.

I am writing to you to ask for your participation in this project by completing an online questionnaire. This online questionnaire will be conducted on Microsoft Forms, and it will take approximately 15 minutes to be completed. Responses gathered in the questionnaire will be anonymous and no identifying information will be collected. The information in the questionnaire will only be shared with my supervisor and will be included in my practicum report. I appreciate you taking the time to provide your feedback and insight. If you have any questions, please contact me at the information below.

Looking forward to hearing from you,

Paige Feltmate, BScN RN

MScN Student, Memorial University of Newfoundland

pmf773@mun.ca

Appendix B: Discharge Planning Questionnaire for RNs and LPNs

1. What is your position at the Ridgewood Detox Unit?
☐ Registered Nurse
☐ Licensed Practical Nurse
2. How long have you worked at Ridgewood Detox?
☐ 1 year or less
☐ 1-5 years
☐ 5-10 years
☐ 15 years or more
3. What category below describes your age?
☐ 21-29
☐ 30-39
☐ 40-49
☐ 50-59
☐ 60 or older
4. What is your gender?
☐ Female
☐ Male
☐ Other
5. How comfortable do you feel engaging in discharge planning for patients at the detoxification unit?
☐ Extremely comfortable
☐ Somewhat comfortable

☐ Undecided

☐ Somewhat uncomfortable

☐ Very uncomfortable

6. Do you believe you would benefit from education related to discharge planning and resources in the community?

☐ Yes

☐ No

7. Do you believe there is a need for a discharge planning resource to assist nurses in the detoxification unit in connecting patients with suitable services upon discharge?

☐ Yes

☐ No

8. Are you currently utilizing any discharge planning documents?

☐ Yes

☐ No

A) If so, which discharge planning document are you currently utilizing?

9. What factors do you believe contribute to the frequent readmission of patients shortly after discharge?

10. What barriers impact patients' success in sobriety during the current inpatient detoxification program?

11. What elements would you prefer to be included in a discharge-planning document?

12. How would you like to learn about discharge planning? (E.g. simulation, PowerPoint)

Thank you.

Appendix C: Discharge Planning Questionnaire for Community Providers

1. What is your position at the agency you are employed at?

- ☐ Community opioid agonist providers
- ☐ Community addiction counsellor
- ☐ Staff at non-profit housing organization

2. What category below describes your age?

- ☐ 21-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60 or older

3. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Other
- ☐ Prefer not to say

4. What type of agency do you work for?

- ☐ Housing
- ☐ Healthcare
- ☐ Other

5. What service does your organization provide for patients with substance use disorder?

6. What is your role in the organization you work for?

7. What is your understanding of the inpatient detoxification program?

8. How do we refer patients to your service from the inpatient detoxification program?

9. What benefits or barriers do you anticipate in detoxification unit patients being connected to your service following discharge?

Thank you.

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

Student Name: Paige Feltmate

Title of Practicum Project: Development of a Discharge Planning Resource for Nurses Working in a Detoxification Unit

Date Checklist Completed: January 30th, 2024

This project is exempt from Health Research Ethics Board approval because it matches item number _____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 there is no research question 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 D: Environmental Scan Report

Development of a Discharge Planning Resource for Nurses Working in a Detoxification

Unit: Environmental Scan Report

Discharge planning is an important component of an individual's admission to a healthcare facility (Lockwood & Mabire, 2020). Adequate discharge planning ensures patients have a smooth transition from hospital into the community. There are several factors that negatively impact the ability of nurses to conduct adequate discharge planning. These include poor communication between healthcare providers, lack of continuity of care while transitioning into the community and a lack of healthcare provider knowledge and role clarity (David et al., 2022; Oppen et al., 2019; Rubinsky et al., 2018; Cruz et al., 2019). Education on discharge planning for healthcare providers has been demonstrated to improve knowledge and role clarity thus improving discharge planning processes (Jehousa et al., 2023; Roberts, Moore & Jack, 2018).

At Ridgewood Detoxification Unit, there are currently no educational opportunities available for nurses regarding the discharge planning process. Instead, patients are responsible for developing a self-guided recovery plan, and no formal connections to community resources are established. According to Charlton et al. (2019) environmental scanning is an effective tool used to identify opportunities, barriers and critical issues when assessing professional education and training needs, reviewing current programs, and informing policy development.

Environmental scanning provides the opportunity for an organization to prepare, understand and address the complex issues that impact healthcare (Charlton et al., 2019). The aim for this environmental scan is to determine if there are pre-existing educational resources regarding discharge planning being utilized in New Brunswick, Canada and the USA. The environmental scan provided the opportunity to compare similarities and difference between resources,

determining which would be the most beneficial for the development of the discharge planning resource.

Specific Objective(s) for the Environmental Scan

The following objectives were established for the environmental scan:

1. Identify if there is existing discharge planning resources utilized in detoxification units within New Brunswick, Canada and the USA.
2. Identify educational resources, content of resources and mode of delivery utilized in discharge planning educational sessions.
3. Analyze data collected during the environmental scan and apply pertinent information to the development of the resource.

Methods

Setting and Sample

Nine sources of information were evaluated as part of the environmental scan to determine the utilization of discharge planning documents in other detoxification units across the province of New Brunswick, Canada, and the USA.

The websites searched for discharge planning education and resources across Canada include *1) Centre of Addiction and Mental Health (CAMH)*, *2) Canadian Mental Health Association (CMHA)*, *3) Canadian Research Initiative in Substance Misuse (CRISM)*, and *4) the Canadian Centre on Substance Use and Addiction (CCSA)*. The following keywords used to search for literature: “*discharge planning*”, “*education-related to discharge planning*”, “*educational strategies*”, “*educational effectiveness*” and “*nurses*”. The five policies and guidelines utilized across Canada and the USA include: *1) IDEAL Discharge Planning (Agency*

for Healthcare Research and Quality, n.d.), 2) My Transitional Care Plan (MTCP) (Behavioural Supports Ontario, 2022), 3) Re-Engineered Discharge (RED) Toolkit (Agency for Healthcare Research and Quality, 2013), 4) Population-specific patient-oriented discharge summary (PODS) (PODS, 2019), and 5) Patient-Centered Discharge Toolkit (PDTK) (Patient Safety Learning Lab, 2019).

Data Collection

Two aspects of data collection were utilized including searching the four previously identified websites and the five policies and guidelines. Data collected from the four websites listed above will include the name of the resource, details of the resources, and their benefits and limitations (see Appendix A). I specifically searched for discharge planning educational resources, strategies and modes of delivery for education, and information about discharge planning for patients with substance use disorder to utilize in the resource. Data collected from the discharge planning resources include the setting in which the resource was implemented, content of the resource, and benefits and limitations of implementing the resource (See Appendix B).

Data Management and Analysis

To analyze the data collected in the literature and website search, I assessed important aspects of the resources including educational strategies and activities for discharge planning. I categorized important aspects in Excel and identified themes using content analysis (Bengtsson, 2016). Common themes between resources were then compared to determine what information would be beneficial to use in the discharge planning resource.

Results

Based on the analysis of the nine resources, there are three number of themes that emerged from the analysis of the four previously identified websites: *1) developing a best-practice guideline for patients with substance use disorder, 2) importance of individualized discharge planning, and 3) educational opportunities for healthcare providers*. Furthermore, the analysis of the five policies and guideline sources revealed three distinct themes: *1) the content of the discharge planning tool, 2) the benefits of the discharge planning tool and 3) the barriers to its implementation*. These themes will be elaborated upon in the following section.

Emerging Themes from Four Websites

Developing a Best-Practice Guideline for Patients with Substance Use Disorder

The CCSA (2017) has a guideline which focuses on the importance of shifting towards a recovery-oriented system for healthcare providers to prioritize the individual's needs. There are five principles discussed in a recovery-oriented system including collaboration, the personal journey toward well-being, recovery extending beyond the individual, and recovery being multidimensional and involving everyone (CCSA, 2017). The information in the guiding document provides valuable content that relates to recovery following discharge for patients with substance use disorder (CCSA, 2017).

In comparison, The Canadian Research Initiative in Substance Misuse (CRISM) published two best practice guidelines that focused on providing care to patients with substance use disorder in acute care settings throughout the COVID-19 pandemic (Dong et al., 2020). One document was a presentation-style webinar that utilized a PowerPoint to provide education to healthcare providers on addressing stigma, screening, and assessment, providing trauma-

informed care and discharge planning checklists (Dong, 2021). Similarly, the other document released by CRISM was a best practice guideline for healthcare providers treating patients with substance use disorder that have COVID (Dong et al., 2021). This guideline focused on transferring patients to an addiction program, providing medical isolation, discharge checklists and prescribing upon discharge (Dong et al., 2021). Dong et al. (2021) also stressed the importance of considering where the individual will be discharged whether it is home, an addiction program, or a shelter.

Importance of Individualized Discharge Planning

The CMHA (2022) advocates for the need to having mental health and addiction services such as pharmacotherapy and psychiatrists federally covered to ensure adequate care is provided post-discharge. Specifically for patients, there is an area on their website that encourages patient to work towards recovery with the individual's healthcare provider by setting treatment goals, developing a recovery support plan, and utilizing coping mechanisms (CMHANB, 2024). Similarly, the CCSA (2017) advocates for the need to involve patients and their families in individualized treatment and recovery plans. Furthermore, the CCSA (2017) indicates it is essential to have an individualized recovery promote progress following discharge from a formal treatment center.

In comparison, the CAMH (2017) focused on providing individualized discharge plans through utilization of "my exit interview" which provides patients who accessed emergency department care information regarding diagnostic testing conducted, medical interventions implemented and follow-up instructions for follow-up care post-discharge. This information is tailored to their specific diagnosis and follow-up needs (CAMH, 2017). Similarly, to CAMH (2017), Dong et al. (2021) expresses the need to have individualized, patient-centred discharge

plans for patients with substance use disorder. The discharge checklist initiated by Dong et al. (2021) included items specific to substance use disorder such as connecting to an opioid agonist provider, providing patients with take-home naloxone kits and sterile injection equipment, ensuring social stability with active identification, income support and transportation to access community healthcare providers.

Educational Opportunities for Healthcare Providers

CMHANB (2024) has many in-person educational opportunities specifically for patients that include topics such as depression, life after loss, engaging caregivers in recovery, mindfulness, from dependency to recovery and making wellness a priority. For healthcare providers specifically, CMHANB (2024) provides a two-day in-person opportunity for individuals to learn about suicide first-aid, developing safety plan and seeking further help. Another program that is offered to healthcare providers is a program called Changing Minds, which is used to enhance knowledge of mental health and reducing stigma. This opportunity is provided in-person or virtually over Zoom over a two-day period (CMHANB, 2024). One limitation of the education provided by CMHANB (2024) is that it is not specific to discharge planning for healthcare providers.

In comparison, CCSA (2017) recommends that employers provide education opportunities related to addiction, and for the education to include the meaning of recovery, the importance of respecting the client's treatment options and having a range of evidence-based approaches to support different pathways of recovery. Although the CCSA (2017) advocates for the need for education for healthcare providers, there is no educational opportunities provided through this organization. Comparatively, CAMH (2017) provides several online educational opportunities for healthcare providers on a variety of topics including opioid use disorder

treatment, concurrent disorder in primary care, fundamentals of addiction and recovery-oriented approach. The one specific online-course that focuses on discharge planning is the program called Recovery-Oriented Approach (CAMH, 2017). This course focuses on characteristics of individualized recovery plan, strategies for recovery care, applying the recovery approach in assessment process and the importance of building support systems in recovery (CAMH, 2017). The Recovery-Oriented Approach course occurs over a seven-week period and utilizes multiple educational strategies including self-directed learning modules, small group discussions and weekly activities (CAMH, 2017).

Finally, Dong et al. (2021) through CRISM, provided a webinar style education session on the best-practice guidelines for supporting people who use substances in acute care settings. This online webinar style PowerPoint presentation covered several topics including addressing stigma, harm reduction and recovery, trauma-informed care, and discharge planning (Dong et al., 2021). An opportunity at the end of the webinar was provided to discuss feedback for questions and potentially missed content.

Emerging Themes from Five Discharge Planning Resources

The analysis of the five policies and guideline sources revealed three distinct themes: *1) the content of the discharge planning tool, 2) the benefits of the discharge planning tool, and 3) the barriers to its implementation.*

Content of Discharge Planning Tools

Through the environmental scan, five discharge planning resources were identified including IDEAL discharge planning, My Transitional Care Plan (MTCP), Re-engineered Discharge (RED) toolkit, Population-specific patient-oriented discharge summary (PODS),

Patient-centered discharge toolkit (PDTK) (Agency for Healthcare Research and Quality, n.d.; Behavioural Supports Ontario, 2022; Agency for Healthcare Research and Quality, 2013; PODS, 2019; Patient Safety Learning Lab, 2019).

IDEAL discharge planning was implemented in inpatient units across Canada and the United States (Agency for Healthcare Research and Quality, n.d). This discharge planning document focuses on engaging patients and their families while transitioning from the inpatient setting to their homes in the community (Agency for Healthcare Research and Quality, n.d.). This approach focuses on empowering the patients and their families to be involved in the discharge plan. The IDEAL acronym stands for include, discuss, educate, assess and listen (Agency for Healthcare Research and Quality, n.d). In comparison, My Transitional Care Plan (MTCP) was implemented in long-term care facilities in Ontario, Canada. This care plan is used for transfers between different facilities and provides information including their substance use plan, daily routine, functional status, potential behaviors and strategies to support the individual (Behavioural Supports Ontario, 2022).

An additional discharge plan that was implemented in inpatient settings across the United States was the Re-engineered Discharge (RED) Toolkit (Agency for Healthcare Research and Quality, 2013). This toolkit involves thirteen steps included to assess the need for language assistance, making follow-up appointments, organizing post-discharge outpatient services, identifying correct medications, reconciling the discharge plan, ensuring the patient understands the discharge plan, educating the patient on their diagnoses and medication, reviewing with patients what to do if complications arise, providing discharge summary to clinicians and providing telephone reinforcement of the discharge plan (Agency for Healthcare Research and Quality, 2013).

Population-specific patient-oriented discharge summary (PODS) was a discharge planning tool that emphasized health literacy and providing patient-centered care (PODS, 2019). This discharge planning tool was implemented in inpatient units across Ontario, Canada (PODS, 2019). Similar to the MTCP, the PODS discharge planning tool encompassed five components including changes to medications, changes in daily activities, follow-up appointments, resources for patients and families and monitoring for signs of complications (PODS, 2019).

The Patient-Centered Discharge toolkit (PDTK) was an additional tool assessed through the environmental scan (Patient Safety Learning Lab, 2019). This tool was developed and implemented in inpatient units across the United States (Patient Safety Learning Lab, 2019). In comparison to the other discharge planning tools, the PDTK utilized an interactive digital program to promote patient involvement in their discharge planning (Patient Safety Learning Lab, 2019). One aspect of the digital program was to assess patients' understanding of discharge education, once the self-assessment was conducted it syncs to the patient's electronic health record for the provider to review (Patient Safety Learning Lab, 2019). An additional component of the PDTK is that there is a communication option for patients to message their provider once discharged if questions arise (Patient Safety Learning Lab, 2019).

Benefits of Utilizing Discharge Planning Tool

The benefits of implementation were discussed in four discharge planning tools (Agency for Healthcare Research and Quality, 2013; Patient Safety Learning Lab, 2019; PODS, 2019). The IDEAL discharge planning tool had the benefits of improving clinical outcomes, decreasing readmission rates, and reducing healthcare costs (Agency for Healthcare Research and Quality, 2013). The PDTK also reported benefits of implementation such as enhancing communication and promoting patients to self-manage their discharge needs (Patient Safety Learning Lab, 2019).

Similarly, the RED discharge planning tool also demonstrates enhanced self-management knowledge, decreased hospital utilization, strengthened connections with primary care providers and increased patient satisfaction (Agency for Healthcare Research and Quality, 2013). The RED toolkit estimates that it reduces healthcare costs by \$412 per patient (Agency for Healthcare Research and Quality, 2013). The PODS toolkit reports benefit on increasing patient and provider satisfaction, increasing patient empowerment and reducing readmission rates (PODS, 2019). The 30-day readmission rates decreased by 4% during the period PODS was implemented in an Ontario hospital (PODS, 2019).

Barriers for Implementation

Three discharge planning tools identified barriers that arose in the implementation process (Agency for Healthcare Research and Quality, n.d; PODS, 2019; Patient Safety Learning Lab, 2019). The PODS (2019) toolkit discussed the barriers that were encountered during implementation included staff acceptance, competing priorities and IT delays. Similarly, the PDK discharge planning tool identified barriers such as low awareness, lack of technical optimization, and inconsistent practices among clinicians. The IDEAL program identifies staff fear of change and providers not being aware of how to incorporate the tool in their care. All three discharge planning tools discussed time constraints as barrier while implementing their tools. Understanding the barriers that were encountered during the implementation process of various discharge planning tools provides opportunities to be aware of and mitigate barriers in the creation of the discharge planning resource.

Ethical Considerations

A screening tool by The Health Research Ethics Authority (HREA) was completed, and

according to the screening tool, this project is exempt from Health Research Ethics approval as it is a quality improvement project (see Appendix C). The literature and websites searched are considered public information, and permission to access and share the information is presumed. To ensure confidentiality and maintain privacy data that was collected and stored on a password-protected file. There were no identifying details shared or located on the files.

Implications

There were several implications identified during the environmental scan. Scanning websites for patients with substance use disorder provided the ability to see what resources and education are available to patients online. Additionally, two best-practice guidelines were identified for discharging patients with substance use disorder from inpatient units through the COVID-19 pandemic. Educational strategies and methods of delivery were established as educational resources related to discharge planning and substance use disorder occurred in various styles including PowerPoint presentation, self-directed online learning, online discussions, and webinar style. Searching for other discharge planning toolkits provided the ability to determine the benefits and barriers to implementation and provided theoretical content to include in my program. Assessing similarities between the discharge planning tools also helps determine what components are beneficial to include in the educational resource such as reviewing medication, and ensuring follow-up appointments are established and patients understand the discharge education provided. Overall, this environmental scan provided significant theoretical content to be included in the educational resource. A limitation noted during this environmental scan was although the discharge planning tools highlighted the need for educating staff, the mode of delivery and educational strategies were not discussed.

Conclusion

In conclusion, the environmental scan provided insight into educational resources and tools used in discharge planning resources in New Brunswick, Canada, and the USA. I gained insight into what discharge tools have been successfully implemented in a variety of inpatient settings. Each tool discussed what benefits the implementation has brought, as well as barriers that impacted success. The information gathered in this environmental scan will be used to inform the development of the educational resource as significant theoretical content was gained.

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Appendix A: Relevant Information from Substance Use Disorder Websites

Name of Resource	Details of Resource	Benefits	Limitations
1. Centre of Addiction and Mental Health (CAMH)	<p>Promotes utilization of the PODS tool for patients with mental health and substance use disorders. This discharge tool was trialled in two CAMH units and now is deployed in all (CAMH, 2017).</p> <p>CAMH also acknowledges the need for staff education and training regarding implementing new discharge planning guidelines (CAMH, 2017).</p> <p>For their emergency departments, they developed a document called “my exit interview” which helps provide patients with a summary of what tests were run, what interventions were implemented, diagnostic results and follow-up instructions. This is also faxed to their primary care provider for continuity of care (CAMH, 2013).</p>	<p>Provides information about medication, community resources, discharge-specific goals, and supports post-discharge</p> <p>Promotes health literacy as it is available in 15 languages, uses large font, images and plain language.</p> <p>Methods or details of educational resources for healthcare providers not available</p>	
2. Canadian Mental Health Association (CMHA)	<p>CMHA provides resources for patients, families and participate in policy and research related to mental health and substance use disorder.</p> <p>CMHA advocates for making mental health and addiction resources such as harm reduction programs, community based services and counseling universal and</p>		<p>A limitation is that there was no educational resources for healthcare providers on discharge planning. There was no recommendation on methods for providing education for</p>

	<p>accessible. They also advocate for addressing social determinants of health that impact these disorder such as housing, income, food security and employment (CMHA, 2022).</p> <p>For patients there is a section about working towards recovery with your treatment provider. This includes setting treatment goals, developing a recovery and support plan, utilizing coping skills and reaching out for support (CMHANB, 2024).</p>		healthcare providers.
3. Canadian Research Initiative in Substance Misuse (CRISM)	<p>Two documents provided by CRISM focus on supporting people who use substance in acute care setting, especially during the COVID-19 pandemic.</p> <p>One document provides education to healthcare providers in a webinar presentation that utilizes a PowerPoint presentation. It includes education on addressing stigma, screening and assessment, providing trauma informed care and discharge planning checklist (Dong, 2021).</p> <p>The other document is a guidance document that focuses on providing care to patients with substance use disorder and COVID-19. This document includes transferring to an addictions program, medical isolation, discharge checklist and discharge prescribing (Dong et al.,</p>	<p>Both documents utilize different formats, Powerpoint versus a guidance document.</p> <p>Both documents provide content that can be utilized in the discharge planning document.</p>	

	2020).		
4. Canadian Centre on Substance Use and Addiction (CCSA)	CCSA (2017) developed a moving toward a recovery-oriented system of care. This guidance document was established for healthcare providers. The goal of this document is to shift to a recovery oriented system that focuses on individual patient needs. The principles of recovery include collaboration, personal journey toward wellbeing, recovery extends beyond the individual, recovery is multidimensional and involves everyone (CCSA, 2017).	The recovery-oriented system document provides content that will be valuable to include in a discharge planning resource. Highlighting the path for recovery for patients with substance use disorder will be helpful to include.	There is no specific document that focuses on providing education to healthcare providers on discharge planning, or the mode of delivery recommended for providing education.

Appendix B: Findings from Existing Discharge Planning Resource

Name of Resource	Setting Implemented	Details of Resource	Benefits	Limitations
1. IDEAL Discharge Planning (Agency for Healthcare Research and Quality, n.d)	Inpatient settings, USA and Canada	<p>IDEAL discharge planning aims to engage patients and their families in the transition from inpatient settings into community</p> <p>I: Include – patients and families in the discharge plan</p> <p>D: Discuss- expectations returning home, mediations, potential complications, test results and follow-up appointments</p> <p>E: Educate- about the discharge plan and patient condition</p> <p>A: Assess- patients’ understanding of instructions and education provided</p> <p>L: Listen- to patient’s goals, concerns and preferences</p>	<p>Focus on improving patient care</p> <p>Empower patients to be involved in their discharge plan</p> <p>Promotes patient-centred care</p>	<p>Challenges to implementing the IDEAL program include staff fear change, time constraints, and healthcare providers may not know how to incorporate into their care</p>
2. My Transitional Care Plan (MTCP) (Behavioural Supports	Long-term Care, Ontario Canada	MTCP is used to provide a synopsis of essential information including substance use	Used for transfers between facilities	It does not include the patient in the discharge plan

Ontario, 2022)		plan, room setup, daily routine, functional status, potential behaviours, strategies to support and the patient's support system.		
3. Re-Engineered Discharge (RED) Toolkit (Agency for Healthcare Research and Quality, 2013)	Inpatient settings, USA	RED involves 13 steps for discharge planning including: "1. Ascertain need for and obtain language assistance 2. Make appointments for follow up 3. Plan for follow up of results from test or labs 4. Organize post-discharge outpatient services 5. Identify correct medications and a plan to obtain them 6. Reconcile the discharge plan with national guidelines 7. Teach a written discharge plan the patient can understand 8. Educate patient about diagnosis/ medication 9. Review with the patient what to do if problem arises 10. Assess the degree of patient's	Improves clinical outcomes Reduces cost by \$412 per patient Promotes patient-centred care Decrease readmission rates	

		<p>understanding of discharge plan</p> <p>11. Expedite transmission of the discharge summary to clinicians accepting care of the patient</p> <p>12. Provide telephone reinforcement of the discharge plan.” p.7</p>		
4. Population-specific patient-oriented discharge summary (PODS) (PODS, 2019)	Inpatient Units, Ontario, Canada	Patient-centred discharge plan that focuses on five sections including medications, changes to daily activities, follow-up appointments, resources for patients and families and signs of complications.	Promotes health literacy by using clear language, easy to follow headings and large font.	Barriers include staff acceptance, competing priorities, and IT delays
5. Patient-Centered Discharge Toolkit (PDTK) (Patient Safety Learning Lab, 2019)	Inpatient units, USA	Involves an interactive digital program where patients can be actively involved with their discharge plan. This include a screen where patients are asked a variety of questions to gauge their understanding of discharge education. The second component	Promotes self-management and enhances communication with care team	Barriers for clinicians include low awareness, lack of technical optimization, and inconsistent practices among clinicians.

		<p>of this digital program is that it syncs the self-assessment to the electronic health record so providers can review and address areas that are needed. Finally, it provides an option for patient-provider messaging where discharge questions can be asked when the patient is home.</p>		
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Appendix C: Health Research Ethics Authority (HREA) Screening Tool

Student Name: Paige Feltmate

Title of Practicum Project: Development of a Discharge Planning Resource for Nurses Working in a Detoxification Unit

Date Checklist Completed: February 2nd, 2024

This project is exempt from Health Research Ethics Board approval because it matches item number _____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 there is no research question 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 E: Discharge Planning Educational Resource



RÉSEAU DE SANTÉ

Horizon
HEALTH NETWORK

Discharge Planning Resource for Nurses Working in a Detoxification Unit

WORKSHOP INSTRUCTOR MANUAL

PREPARED BY :

Paige Feltmate BSCN RN

Table of Contents

Introduction.....	2
The Discharge Planning Education Workshop.....	3
Theoretical Framework.....	8
Preparation for Instructors	4
Timeline of Events.....	5
Introductions	6
Pre-Test Questionnaire.....	7
Discharge Planning PowerPoint Lecture	10
Reflection of Discharge Planning Experiences.....	11
Case Studies	12
Post-Test Questionnaire/ Workshop Evaluation.....	13
References.....	14
Appendix A: Recruitment Letter for Workshop.....	17
Appendix B: Attendance Sheet.....	18
Appendix C: PowerPoint Slides and Lecture Content.....	19
Appendix D: Pre-Test on Discharge Planning.....	55
Discharge Planning Questionnaire.....	55
Appendix E: Reflection Exercise.....	59
Appendix F: Case Studies and Answer Key	60
Appendix G: Post-Test on Discharge Planning	64
Appendix H: Evaluation of the Discharge Planning Workshop	67

Introduction

Substance use disorder is a condition that impacts 1 in 6 Canadians throughout their lifetime and 250 million people worldwide (Connery et al., 2021; Government of Canada, 2023). One in five people with substance use disorder has accessed treatment globally (United Nations Office on Drugs and Crime, 2023). The first step in treating substance use disorder requires detoxification of substances, this is often not enough alone to maintain sobriety when transferred back into the community (Zhu & Wu, 2018). To ensure success when transferring patients into the community it is crucial to establish an adequate discharge plan (Luther et al., 2019).

Literature has demonstrated that contributing factors to inadequate discharge planning include poor communication between healthcare providers, lack of continuity of care and insufficient knowledge and role clarity for healthcare providers (Cruz et al., 2017; David et al., 2022; Lee et al., 2020; Noseworthy et al., 2014; Oppen et al., 2019; Rubinsky et al., 2018; Sharp et al., 2021). Effective discharge planning is associated with several positive patient outcomes including reduce readmissions and relapses into substance use, improved communication and patient quality of life and enhanced knowledge (Cruz et al. 2017; Jehosua et al., 2023; Ivers et al., 2018; Oppen et al., 2019; Smith, Hansen & Colvard, 2021; Wang et al., 2020).

Currently at Ridgewood Detoxification Unit there is no formal discharge planning resource that is utilized among nursing staff. This workshop aims to improve knowledge, skills, and role clarity on discharge planning for nurses working at the detoxification unit.

The Discharge Planning Education Workshop

- The 4-hour workshop was developed and designed for nurses working at Ridgewood Detoxification Unit.
- Participants will be notified of the learning opportunity through their work emails to registered (Appendix A).
- Workshop time is 4 hours from 9am-1pm and 1pm-5pm.
- Extra staff will be scheduled to cover patient assignments to ensure participants have the opportunity to attend.
- Two educational frameworks (Kolb's experiential learning theory and Kotter's eight step change model) will be used to guide the development of this workshop and the development of this manual.
- Participants should sign the attendance sheet.
- Participants' number should be a minimum of 3 and a maximum of 10 per workshop.
- Pre evaluation questionnaire need to be completed before the beginning of the workshop.

Workshop Instructors

- Instructors should have clinical background on discharge planning and attend a workshop prior to teaching.

The objectives to achieve the overall goal of enhanced knowledge and skill include:

1. Define discharge planning.
2. Identify the importance of discharge planning.
3. Discuss negative impacts of inadequate discharge planning.
4. Identify appropriate community resources for patients with substance use disorder in Saint John

Preparation for Instructors

Preparation Prior to Workshop

For instructors to be prepared to facilitate the workshop it will be essential to:

- Have previously attended the workshop and be familiar with the educational material.
- Have the presentation on a thumb drive, and the appropriate equipment such as a projector and computer.
- Should book a room that can comfortably fit 3-10 people with enough tables and chairs.
- Should also request approval from administration for educational leave for the nursing staff to be financially compensated for their time.

Required Documents

- PowerPoint presentation slides printed for each participant (Appendix C)
- Timeline of events (one copy for each participant)
- Case studies (one copy for each participant) (Appendix F)
- Attendance Sheet (Appendix B)
- Pre and Post Test Questionnaire (Appendix D) (Two copies for each participant)
- Reflection Exercise (one copy for each participant) (Appendix E)
- Workshop Evaluation (one copy for each participant) (Appendix H)

Timeline of Events

0900-09:15 Introductions/ Housekeeping items

09:15-09:30 Completing the Pre-Test Questionnaire

09:30-10:00 PowerPoint Background: Substance Use Disorder and Discharge Planning

10:00-10:30 Strategies to Improve Discharge Planning

10:20-10:50 Coffee Break

10:50-11:10 Reflection Exercise

11:10-11:40 Break into Groups for Case Studies

11:40- 12:10 Discussion of Answers for Case Studies

12:10- 12:40 Questions and Answers

12:40-13:00 Completing Post-Test and Evaluation of Workshop Evaluation Form

Introductions

Welcome to our 4-hour workshop on Discharge Planning. In this session, we will provide an overview of the discharge planning process and address some important housekeeping items to ensure a smooth and productive workshop.

To facilitate this session, we have prepared several materials:

- Laptop
- Projector
- USB Drive with PowerPoint Presentation

As your instructor, my responsibilities include:

1. Ensure the room is set up so that all participants can see the projector screen.
2. Provide educational packets including course material, pre and post-test and case studies at each seat.
3. Connect the projector to the laptop and ensure the display screen is on and PowerPoint presentation is visible.
4. Pass around attendance sheet and have participants sign in.
5. Begin PowerPoint Presentation.

Pre-Test Questionnaire

The purpose of this Pre-Test Questionnaire is to assess participants' current understanding, identify learning priorities, and pinpoint knowledge gaps within the group.

Required Materials

- 1 copy of the pre-test for each participant (Appendix D)
- Enough pens/pencils for the group

As your instructor, my responsibilities include:

1. Ensure participants have a paper copy of the pre-test questionnaire.
2. Provide 15 minutes for participants to complete the test.
3. Answers for pre-test will be provided after completion of the post-test.

Theoretical Framework

There were two educational frameworks that guided the development of this workshop and the development of this manual. The educational frameworks include Kolb's (1984) experiential learning theory and Kotter's eight step change model.

Kolb's Experiential Learning Theory

Kolb's experiential learning theory posits that individuals learn through a continuous cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. In this workshop, participants engage in activities designed to enhance discharge-planning knowledge; they perform tasks, reflect on their experiences, learn theoretical concepts and apply new knowledge to clinical scenarios.

Figure 1: Kolb's Learning Cycle



Kotter's Eight Step Change Model

Kotter's eight-step change model guides the implementation of this workshop, focusing on steps such as creating urgency through lecture content on discharge planning, forming a coalition including unit managers, team leaders and communicating the vision by educating participants on discharge planning's importance.

Figure 2: Kotter's Eight Step Change Model



Discharge Planning PowerPoint Lecture

Learning Objectives

- Define discharge planning.
- Identify the importance of discharge planning.
- Discuss negative impacts of inadequate discharge planning.
- Identify appropriate community resources for patients with substance use disorder in Saint John

Methods

- Interactive PowerPoint presentation

Required Materials

- Electronic copy of PowerPoint (Appendix C)

Role of Instructor

1. Review lecture slides in the PowerPoint presentation (Appendix C)
2. Answer any relevant questions identified by participants.

Reflection of Discharge Planning Experiences

Learning Objectives

- Reflect on previous experiences of discharge planning.
- Identify how to apply strategies to improve discharge planning.
- Identify barriers and facilitators for discharge planning in the facility.

Methods

- Open Discussion with Group

Required Materials

- Electronic copy of PowerPoint (Appendix E)
- Paper copy of the PowerPoint (1 for each participant)

Role of Instructor

1. Ask questions on PowerPoint slide and facilitate a discussion with the group.
2. Allow the participants 15 minutes to reflect on the questions.
3. Ask participants to share their previous experiences with discharge planning (See Appendix E)

Case Studies

Learning Objectives

- Identify appropriate interventions applicable to the case study.
- Promote critical thinking and problem skills among nurses to develop an appropriate discharge plan.
- Build knowledge related to discharge planning for patients with substance use disorder.
- Identify appropriate resources in the community to provide linkage to care.

Methods

- Group brainstorming

Required Materials

- Provide paper copy of case studies to each participant (Appendix F)
- Pens/pencils to write answers.

Role of Instructor

1. Ensure participants each have a copy of the case studies.
2. Ask participants to divide into groups of 2-4 depending on the size of the group.
3. Assign a case study to each group.
4. Provide participants 15 minutes to read the case study and answer related questions.
5. Once the groups are finished, the instructor will have groups present their answers to the group and discuss answers.

Post-Test Questionnaire/ Workshop Evaluation

Learning Objectives

- Assess and compare the participants level of knowledge pre and post-test.
- Determine participants' experience of the workshop and provide an opportunity to give feedback to improve the workshop.

Methods

- Evaluation form
- Post-test

Required Material

- Copies of evaluation forms for each participant
- Copies of the post-test for each participant.
- Enough pens/pencils for the group.

Role of the Instructor

1. Provide participants with a copy of the post-test and a copy of the evaluation form.
2. Allow the participants 10 minutes to complete.
3. Utilize the last 10 minutes of the workshop to review the answers and collect evaluation forms.

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Appendix A: Recruitment Letter for Workshop

Dear Nursing Staff,

Discharge planning is an essential component to an individual's admission to the Ridgewood Detoxification facility. Staff have acknowledged a need for education regarding discharge planning which has resulted in us offering a 4-hour educational workshop from 9am-1pm and 1pm-5pm. The workshop will be offered on (insert dates and times of workshop offerings) at (insert location of educational room). This workshop is covered under a paid educational leave to promote staff attendance. We look forward to providing this opportunity to improve staff confidence and knowledge surrounding discharge planning. Please reply to which date and time you are available to attend as well as any questions you may have.

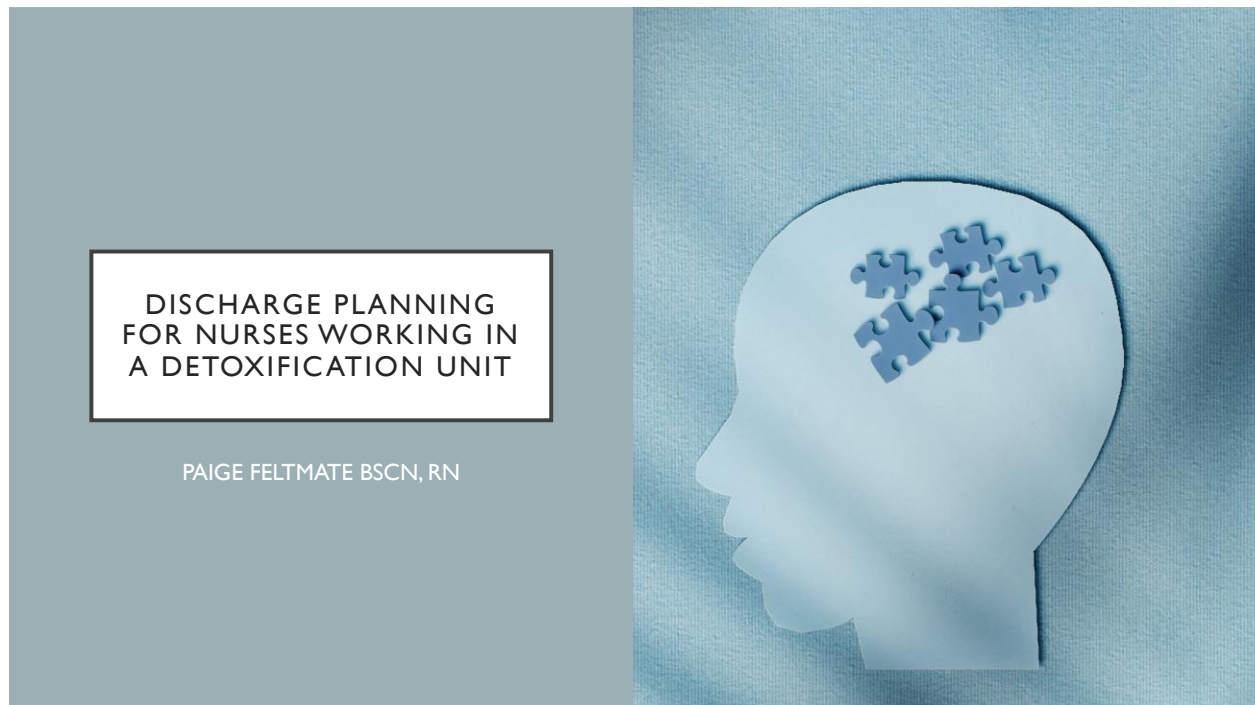
Sincerely,

(Workshop Instructors Name)

Appendix B: Attendance Sheet

Name of Participant	Date	Designation (RN/LPN)	Signature

Appendix C: PowerPoint Slides and Lecture Content



All images utilized in the PowerPoint presentation are available under CC license in Microsoft 365.



INTRODUCTIONS

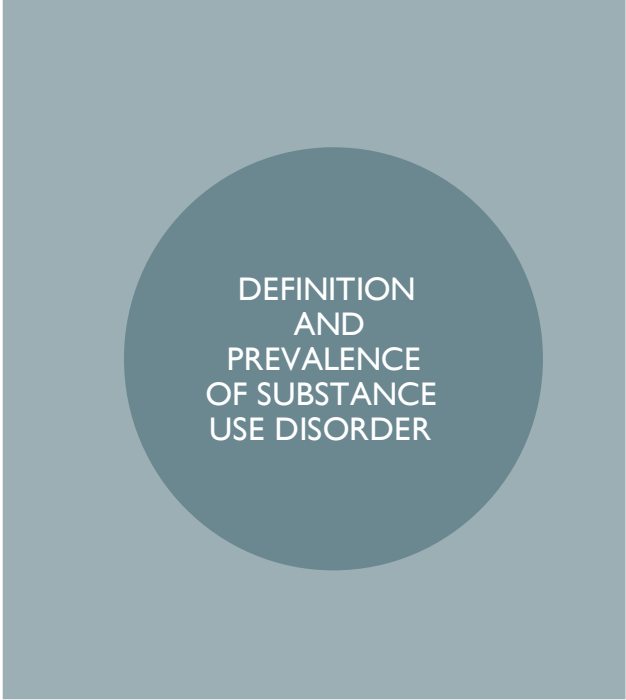
Introduce yourself as the instructor. Discuss housekeeping rules, such as location of washrooms, fire exits and sign in sheet for attendance. Get participants to introduce themselves to the group. Inform participants that the duration of the workshop is 4 hours with a 30-minute break halfway through.

LEARNING OBJECTIVES

By the end of the workshop, Nurses will be able to:

- Define Discharge Planning
- Identify the importance of discharge planning
- Discuss negative impacts of inadequate discharge planning
- Identify appropriate community resources for patients with substance use disorder in Saint John

Review learning objectives for the educational session with participants.



DEFINITION AND PREVALENCE OF SUBSTANCE USE DISORDER

- Encompasses various conditions dependent on the substance use
- Globally impacts 296 million people, which is a 23% increase over past decade
- In Canada, 6 million people will experience substance use disorder throughout their lifetime
- New Brunswick has a significant prevalence of substance use disorder impacting 1 in 5 people.

Substance use disorder includes a variety of conditions which is dependent on the substance used. This includes alcohol use disorder (AUD), opioid use disorder (OUD), stimulant use disorder, cannabis use disorder, caffeine use disorder, hallucinogen use disorder, inhalant use disorder, tobacco use disorder, and sedative, hypnotic or anxiolytic use disorder (Substance Abuse and Mental Health Services Administration, 2016). Substance use disorder has several negative consequences for the individual including increased risk of serious mental health illness, legal issues, poor physical health, financial issues, and strained relationships with loved ones (Government of Canada, 2023).

Substance use disorder is a prevalent condition that impacts 296 million people worldwide and 21% of people in Canada (United Nations Office on Drugs and Crime, 2023; Centre for Addiction and Mental Health, 2024). In New Brunswick, substance use disorder is prevalent impacting 1 in 5 people (Government of New Brunswick, 2016). The most prevalent type of substance use disorder in New Brunswick is alcohol use disorder which affects 20% of

New Brunswickers (Government of New Brunswick, 2016). These statistics demonstrate the need for services to treat this disorder.



ACCESSING TREATMENT FOR SUBSTANCE USE DISORDER

Detoxification is one of the initial steps for managing substance use disorder (Zhu & Wu, 2018). Detoxification involves providing the individual with short-term medical interventions with the goal of alleviating signs and symptoms of withdrawal (Zhu & Wu, 2018). According to the United Nations Office on Drugs and Crime (2023), one in five people worldwide have accessed treatment for substance use disorder. In Canada, 1 in 206 people were in treatment for substance use disorder between 2017 and 2018 (CCSA, 2019). The majority of the patients were male, and the most treated substance was alcohol (CCSA, 2019). Between 2017 and 2018, 1 in 366 people in New Brunswick accessed treatment for substance use disorder (CCSA, 2021). On a local level, in 2023 544 patients were admitted to the Saint John Ridgewood Detoxification unit for acute withdrawal management. Often detoxification alone is not effective for long term sobriety, which demonstrates the need for adequate discharge planning to successfully transition patients into the community (Zhu & Wu, 2018).

WHAT IS DISCHARGE PLANNING

- Provides resources to patients and families to transition from inpatient to community
- Patient-centered and individualized to patients needs



Discharge planning utilizes an interdisciplinary approach that can involve patients, their families, nurses, therapists, social workers, caregivers, and case managers (Patel, 2023). The goal of discharge planning is to provide appropriate resources to successfully transition patients from an inpatient setting to their homes in the community (Luther et al., 2019). For a discharge plan to be effective it must be individualized and focused on the individual's needs (Luther et al., 2019).

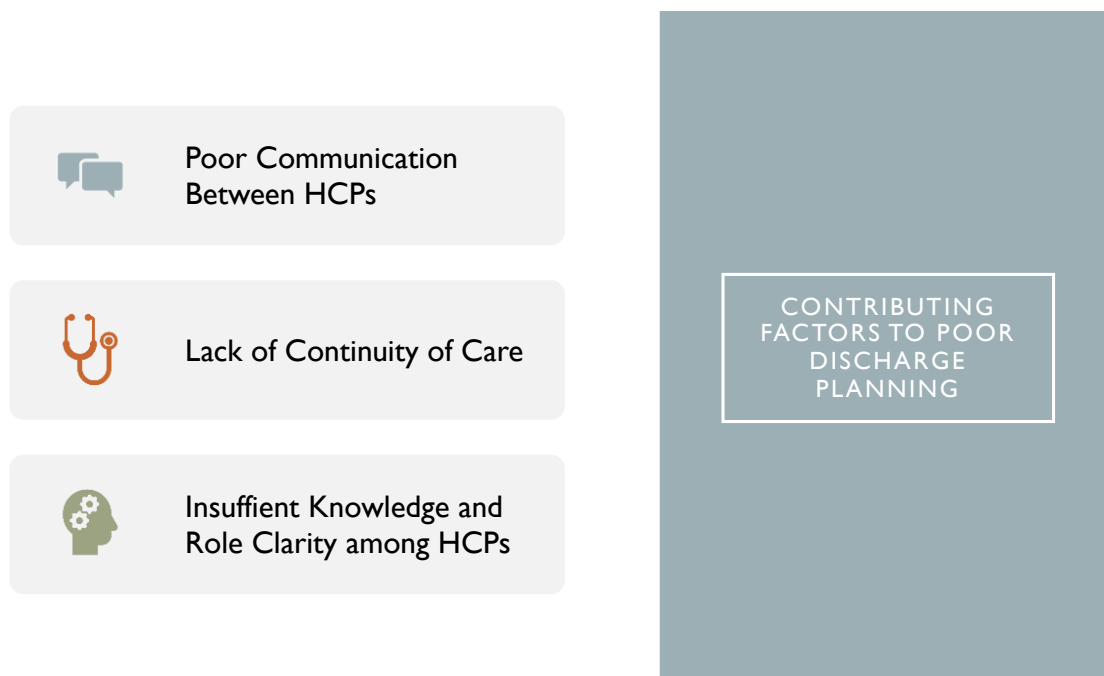
BENEFITS OF DISCHARGE PLANNING

Improved Quality of Life

Reduced Readmissions

Decrease Mortality

There are various benefits of effective discharge planning to both patients and their families including improved quality of life, reduce readmissions to hospital and overall decreased mortality (Burke et al., 2014; Lockwood & Mabire, 2020).



By examining literature, three factors were determined to negatively influence discharge planning including poor communication between healthcare providers, lack of continuity of care and insufficient knowledge and role clarity among healthcare providers and organizations (Cruz et al., 2019; David et al., 2022; Lee et al., 2020; Noseworthy et al., 2014; Oppen et al., 2019; Rubinsky et al., 2018; Sharp et al., 2021).

Poor communication between healthcare providers is associated with adverse effects upon discharge, decreased patient satisfaction and decreased patient safety (Lobchuk et al., 2021; Nava et al., 2022; Gholizadeh et al., 2016). Continuity of care occurs when patient care is continued by providers when transitioned into the community (Cole et al., 2021). Lack of continuity of care is associated with poor accessibility to treatment, difficulty obtaining follow up appointments, and unclear discharge plans (David et al., 2022; Lee et al., 2020; Rubinsky et al., 2018). An additional contributing factor to inadequate discharge planning is poor communication between healthcare providers. For healthcare providers this causes confusion in

role clarity, diverse perceptions of treatment planning, confusing regarding discharge planning protocols and lack of knowledge regarding available community resources (Sharp et al., 2021; Noseworthy et al., 2014).

IMPACT OF INADEQUATE DISCHARGE PLANNING



INCREASED
READMISSION RATES



RELAPSE IN SOBRIETY



INCREASED COST TO
HEALTHCARE SYSTEM

If discharge planning is inadequate, this can lead to several negative impacts including increased readmission rates, relapse in sobriety, and increased cost to the healthcare system. One study conducted by Running Bear et al. (2022) examined readmission rates to a detoxification facility where discharge planning did not occur. This resulted in a 44% readmission rate for those with alcohol use disorder, and a 25% readmission rate for those with opioid use disorder.

An additional negative impact for inadequate discharge planning is patients are more likely to have a relapse into substance use and struggle with maintaining sobriety. Stein et al. (2020) demonstrated that patients who were linked to community care for buprenorphine treatment for opioid use disorder had significantly lower rates of relapse at 35 and 95 days. Additionally, Morgan et al. (2020) determined that 52% of patients not connected to community care were readmitted for substance use within two years.

According to the CIHI (2023) it is estimated that 500 Canadians are hospitalized daily due to harms related to substance use and causes a significant cost to the healthcare system. The

cost of substance use in Canada has increased by 30% since 2007, and results in \$49.1 billion dollars spent a year in healthcare, criminal justice, and loss of productivity (CCSA, 2023).

ROLES OF NURSES IN DISCHARGE PLANNING

- Collaboration with the patient and their support network to identify their goals and needs
- Assessing readiness for transition to community care
- Collaborating in an interprofessional team to develop discharge plan
- Navigation of community services



Nurses have an integral role in discharge planning as they often have the most communication and contact with patients and their support network. This connection can provide insight into barriers and factors that could negatively impact discharge (Luther et al., 2019). Nurses are responsible for collaborating with patients and their support networks to identify their needs and goals for discharge planning to develop an individualized plan (RNAO, 2023). Additionally, nurses aid in discharge planning by assessing the patient's readiness to transition out of hospital to their homes in the community (RNAO, 2023). Assessing their readiness may include assessment of their medical stability, knowledge of how to manage their condition, functional ability to care for themselves and ability to acknowledge and manage complications of their condition (RNAO, 2023). Interprofessional teams include nurses, physicians, social workers, pharmacist, occupational therapist as well as the patient and their support system (RNAO, 2023). This team is responsible for establishing a plan for to assist the patient into smoothly transitioning into the community (RNAO, 2023).

STRATEGIES TO IMPROVE DISCHARGE PLANNING

Strategy	Definition	Application
Linkage to Care	A range of services that aims to assist the individual with substance use disorder access necessary treatment, engage in recovery support services and maintain access to medications	Involves assisting patients in setting up appointments and navigation of appropriate resources upon discharge
Initiation and Transition of Pharmacotherapy	Involves the initiation of medications for the treatment of SUD and the transition of the medications into community care following discharge	Nurses can educate patients on appropriate medication related to SUD and assist in transitioning prescriptions into community
Education for HCPs	Theoretical and practical content provided to HCPs to enhance their clinical knowledge	Taking part in educational sessions on discharge planning to learn resources and value in practice

To prevent the negative consequences of inadequate discharge planning, organizations and healthcare providers should focus on the implementation strategies to improve discharge planning. The most common interventions identified in literature to improve discharge planning processes include linkage to care, transition initiation of pharmacological therapy and education for healthcare providers on discharge planning.

LINKAGE TO CARE OUTPATIENT RESOURCES

Housing	Addictions Peer Support	Outpatient Mental Health and Addictions	Crisis Support Lines
Fresh Start Services for Women	Alcoholics Anonymous	RECAP/ Riverstone	CHIMO Suicide Crisis Line
Hestia House	Al-Anon	Phoenix Recovery Clinic	Domestic Violence Outreach
Housing Alternatives	Narcotics Anonymous	St. Joseph's Community Health Centre	Mobile Mental Health Crisis Service
First Steps	Sophia Recovery Centre	Port City Clinic	Provincial Sexual Assault Crisis Line
Coverdale Women's Shelter	Celebrate Recovery	One at a Time Therapy (Horizon Health)	
Outflow Men's Shelter		Canadian Mental Health Association	
NB Housing		Gentle Path Counselling	
		Family Plus/ Life Solutions	

Housing resources are crucial to help patients that are discharged with substance use disorder. Stability in an individual's environment results in lower likelihood of relapse. Fresh Start Services for Women (n.d.) is a non-profit organization that has three pillars of work; prevention services, support, and assistance to the unhoused to work towards housing, and intensive support for individuals exiting chronic homelessness to maintain new housing. Hestia House (n.d.) is a shelter for women and children transitioning from intimate partner violence. They provide counselling, safety planning, support with housing and group and individual programming.

First Steps Housing Inc (2018) is a non-profit agency that provides housing, parenting support, education, life skills knowledge for women who are pregnant or parenting. Once women have completed the First Steps program, they can be transitioned to Second Steps which provides the individual with supportive housing for them and their family (First Steps Housing Inc, 2018).

Coverdale Centre for Women (2015) is an emergency shelter with 15 beds for women experiencing homelessness. Outflow Men's Shelter is a 30-bed shelter open 24/7 for men experiencing homelessness (Outflow Ministry, 2018).

Peer Addiction supports groups that are offered in the Saint John Area. Alcoholics, Narcotics and Gamblers Anonymous is a network of individuals who come together to discuss their addictions and share their experiences in the hopes of maintaining and achieving sobriety (Alcoholics Anonymous, 2024). Sophia Recovery Centre (2024) also provides peer support for women with substance use disorder providing one on one mentoring, group workshops and education. Celebrate Recovery is a faith based, 12 step program that aims to support individuals with addiction in a peer support weekly meeting (Celebrate Recovery Canada, n.d.).

RECAP, Phoenix Recovery Clinic, St. Joseph's Community Health Centre and Port City Clinic all provide patients an opportunity to engage in medications to treat substance use disorder including methadone, suboxone, Kadian, Dexedrine, injectable hydromorphone and naltrexone. The RECAP clinic also provides primary care, STBBI screening and testing and treatment for Hepatitis C Virus. One At a Time Therapy is a free counselling service offered through Horizon Health Network (2023) which provides single-session counselling to provide same-day appointments for mental health and addiction support. These sessions also provide patients an opportunity to conduct an intake to be waitlisted for longer term inpatient rehab programs (Horizon Health Network, 2023). Gentle Path counselling is a non-profit organization that aims to provide subsidized counselling services to people based on their income. Like Gentle Path, Family Plus provides subsidized counselling to individuals. The local Canadian Mental Health Association (2024) provides community-based programs on depression, life after loss, anxiety, and panic disorder, engaging caregivers in recovery and mindfulness.

CHIMO Suicide crisis line is a direct phone line that is available to patients who are experiencing mental health crisis 24/7 to speak to a professionally trained volunteers for emotional support and resources (CHIMO Community Services, 2023). The Domestic Violence Outreach line is also available 24/7 and is for individuals experiencing intimate partner violence. Mobile Mental Health Crisis service provides individuals with timely assessment by social workers or nurses for mental health crisis and is available in person by 11pm and by phone 24/7 (Horizon Health Network, 2024). The Provincial Sexual Assault Crisis line is a resource that connects patients who have experienced sexual violence with professional staff to provide support, counselling, education, advocacy, and awareness (Sexual Violence New Brunswick, n.d.). This support line is available to patients from 5pm-8am 7 days a week (Sexual Violence New Brunswick, n.d.).

INITIATION AND TRANSITION OF PHARMACOTHERAPY: MEDICATIONS FOR OPIOID USE DISORDER

	Methadone	Suboxone (Buprenorphine/ Naloxone)	Sublocade (Extended- Release Buprenorphine)	Slow-Release Oral Morphine (SROM)	Injectable Opioid Agonist Therapy (OAT)
Route	Oral diluted in juice	Sublingual	Subcutaneous	Oral on apple sauce/ pudding	Intravenous
Dosage	No max dosage. Can take weeks to reach therapeutic dose	Maximum of 24mg administered daily	Initial injection 300mg x 2 doses, then 100mg monthly maintenance	Unclear guidelines initiate on 50- 300mg based on use	Max dose is 500mg hydromorphone or 1000mg diacetylmorphine
Side Effects	Potential for prolonged QT, higher risk of opioid overdose	Must be abstinent from opioid prior to initiation due to precipitated withdrawal	Requires stabilization of suboxone prior to initiation	High risk for opioid overdose and respiratory depression	Often requires co- prescription of SROM or methadone to prevent withdrawal
Administration	Requires witnessed daily at pharmacy until stable	Due to safety, suitable for take home doses immediately	Administered monthly, more flexibility and freedom	Requires witness at pharmacy daily until stable	Supervised in clinic three times daily by nursing staff. No take home doses

Methadone is medication used to treat patients with opioid use disorder. This medication is administered orally and mixed in juice; patients are required to witness consumption daily at the pharmacy (BCCSU, 2023). Patients can earn take home doses, but it requires that they demonstrate clinical, psychosocial, and medical stability due to the higher risk of overdose (BCCSU, 2023). As opposed to Suboxone, this medication does not have a maximum dose and patients are not required to be in withdrawal prior to initiation of the medication. This medication has the side effect of QT-prolongation, and it is recommended that patients receive an ECG prior to initiation (BCCSU, 2023). When patients wean off this medication, they typically report more severe symptoms of withdrawal compared to Suboxone (BCCSU, 2023).

Suboxone is a sublingual medication provided to patients with opioid use disorder to decrease symptoms of withdrawal and cravings. This medication is a combination of buprenorphine and naloxone which results in increased medication safety and low risk of overdose (BCCSU, 2023). Due to the safety of this medication, patients can earn take home

doses and does not require daily witnessing. It takes approximately 1-3 days to achieve a therapeutic dose of Suboxone, and patients can receive a maximum of 24mg daily (BCCSU, 2023). Patients must be in withdrawal before starting this medication as it can precipitate withdrawal if patients consume opioids prior to administration (BCCSU, 2023).

Sublocade is an extended-release injectable form of suboxone that is administered subcutaneously monthly (BCCSU, 2023). Prior to the initiation of Sublocade it is important that patients are stabilized on sublingual suboxone. When patients start Sublocade they receive two monthly injections of 300mg and then 100mg monthly injections as monthly maintenance (BCCSU, 2023). This option provides patients with more flexibility and freedom as it does not require daily witnessing at the pharmacy (BCCSU, 2023). Patients can also easily taper off this medication as it slowly weans out of the patient's system (BCCSU, 2023).

Slow-Release Oral Morphine (SROM) also referred to as Kadian is a medication that is traditionally utilized for pain management. This is a daily medication, pellets of the morphine are either swallowed whole or witnessed over applesauce (BCCSU, 2023). This medication does not have a ceiling effect making it high risk for opioid overdose, and misuse (BCCSU, 2023). Since this medication is used off label for the treatment of opioid use disorder there is not clear evidence-based guidelines on the initiation and titration of this medication (BCCSU, 2023).

Supervised injectable opioid therapy is designed for patients who continue to use injectable opioids despite multiple trials of methadone and buprenorphine (BCCSU, 2023). Providers chooses between hydromorphone and diacetylmorphine and is dependent on medication availability, clinical judgement, and patient's preference (BCCSU, 2023). The supervised self-administration of the intravenous injection requires a pre-assessment, observation by nursing staff of injection/disposal of equipment and post-injection assessment to monitor for

signs of oversedation (BCCSU, 2023). Initiation occurs over three to five days and doses of hydromorphone are titrated by 10-30mg daily while doses of diacetylmorphine are titrated by 20 to 60mg daily (BCCSU, 2023). The maximum dose for hydromorphone is 500mg daily while the maximum for diacetylmorphine is 1000mg daily (BCCSU, 2023). Often providers prescribe a co-prescription of methadone or SROM to prevent cravings and withdrawal overnight between doses. Unlike other forms of opioid agonist therapy, there is no ability for take home doses due to the risk of diversion, misuse, and safety (BCCSU, 2023).

INITIATION AND TRANSITION OF PHARMACOTHERAPY: MEDICATIONS FOR STIMULANT USE DISORDER

	Dextroamphetamine SR (Dexedrine)	Methylphenidate SR (Ritalin or Concerta)
Route	Oral	Oral
Dosage	Starting dose of 10-20mg orally twice daily with a maximum dose of 80mg daily	Starting dose of 20-40mg daily with a maximum dose of 100mg daily
Side Effects	Contraindicated in patients with a history of stimulant induced psychosis, hypertension, or unstable angina	Contraindicated in patients with a history of stimulant induced psychosis, hypertension, or unstable angina
Administration	Daily witnessed in pharmacy, high risk for diversion or misuse	Daily witnessed in pharmacy, high risk for diversion or misuse

For the treatment of stimulant use disorder there is no approved pharmacological treatment approved in Canada. A harm reduction strategy used to reduce illicit stimulant use is the prescribing of psychostimulants such as dextroamphetamine and methylphenidate (BCCSU, 2022). Similar to Kadian, this medication is daily witnessed in a pharmacy, as it is high risk for diversion and unintended use. Dextroamphetamine also known as Dexedrine SR has a starting dose of 10-20mg orally twice daily with a maximum dose of 80mg daily. Methylphenidate SR also known as Ritalin or Concerta has a starting dose of 20-40mg daily with a maximum dose of 100mg daily (BCCSU, 2022). It is not recommended for this medication to be used in patients with a history of stimulant induced psychosis, hypertension, or unstable angina (BCCSU, 2022).

INITIATION AND TRANSITION OF PHARMACOTHERAPY: MEDICATIONS FOR ALCOHOL USE DISORDER

	Naltrexone	Acamprosate	Disulfiram
Route	Oral	Oral	Oral
Uses	Binds to receptor in the brain and blocks the effects of alcohol and thus decreases rates of relapses and cravings	Works by altering patients brain chemistry to reduce the cravings for alcohol	Creates an acute sensitivity to the medication and when alcohol is consumed on this medication causing flushing, nausea, vomiting, headaches, sweating and weakness
Dosage	Once daily medication that is started at 25mg daily and titrated up to 50mg	Recommended dosage is 666mg three times per day	Initial dose is 250mg daily x2wk and then maintenance dosing between 125mg-250mg daily
Side Effects	Monitor liver function	Requires the patient to be fully detoxed for 3 days prior to starting the medication	Must be abstinent from alcohol prior to initiation
Contraindications	Should not be used in patients with liver dysfunction, acute hepatitis, and liver failure	Can be used in patients with moderate liver dysfunction	

Naltrexone is a first-line medication utilized for the treatment for alcohol use disorder. It is a once daily medication that is started at 25mg daily and titrated up to 50mg (Centre for Addiction and Mental Health, 2024). This medication binds to receptor in the brain and blocks the effects of alcohol and thus decreases rates of relapses and cravings (Centre for Addiction and Mental Health, 2024). This medication should not be used in patients with liver dysfunction, acute hepatitis, and liver failure (Centre for Addiction and Mental Health, 2024). While patients are on this medication it is recommended for healthcare providers to monitor patients' liver function (Centre for Addiction and Mental Health, 2024).

Acamprosate is an oral medication utilized for the treatment of alcohol use disorder. It works by altering patients brain chemistry to reduce the cravings for alcohol (Centre for Addiction and Mental Health, 2024). This medication requires the patient to be fully detoxed for 3 days prior to starting the medication (Centre for Addiction and Mental Health, 2024). Unlike

naltrexone, it can be used in patients with moderate liver dysfunction (Centre for Addiction and Mental Health, 2024).

Disulfiram is an oral medication used for patients with alcohol use disorder. It works by creating an acute sensitivity to the medication and when alcohol is consumed on this medication it causes the individual to experience flushing, nausea, vomiting, headaches, sweating and weakness (Centre for Addiction and Mental Health, 2024). Due to the negative and unpleasant side effects it acts as a deterrent for individuals not to consume alcohol. Similar to acamprosate, the individual must be abstinent from alcohol prior to initiation. Patients are started on 250mg orally daily for the first two weeks and then doses can be titrated up or down dependent on the patient's needs (Centre for Addiction and Mental Health, 2024).



Time for 30-minute coffee break.

REFLECTION EXERCISE

1. Can you think of a time where you had success in your practice with discharge planning?
2. Reflect on a time in your practice where a discharge did not go as planned. What learning opportunities did you identify that you can apply moving forward.
3. After completing the lecture material, if you could go back and change anything with an unsuccessful discharge what would you do differently?

Ask participants to take 10 minutes to reflect on these questions and facilitate a discussion with the group.

CASE STUDY: PATIENT WITH ALCOHOL USE DISORDER

A 55-year-old man is admitted to the detoxification unit with alcohol use disorder. He is experiencing homelessness as he has recently lost his apartment due to a house fire. This is when his alcohol consumption has significantly increased. He is teary and visibly anxious throughout his admission due to the trauma he has experienced from the fire. His medical history includes severe hepatic dysfunction and Hepatitis C. During his admission he expresses concerns of where he will go after and how he will maintain his sobriety when he is discharged

What housing resources would be applicable to refer this individual to?

Is there any medication that would be appropriate for this individual to start?

What other community resources would be beneficial to improve the health of this patient?

Review the case studies with the group, divide patients into 3 groups and assign each a case study. Provide 15 minutes for groups to answer the questions associated with the case study. Review the answers as a group.

CASE STUDY: PATIENT WITH OPIOID USE DISORDER

A 30-year-old female is admitted to the detoxification with opioid use disorder. She reports her opioid addiction has started 10 years ago when prescribed narcotics for a back injury. She has been on methadone and suboxone multiple times in the past and has found it unsuccessfully as she still experiences withdrawal. She injects large amounts of dilaudid daily. Her opioid use has significantly increased since she was sexually assaulted 2 weeks ago. She expresses stress about her discharge as she feels safe in the detoxification unit.

What resources can be provided to this patient in the community?

What type of opioid agonist therapy may be appropriate for this individual?

CASE STUDY: PATIENT WITH STIMULANT USE DISORDER

A 40-year-old woman with stimulant use disorder was recently admitted to the detoxification unit. During her admission she reports she has been smoking crystal methamphetamines daily. She also expresses increased thoughts of suicidal ideation with a plan when she is discharged. When discussing patient's support system that is available after she is discharged, she reports she is leaving an intimate partner violence situation and due to this is homeless with her 2 children.

What resources need to be contact regarding this individual's mental health?

Is there any medication that could assist cravings for stimulant use disorder?

What resources are available to individuals experiencing intimate partner violence?



QUESTIONS?

Ask the group if there are any questions for the lecture material.

EVALUATION OF DISCHARGE PLANNING EDUCATION/ POST-TEST



Provide 10 minutes for participants to complete the post-test questionnaire and workshop evaluation form.

Thank participants for attending the workshop.

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Appendix D: Pre-Test on Discharge Planning
Discharge Planning Questionnaire

Name: _____

- 1. How many individuals in Canada experience substance use disorder throughout their lifetime?**
 - A) 1 Million
 - B) 3 Million
 - C) 6 Million
 - D) 2 Million
- 2. What is the most commonly treated type of substance use disorder globally?**
 - A) Stimulant Use Disorder
 - B) Alcohol Use Disorder
 - C) Opioid Use Disorder
 - D) Benzodiazepine Use Disorder
- 3. What is the initial step in the treatment continuum for substance use disorder?**
 - A) Detoxification
 - B) Rehabilitation
 - C) Community Clinics
 - D) None of the above
- 4. What is one benefit that results from adequate discharge planning?**
 - A) Reduced readmissions
 - B) Increase length of hospital stay
 - C) Patient satisfaction
- 5. What is a contributing factor to poor discharge planning?**

- A) Poor communication between healthcare providers
 - B) Lack of continuity of care
 - C) Insufficient knowledge and role clarity among healthcare providers
 - D) All of the above
- 6. Nurses are responsible for participating in discharge planning.**
- A) True
 - B) False
- 7. For patients with substance use disorder, what is a negative impact of inadequate discharge planning?**
- A) Longer hospital admission
 - B) Increased likelihood to experience a relapse in sobriety
 - C) Decrease patient satisfaction
 - D) Increase emergency room visits
- 8. What is part of the nursing role for discharge planning?**
- A) Assessing patients readiness for transition into community care
 - B) Collaboration with patient and their support network to identify their needs and goals
 - C) Navigation of community services
 - D) All of the above
- 9. What medication is used for the treatment of stimulant use disorder?**
- A) Suboxone
 - B) Methadone
 - C) Dexedrine
 - D) Disulfiram

10. Injectable opioid therapy is a type of treatment where the patient is allowed to have take home doses.

A) True

B) False

Any Comments:

Discharge Planning Questionnaire: Answer Key

1. C
2. B
3. A
4. A
5. D
6. A
7. B
8. D
9. C
10. B

Appendix E: Reflection Exercise

1. Can you think of a time where you had success in your practice with discharge planning?
2. Reflect on a time in your practice where a discharge did not go as planned. What learning opportunities did you identify that you can apply moving forward?
3. After completing the lecture material, if you could go back and change anything with an unsuccessful discharge what would you do differently?

Appendix F: Case Studies and Answer Key

Case Study: Patient with Alcohol Use Disorder

A 55-year-old man is admitted to the detoxification unit with alcohol use disorder. He is experiencing homelessness as he has recently lost his apartment due to a house fire. This is when his alcohol consumption has significantly increased. He is teary and visibly anxious throughout his admission due to the trauma he has experienced from the fire. His medical history includes severe hepatic dysfunction and Hepatitis C. During his admission he expresses concerns of where he will go after and how he will maintain his sobriety when he is discharged.

1. What housing resources would be applicable to refer this individual to?

Fresh Start Services to complete an intake and have his name registered on the by names list. While waiting for housing he would be eligible to stay at the Outflow Men's shelter.

2. Is there any medication that would be appropriate for this individual to start?

Since this individual has alcohol use disorder and a diagnosis of Hepatitis C, he would be Acamprosate may be the most appropriate medication. He should not be started on Naltrexone as he has liver dysfunction.

3. What other community resources would be beneficial to improve the health of this patient?

This patient should be referred to the RECAP clinic as they specialize in the treatment of Hepatitis C. Another resource that is appropriate would be one at a time therapy through Horizon Health as he is experiencing trauma from the house fire. Community based program from the Canadian Mental Health Association may also be helpful to suggest.

Case Study: Patient with Opioid Use Disorder

A 30-year-old female is admitted to the detoxification with opioid use disorder. She reports her opioid addiction has started 10 years ago when prescribed narcotics for a back injury. She has been on methadone and suboxone multiple times in the past and has found it unsuccessfully as she still experiences withdrawal. She injects large amounts of dilaudid daily. Her opioid use has significantly increased since she was sexually assaulted 2 weeks ago. She expresses stress about her discharge as she feels safe in the detoxification unit.

1. What resources can be provided to this patient in the community?

- Canadian Mental Health Association – provides education on anxiety, panic disorder and depression.
- One at a Time Therapy- free counselling service through Horizon Health that provides same day appointments.
- RECAP clinic- assess for STBBI related to the assault.
- Provincial Sexual Assault Crisis Line – connect patient to support, counselling and education.

2. What type of opioid agonist therapy may be appropriate for this individual?

- Where the patient has tried Suboxone and Methadone unsuccessfully in the past they could speak to providers at RECAP/ Riverstone regarding their Kadian and injectable opioid agonist therapy program.

Case Study: Patient with Stimulant Use Disorder

A 40-year-old woman with stimulant use disorder was recently admitted to the detoxification unit. During her admission she reports she has been smoking crystal methamphetamines daily. She also expresses increased thoughts of suicidal ideation with a plan when she is discharged. When discussing patient's support system that is available after she is discharged, she reports she is leaving an intimate partner violence situation and due to this is homeless with her 2 children.

1. What resources need to be contact regarding this individual's mental health?

- Mobile Mental Health Crisis Line- since the patient is actively suicidal with a plan they need to be assessed by the mental health team
- Canadian Mental Health Association – provides education on anxiety, panic disorder and depression.
- One at a Time Therapy- free counselling service through Horizon Health that provides same day appointments.

2. Is there any medication that could assist with treating stimulant use disorder?

- This patient could be eligible for Dextroamphetamine SR or Methylphenidate SR if the patient does not have a history of stimulant induced psychosis, unstable angina or hypertension.

3. What resources are available to individuals experiencing intimate partner violence?

- Hestia House is a shelter for women and children transitioning from intimate partner violence. They provide counselling, safety planning, support with housing and group and individual programming.

- The Domestic Violence Outreach line is also available individuals experiencing intimate partner violence.

Appendix G: Post-Test on Discharge Planning

Name: _____

11. How many individuals in Canada experience substance use disorder throughout their lifetime?

- E) 1 Million
- F) 3 Million
- G) 6 Million
- H) 2 Million

12. What is the most commonly treated type of substance use disorder globally?

- E) Stimulant Use Disorder
- F) Alcohol Use Disorder
- G) Opioid Use Disorder
- H) Benzodiazepine Use Disorder

13. What is the initial step in the treatment continuum for substance use disorder?

- E) Detoxification
- F) Rehabilitation
- G) Community Clinics
- H) None of the above

14. What is one benefit that results from adequate discharge planning?

- D) Reduced readmissions
- E) Increase length of hospital stay
- F) Patient satisfaction

15. What is a contributing factor to poor discharge planning?

- E) Poor communication between healthcare providers
- F) Lack of continuity of care
- G) Insufficient knowledge and role clarity among healthcare providers
- H) All of the above

16. Nurses are responsible for participating in discharge planning.

- C) True
- D) False

17. For patients with substance use disorder, what is a negative impact of inadequate discharge planning?

- E) Longer hospital admission
- F) Increased likelihood to experience a relapse in sobriety
- G) Decrease patient satisfaction
- H) Increase emergency room visits

18. What is part of the nursing role for discharge planning?

- E) Assessing patients readiness for transition into community care
- F) Collaboration with patient and their support network to identify their needs and goals
- G) Navigation of community services
- H) All of the above

19. What medication is used for the treatment of stimulant use disorder?

- E) Suboxone
- F) Methadone
- G) Dexedrine
- H) Disulfiram

20. Injectable opioid therapy is a type of treatment where the patient is allowed to have take home doses.

C) True

D) False

Any Comments:

Appendix H: Evaluation of the Discharge Planning Workshop

Date:

Workshop Location:

Workshop Instructor:

On a scale of 1-5 please indicate the extent to which you agree or disagree with the following statements by circling which one applies

5= Strongly Agree 4= Agree 3= Neutral. 2= Disagree 1= Strongly Disagree

The workshop enhanced my knowledge of discharge planning.	5 4 3 2 1
The workshop was well organized.	5 4 3 2 1
The information was useful and relevant.	5 4 3 2 1
The presenter provided adequate time to ask and answer questions.	5 4 3 2 1
The methods of learning met my learning needs.	5 4 3 2 1
The workshop objectives were clearly defined and met.	5 4 3 2 1
This topic will be applicable to my nursing practice.	5 4 3 2 1
The amount of time for the workshop was adequate	5 4 3 2 1

Additional Comments:
