

**Chronic Pain Management, Opioid Tapering Guideline.**

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### **Introduction**

Chronic pain is an ongoing issue facing many Americans and individuals globally.

Patients have historically been prescribed opiates and narcotics as a common care plan to help manage the chronic pain that they are experiencing, it is noted that “5 to 8 million Americans use opioids for long-term management of chronic pain.”(Reuben et al, 2015, Abstract). However, recent guidelines issued by the Center of Disease Control and Prevention (CDC) in 2022 have changed the way providers prescribe and manage pain medications and chronic pain patients. With the change of guidelines, many patients are experiencing an alteration in the way they live their daily lives.

Prior to the new guidelines released by the CDC in 2022, prescribers were more lenient and willing to prescribe a wide variety of opiates and narcotics for acute and chronic pain. While this was beneficial in creating pain relief, it also contributed heavily to the opioid epidemic. Patients were able to establish care, and be prescribed numerous pain medications, patients rarely had these medications discontinued or tapered down after their acute pain was over.

Now, with the culmination of new providers graduating from medical school and the new CDC guidelines on prescribing and managing opiates, patients who have been on previously determined chronic pain management medications and care plans are being pulled off their pain medications when establishing new care with their new primary care providers(PCP).

With new opioid prescribing guidelines in place, providers may not be able to prescribe narcotics or pain medications as they previously did, which has its benefits and downfalls. The benefits to this are hopefully less occurrences of addiction, overdose and costly treatment plans i.e. rehab. It is noted that “The total annual Opioid Use Disorder(OD)-related costs to the U.S.

in 2018 were \$786.8 billion to society, \$93 billion to taxpayers, and \$89.1 billion to the healthcare sector. The mean present value of averting an OUD, across all ages, was \$2.2 million, \$325,125, and \$244,030 from the societal, taxpayer, and healthcare sector perspectives, respectively.” (Murphy, 2020, Abstract). OUD is extremely costly to each tax paying person in society, so there is sufficient rationale to decrease the ability of prescribing.

The downfalls of these new guidelines are; they are vague and do not encourage individual care plans, rather give similar guidelines to each patient and justify not prescribing across the board. Patients who have been on medications for 10-15 years who are now seeking care with a new primary care provider(PCP) due to the provider leaving or retiring, are faced with previously determined medication regimes and care plans being taken away with little hope of being tapered off the medication or given any additional resources to manage their pain.

### **Background**

In a facility located in the United States, 10 out of 30 Chronic Care Management (CCM) patients (33.3%) are being abruptly pulled off their chronic pain management medications. They are primarily being taken off their regimens because the new providers who are replacing their old doctors, follow the new guidelines set in place by the CDC in regards to opioid prescription and allowance. In addition to the transfer of care (TOC) to new providers, many of the patients examined in the microsystem are being followed by temporary doctors due to the delay in primary care providers being available at the facility. These doctors are referred to as “fill in” doctors. These fill in providers are not willing to prescribe opiates, at all. In one instance, a patient who has been waiting to establish care with their new PCP, although not for another three months, was asked to seek opiates and narcotics from their pain management doctor in a

neighboring town. The patient is frail and elderly and was asked to commute one hour, one way to seek treatment which had been previously established by their old PCP and was their regime for over 15 years. Due to the refusal of the fill-in Medical Doctor(MD), this patient commuted across two counties only to come up with the answer that they needed a PCP or established MD to prescribe/refill standing or recurring pain medication orders. The specificity of pain management in the neighboring town does not prescribe those types of orders/medications. The chronic care nurse who is a liaison for the patient, has spent hours working with the patient and prescribing doctors to no avail. The patient who takes only a few (seven) Norcos throughout a 90 day period, as needed for pain, must wait another three months to be established with a new MD, and hope that they reinstate their orders.

Many patients suffer silently when dealing with and living with chronic pain. The stigma regarding pain patients is alive and real. Many patients regardless of their background or their title suffer from discrimination as patients in pain, especially if taking any pain medications. One nurse practitioner speaks to living in chronic pain, “living in chronic pain constrains a person’s ability to participate in society, especially absent proper medical and environmental accommodation.” (Huang, 2018, The Labor of Living in Chronic Pain). Chronic pain patients are continually being pushed aside in society or referred to as “addicts”, because of this stigma many patients do not seek care or when they do are turned away due to the liability regarding and surrounding prescribing pain medications. One additional factor as to why patients do not seek medical attention, is due how increasingly difficult it is to find a physician who will prescribe opiate pain medications.

Some facilities are guided by the implementation of alternative therapies in adjunct to narcotic or opiate prescriptions. Notably, with recent law changes, marijuana has become

commonly utilized for patients who live in chronic pain, with the addition of numerous other pain relieving therapies as well. Within the selected microsystem, patients are left to turn only to alternative therapies, which are commonly unregulated by the Food and Drug Administration (FDA) (National cancer Institute, 2023). Because of the lack of follow up, lack of reporting and complete lack of patients being followed by a PCP, even more rationale is presented for the need to implement the opioid tapering tool. The purpose of discussing these alternative therapies is to give the reader a better understanding as to why a tapering guideline must be implemented as soon as possible.

With the recent emergence of alternative therapies, marijuana has taken the forefront in Complementary and Alternative Medicine (CAM) usage. It is discovered that, "Related to the opioid epidemic and risks associated with prescribing opioids as a treatment for chronic pain, alternative therapies have been introduced as a treatment option. Specific components of the ancient plant *Cannabis sativa* have gained recent interest as a choice of treatment for chronic pain due to the increasing public use as well as the recent legalization of cannabis in many states in the USA...In recent studies, CBD has demonstrated beneficial effects in the setting of chronic pain" (Urits et al, 2020). While Cannabidiol (CBD) may be used commonly in some states and practices, it is not so commonly utilized in Montana and many other rural states.

There are many restrictions on medical marijuana and recreational marijuana. It is also found that within the assessed microsystem, many patients are unable to pay the nearly \$200 to get a medical marijuana card(which allows them to have access to better strains of marijuana for chronic pain relief) and allows them to pay less, while being taxed less as well. There seems to be a lack of programs in place for financial assistance related to acquiring marijuana. Due to the difficulty in obtaining marijuana and alternative therapies because they are expensive with no

assistant programs in place, patients are embedded in a cycle of being unable to obtain pain medications and alternative therapies, which culminates into increased mortality rates, and increased negative health outcomes.

Found by many other researchers and highly utilized in the microsystem that was assessed, meditation and mindfulness are highlighted and encouraged as adjuncts to a patient's care when they suffer from chronic pain. Noted by researchers Pardos-Gascón and team, “the differential efficacy between mindfulness-based interventions and cognitive-behavioral Therapy (CBT) on chronic pain across medical conditions involving pain...In fibromyalgia, mindfulness based stress reduction (MBSR) was superior to the usual care and Fibroqol, in impact and symptoms. In low back pain, MBSR was superior to the usual care” (Pardos-Gascón et al, 2021) Mindfulness is a powerful treatment when patients present with chronic pain and are unable to receive any type of medication or opiate based therapy. Mindfulness is being utilized within nearly every patient encounter within the assessed microsystem to assist in managing patients pain while they are being abruptly taken off their opiate pain medications.

One final method of pain reduction tried within the microsystem, is the utilization of pain management and pain injections. Notably, a high percentage of chronic care/chronic pain management utilize the onsite pain management services. Within pain management there is a registered nurse, and a Doctorate Nurse Practitioner(DNP) Certified Registered Nurse Anesthetist (CRNA) that specializes in chronic pain management and pain injections. Typically patients undergo a series of pain injections at the onsite surgical center, with very close follow up, utilizing a pain diary and frequent check ins with the Pain Management Registered Nurse (RN). Additionally, if the pain injections do not control their pain (commonly in the neck or back

area) they will have radio frequency ablations or RFA's to burn the nerve endings which prevent their brains from getting the signal that the patient is in pain.

Discussed further in this paper, tapering patients off of their pain medications opposed to completely taking them off. Completely taking away pain medications and forcing the patient to quit immediately reflect in devastating health outcomes. Providers must be willing to prescribe a few more months of pain medications at a tapered dose, work closely with the patient, case management, social workers and chronic care management to create a sustainable long term plan for the patient. In addition to opiate tapering, patients must be encouraged to utilize alternative therapies to alleviate their pain and discomfort.

The CDC created a pocket guide to tapering opiates and narcotics, this guideline is suggested and presented to the microsystem in question. The pocket guide presents a series of steps and guidelines for providers to follow rather than pull patients completely off their pain management regimes. Some of the guidelines include tapering a patient off their pain medication when the patient "requests dosage reduction, does not have clinically meaningful improvement in pain and function (e.g., at least 30% improvement on the 3-item PEG scale) , is on dosages  $\geq$  50 MME\*/day without benefit or opioids are combined with benzodiazepines, shows signs of substance use disorder (e.g. work or family problems related to opioid use, difficulty controlling use), experiences overdose or other serious adverse event , shows early warning signs for overdose risk such as confusion, sedation, or slurred speech" (Centers for Disease Control and Prevention, 2018) Further discussion on how to implement this guideline into everyday practice is presented.

### **Problem**

Chronic care and chronic pain management patients are being completely taken off their prearranged narcotic and opiate therapies, with no tapering period, due to recent changes in prescribing guidelines. Patients are seeking alternative therapies to help alleviate their pain and discomfort. Care teams are focusing on treating the patient holistically with the utilization of a multitude of alternative therapies, but need to implement a tapering guideline to create a safer and better outcome for the patient. Utilizing a tapering guideline should be the first task and first defense care providers present to patients, encompassing evidence based practice which reflects more positive health outcomes.

### **Significance**

If chronic pain management and chronic care management patients are not able to access the medications and therapies they need, their health could take a drastic turn for the worse. Patients can begin to get so desperate that they begin to seek illicit or illegal substances to make their pain stop. Additionally, patients may become so frustrated by their PCP's not prescribing their previously arranged medications that they may discontinue their care and completely become non compliant due to their frustration. A third issue that could emerge from this, is the fear of reporting pain, and the fear of seeking treatment due to the stigma regarding chronic pain and therapy use.

### **Purpose and Aim**

The purpose of this project is to present a tapering protocol and guideline to the PCP's in the microsystem, to be implemented in each patient who is getting off pain medications or experiencing a reduction in pain medications. The project will encourage the utilization of this

guideline to PCP's opposed to completely taking patients off of pain medications with no other plan in place.

The project aims to have patients experience less discomfort when being taken off pain medications. Patients will be able to have improved pain tolerance and increased understanding regarding their pain medications, and their tapering schedule. Additionally, providers will be empowered to utilize this new tapering tool as an adjunct to their patients overall health and well being. Providers will also be able to advise and encourage appropriate alternative therapies while patients are being tapered off their pain medications to create a more holistic care plan. The goals of this project will be measured over a three month period, six month period and finally a 12 month period. With check ins at three months, six months and 12 months to assess the success of this tapering tool and overall patients outcomes.

### **Overview**

Patients have been taken off their pain medications without the use of any tapering methods or guidelines. Patients who are in the chronic care management (CCM) system/program commonly utilize pain medications to alleviate their pain and discomfort. Patients in this system/program are commonly elderly and vulnerable. They may have low health literacy and limited ability to access health resources. The culmination of these disabilities and inabilities creates room for error within the health outcomes of this population.

The purpose of this project is to present a tapering protocol and guideline to the PCP's in the microsystem, to be implemented in each patient who is getting off pain medications or experiencing a reduction in pain medications. The project will encourage the utilization of this

guideline(published by the CDC) to PCP's opposed to completely taking patients off of pain medications with no other plan in place.

One of this project's main goals and aims will be to assist patients in coming off of opioids in a way that protects their holistic health, their dignity and overall well being. Patients are hoped to experience less pain and discomfort while being taken off pain medications when this tapering tool is utilized.

This portion of this literature review will discuss when it is applicable to taper patients' pain medications, and provide evidence based research on exactly how to taper a patient's pain medications. Throughout this chapter, the reader will be able to come to the understanding of what guidelines and resources are in place for patients coming off of opioids, whether that is long term or short term. For the purposes of this paper, 30 articles, webpages, papers and literature reviews were analyzed. The findings from each were scrutinized and applied to the purposes and aims of this project to provide insight and understanding.

Throughout this paper, there will be numerous references to a multitude of papers published in agreement of opiate tapering, there will also be evidence presented from researchers or articles that claim opioid tapering is not needed. One quotation that may sum up the majority of the research presented is as follows: "Consider tapering to a reduced opioid dosage, or tapering and discontinuing opioid therapy, when pain improves, the patient requests dosage reduction or discontinuation, pain and function are not meaningfully improved, the patient is receiving higher opioid doses without evidence of benefit from the higher dose, the patient has current evidence of opioid misuse, the patient experiences side effects that diminish quality of life or impair function, The patient experiences an overdose or other serious event (e.g., hospitalization, injury), or has warning signs for an impending event such as confusion, sedation,

or slurred speech, The patient is receiving medications (e.g., benzodiazepines) or has medical conditions (e.g., lung disease, sleep apnea, liver disease, kidney disease, fall risk, advanced age) that increase risk for adverse outcomes, The patient has been treated with opioids for a prolonged period (e.g., years), and current benefit-harm balance is unclear”(US Department of Health and Human Services, 2019, p. 1, 2019) Throughout this paper, this rationale will be referred to, and applicable to the microsystem in reference.

Through the use of several tapering tools and guidelines it is proven that patients have better health outcomes than patients who are rapidly discontinued or completely taken off opioids abruptly (Centers for Disease Control and Prevention, 2018). As noted by researchers within the Centers for Medicare and Medicaid services, “Opioids should not be tapered rapidly or discontinued suddenly due to the risks of significant opioid withdrawal.” (US Department of Health and Human Services, 2019) As noted by professionals working for the Centers for Medicare and Medicaid services, risks of rapid tapering include: depression and thoughts of harming oneself, acute withdrawal symptoms, an extreme exacerbation of pain, and serious psychological distress. Furthermore it is noted that patients may be more susceptible to seeking out other types of pain relief which could include illicit drug use or obtaining large amounts of illegal drugs/opioids/narcotics to provide pain relief. (US Department of Health and Human Services, 2019). Tapering is appropriate for patients taking opioids when a protocol is followed and when it is applicable to the individual patient and their health history. A tapering plan should be discussed between the provider and the patient prior to initiating the taper. Throughout guidelines published by the CDC it is recommended to start at a taper of 10% each month as the patient tolerates the taper and is still able to maintain a quality of life. This taper should be

followed closely by the provider who is caring for the patient. (Centers for Disease Control and Prevention, 2018).

### **Search Strategy**

Topics searched for the purpose of this project include: tapering guideline tool for opioid cessation, CDC guidelines for tapering opioids, pain control and opioids, pain management practices, opioids and narcotic use in chronic care patients, chronic care management guidelines and expectations, interdisciplinary teams and chronic care patients, pain management and alternative therapies, pain injections, chronic care patients and pain, opiate tapering tool and chronic care. Databases used in this literature review were the Montana State University Library CatSearch, Medline, CINAHL Ultimate, CINAHL Complete, Global Health. Key search terms that were used include: *tapering tool opioid pain management, certified clinical nurse leader, chronic care management, pain patients, pain improvement, opioid use, opioid tapering, narcotic tapering tool, alternative therapies in pain reduction*. Inclusion criteria for identified studies included: articles in the English language, articles that have been published between 2019 and 2023, articles that are peer reviewed, have peer reviewed references and focused on chronic care management in relation to opioid management. Upon researching, some articles were found to contain seminal research, these are articles that may be older than five years, in all other cases, articles will have been published within the last five years.

Numerous types of reviews were utilized in compiling data for this paper, some include, gray literature, meta-analysis, narrative reviews, systemic reviews, randomized trials, cross-sectional research design, comparative effectiveness reviews, and critical reviews. A total of 30 articles were reviewed for the purposes of this research proposal and project.

### Conceptual/Theoretical Framework

One nursing theory was utilized when developing this paper/project, the *Middle-Range Theory of Self-Care of Chronic Illness* was found to be applicable and evidence based, specific to this population. The *Middle-Range Theory of Self-Care of Chronic Illness* was published in 2012 and has been utilized in a number of facilities, projects and in the work of many Certified Nurse Leader's (CNL). ( Riegel B, Jaarsma T, Lee CS, Strömberg, 2019). The *Middle-Range theory of self-Care of Chronic Illness* “addresses the process of maintaining health with health promoting practices within the context of the management required of a chronic illness. The key concepts include self-care maintenance, self-care monitoring, and self-care management.” ( Riegel, Jaarsma, Lee, Strömberg, 2019, Abstract)

Researchers with a passion for chronic care management patients and patients suffering from a multitude of chronic illnesses Riegel , Jaarsma, and Stromberg developed the *Middle-Range theory of self-Care of Chronic Illness*. This theory has had hundreds of citations and has been widely used in facilities and programs across the globe since its development and implementation in 2012. (Riegel et al, 2019, Current State)

With the utilization and implementation of the *Middle-Range theory of self-Care of Chronic Illness*, the microsystem was evaluated and examined through a unique lens and perspective. With the model as a guideline to evaluate data and evaluate processes, areas for improvement were identified. One main goal of this model is to improve health outcomes in chronic care patients. One way to achieve this goal as it applies to the population and microsystem that was assessed, is through the use of opioid and narcotic tapering through accredited, reviewed and renowned tapering tools presented throughout this paper.

## **Search Results**

### **Gray Literature**

Gray literature was utilized in this project for the purpose of obtaining the tapering tools and guidelines. The CDC as well as the National Library of Medicine, National Cancer Institute, American Association of Colleges of Nursing were utilized to obtain information regarding opioid tapering tools, a CNL's role in opioid tapering as well as quality improvement, and information regarding alternative therapies. These websites were utilized to obtain information that is produced outside of traditional publishing networks and distribution channels. The information obtained from these sites is analyzed by the government and released to reflect the most up to date and current information without being delayed by peer reviews or lengthy publishing processes. The information obtained on these sites is trustworthy as each of the sites utilized are nationally acclaimed and renowned.

### **Comparative Effectiveness Review/Cross Sectional Reviews**

Comparative Effectiveness Reviews are systematic reviews of research that has been implemented, the review focuses on existing research in which harms and benefits of health outcomes, healthcare and patient safety are analyzed. Numerous comparative effectiveness reviews were utilized in this study to depict the importance of obtaining a tapering tool and using it opposed to abruptly stopping opioids. Additionally some studies also highlight the importance of accreditation and nursing/patient safety. Accreditation heavily weighs into the applicability of this paper as the tapering tool must be from an accredited source in order to be implemented within the microsystem. Teng and fellow associates illuminate the importance of nursing

institutions and healthcare being accredited to improve patient safety, this study is cross sectional. (Teng et al, 2012)

Furthermore, the article published by Kral and associates depicts the importance of an opioid tapering tool, as well as staff management in patient care, and closely monitoring patients after the beginning of opioid tapering. “Opioid tapering is an essential clinical tool to utilize for a variety of reasons, including safety and analgesic optimization. The need for individualized regimens reveals a corresponding need for healthcare providers who can actively manage patients throughout the process.” (Kral et al, p.1, 2022)

### **Randomized Trial**

An important and empirical study utilized in this research paper, *Chronic Care Management for Dependence on Alcohol and Other Drugs: The AHEAD Randomized Trial* presents the reader with insight regarding patients with substance abuse(including pain medications) and proposes care plans/resources for these patients to utilize in improving their overall health. In this trial there were over 500 participants evaluated and utilized for data gathering. Found in the study, “People with substance dependence have health consequences, high healthcare utilization and frequent comorbidity but often receive poor quality care overall and for dependence. Chronic care management has been proposed as an approach to improve care and outcomes.” (Saitz et al, 2013). The microsystem in question contains patients within chronic care management (CCM), therefore the study and this research paper align in design and vision.

One additional quotation of note from the study published by Saitz and associates, “CCM included longitudinal care coordinated with a primary care clinician, motivational enhancement

therapy, relapse prevention counseling, and on-site medical, addiction and psychiatric treatment, social work assistance and referrals” (Saitz et al, 2013). Throughout this informative study many options are presented as quality improvement metrics and measures to implement in the microsystem.

### **Systemic Review/Realist Reviews**

Many articles were discovered to be systematic reviews and realist reviews when researching data for the purposes of this study. Systemic and realist reviews are especially important when proving the efficacy of improvement projects and the continued need for these changes/projects to be implemented. Systematic reviews account for providing a transparent and exhaustive research approach to reviewing the primary sources of literature, commonly on any given topic. A few studies of specific note are: *Understanding Nurse-led Case Management in Patients with Chronic Illnesses: A Realist Review*, and *Differential efficacy between cognitive-behavioral therapy and mindfulness-based therapies for chronic pain: Systematic review*.

Noted by Joo and Liu, authors of *Understanding Nurse-led Case Management in Patients with Chronic Illnesses: A Realist Review*, “Worldwide, the growing population of people with chronic illnesses has incurred serious health care costs (Agency for Healthcare Research and Quality, 2017). It is estimated that in the United States, two out of three older people have two or more chronic conditions” (Joo, & Liu, 2021) This research and data is especially crucial for the reader to understand as they begin to piece together each aspect of this paper to fully understand and encompass the population this paper aims to implement the tapering tool in. Additionally, the research found by Pardos-Gascón and team is especially important to conceptualize as the microsystem utilizes many alternative therapies. The data presented in this systematic review is

essential to the quality improvement project. The microsystem currently relies heavily on alternative therapies, so being able to apply current evidence based practices regarding alternative therapies in chronic care management patients/populations is essential. (Joo, & Liu, 2021) (Pardos-Gascón et al, 2021).

### **Narrative Review:**

This paper additionally utilizes many narrative reviews to obtain current and up to date research. A narrative review article contributes as an overview, in addition to an analysis of a vast spectrum of material on specific topics of interest. (Bender, 2014, Dowell, Compton & Giroir, 2019, Dowell et al, 2022). The narrative reviews included in this paper guide the reader to better understand the need for an opioid tapering tool to be implemented.

Specifically the article published by Dowell and associates in 2019, *Patient-centered reduction or discontinuation of long-term opioid analgesics: the HHS guide for clinicians* is empirical in guiding the reader as well as healthcare teams on the exact steps to use when tapering a patient off of opioids. Noted by Dowell and associates, “Nonopioid strategies may provide equally or more effective pain relief and lower risks than opioids for most patients with chronic pain and for many with acute conditions...To help clinicians reduce risks and improve outcomes related to opioid dose reduction and discontinuation among patients prescribed opioids to manage pain (particularly chronic pain), the US Department of Health and Human Services (HHS) developed the HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics” (Dowell, Compton & Giroir, 2019). Additionally this study depicts how fast opioids can be tapered, including reducing opioids at a 10% rate each month until a patient is completely off of the medications. Some patients may

need a slower opioid taper, in which case research suggests the medications being tapered at a 7% rate, which significantly reducing a patient's risk to opioid overdose and risk of opioid-related emergency department visits or hospitalizations. (Bender, 2014, Dowell, Compton & Giroir, 2019, Dowell et al, 2022).

### **Contraindicatory Research**

A qualitative research study and review was conducted on the patient's perspective of opioid tapering. This study describes the data gathered from a large group of patients who had been put on tapering tools, the data was alarming. Included in this study, the patients experience of/with medical professionals during their opioid taper. Many patients discuss “ Clinical guidelines discourage prescribing opioids for chronic pain, but give minimal advice about how to discuss opioid tapering with patients. ” (Henry et al 2019) Throughout this qualitative study, it is found that much more information, education and data must be gathered to understand how clinicians can treat patients individually, with respect, care and evidence based practice in a more conducive, safe and personal manner.

This article, as well as all others included in this paper, should encourage the healthcare professional to act as an advocate, paving a path towards health for their patients. Additionally, this paper aims to accomplish enlightening the reader on not only why it is so important to have tapering tools in place but also how to correctly and effectively implement these to improve health outcomes.

### **CNL Role and Competencies**

The CNL is a graduate prepared nurse who has a background of advanced practice courses/achievements throughout their schooling. CNL's have a blend of didactic coursework, and clinical coursework to fully encompass the CNL role within healthcare, hospitals, collegiate programs and within the community. "All master's degree programs that prepare graduates for roles that have a component of direct care practice that includes the CNL are required to have graduate level content/coursework in the following three areas: physiology/pathophysiology, health assessment, and pharmacology...These three components reflect the current knowledge base and scope of practice for entry-level CNLs. (American Association of Colleges of Nursing, p.8-9, 2013) The role of a CNL as it applies to this project is through the implementation of quality improvement measures, appraising evidence based practice to a workplace, analyzing current research and applying them to a selected setting. Additionally, a CNL holds a place as a transformative leader within the workplace, integrating workmanship with other teams (interdisciplinary teams) and showcasing their unique skillset to better improve the outcomes for the patients under their care.

### **Current Practice and the CNL**

The purpose of this project is to present a tapering protocol and guideline to the PCP's in the microsystem, to be implemented in each patient who is getting off pain medications or experiencing a reduction in pain medications. Tapering guidelines presented in a multitude of studies (Dowell et al, 2019; Kral et al, 2022) present the need for patients to be gradually weaned off their opioids. Many studies describe the importance of following a tapering guideline as opposed to pulling patients from pre established pre-established medications with no other plan in place (Dowell et al, 2019; Kral et al, 2022). Additionally, the remaining studies(which have also been described above) enlighten and encourage the reader to visualize why it is important to

replace opioids with some type of alternative therapy. The tapering tools additionally encourage the healthcare professional to taper at a slow rate, and introduce alternative measures for pain control. The main aim of all nursing staff, especially a CNL is to create better health outcomes for their patients, communities and populations which surround them.

Further discussed and noted, in the years since the tapering guidelines were developed by the CDC and other regulatory bodies, patients have experienced increased health outcomes (Prommer et al, 2017; Covington et al, 2020; US Department of Health and Human Services, 2019). When utilizing a tapering tool, it is important to understand patients still require personal and individualized care (Centers for Disease Control and Prevention, 2018). Furthermore, it is essential that the nursing staff and nurse leaders comprehend the complexity of chronic care patients and chronic pain patients in hopes to encompass their entire holistic healthcare plans and goals. (Saitz et al, 2013; Kral et al, 2022; Reuben 2015)

Finally, the CNL is bound to the duty to perform ethical, safe and informed care for patients across the lifespan encompassing the different essentials of CNL practice. One main goal of the CNL is to decrease negative health outcomes and utilize current research to provide improved care based on current evidence and risk anticipation of patients pain and negative health outcomes(American Association of Colleges of Nursing, 2013). Additional resources were utilized to examine and APRN's role in mitigating pain, utilizing current guidelines and tools as well as alternative proven therapies in patients care plans (Rajput et al 2021; Pardos-Gascón 2021).

### **Summary**

One of the roles of a CNL is to act as an aid to quality improvement within their place of work or practice. Quality improvement measures are important to take on in each healthcare setting as a way to stay accredited and current (Algunmeeyn et al, 2020). Furthermore, the literature supports the utilization of a trained CNL in implementing new quality control, improvement measures or projects. A CNL may be best suited to implement a project such as this, a new tapering tool within the microsystem. The literature is specific in its factuality that CNL's have the bandwidth and power to help foster an environment for safe and controlled patient care while providing individuality and growth. (Bender et al, 2019; Bender, 2014; Joo et al, 2021)

Finally, the research and literature prove that utilizing an opioid tapering tool, with the trained skillset of individualized patient care, patients may have increasingly positive outcomes. The literature from 30 studies, articles and publications reflect that chronic care patients(as the population in the microsystem) would benefit from the implementation of an opioid tapering tool so that they experience less pain, discomfort, withdrawals, and health threatening outcomes.

### **Chapter 3: Overview**

The purpose of this project is to educate primary care providers (PCP) within the selected microsystem (Facility X) to utilize the proposed opioid tapering protocol and guideline. The goal of this project would be to have every PCP implement the opioid tapering tool for each patient who is stopping or experiencing a reduction in pain medications. This project will encourage the utilization of evidence-based practice regarding tapering and discontinuing opioids at a slow rate as opposed to rapid discontinuation which is the current practice. The methods used to address this problem include a microsystem assessment, patient and healthcare worker surveys and

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interviews, and a thorough literature review to understand the issue as well as proposed evidence based guidelines for providers to follow. This will be followed by educational training and meetings to educate the clinical staff who will be utilizing these guidelines.

### **Design**

This project will be proposed as an educational quality improvement (QI) project to the PCPs of the selected microsystem (Facility X). The project will utilize an educational tool that will act as a guide and informational template for providers to utilize when tapering patients off opioid pain medications. With the implementation of a taper, rather than abrupt withdrawal, patients will have increased pain management abilities, and experience less discomfort, frustration, and confusion. This project will be implemented within Facility X, with the PCPs caring for patients undergoing a reduction in their opioid pain medications.

### **Setting**

A rural healthcare facility in Montana, deemed Facility X, will host the intervention and educational QI project. This facility has a large incidence of chronic care patients and patients utilizing opioid pain medications. In Facility X, 10 out of 30 Chronic Care Management (CCM) patients (33.3%) are being abruptly pulled off their chronic pain management medications. This data was gathered from the microsystems assessment and shines light on the underlying issues within the facility including the lack of primary care providers available to follow patient care. One of the main discoveries from the microsystems assessment was the inability for patients to be seen by a PCP and have that PCP perform and document a full medication reconciliation and evaluate an appropriate care plan for discontinuing their opioids. Notably, there are over 1600 patients per one PCP in the county which Facility X is located in, which creates a unique

challenge to the **microsystem** (University of Wisconsin Population Health Institute, 2024). Due to the extreme lack of providers in the facility, patients are commonly discontinued from medications without any taper or educational plan in place. In addition to the limited staff, the new guidelines from the CDC encourage complete opioid prescription cessation. Although there is additional information in these guidelines which encourage individualized and personalized care plans for each and every patient, the PCPs are unable to perform this level of patient care and individualization. Due to the implication that opioids must be completely stopped, the PCP is utilizing the technique of abrupt withdrawal, rather than tapering due to the extremely limited staffing resources available to them.

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### **Target Population**

The target population impacted by this change is: primary care providers within facility X. It can also be argued that medical staff such as registered nurses (RNs) and certified medical assistants (CMAs) may also be the target population. The clinical staff within the PCP clinic/setting will be altering their daily workflow and tasks to accommodate this change to policy and procedure. By the PCPs engaging and participating in this educational project, their patients and their community will benefit from this new higher level of individualized care.

### **Stakeholders**

The stakeholders in this project include the patients on opioid therapy, the nurses in the primary care/clinical setting who are caring for this population and the certified medical assistants (CMA) within the PCP's office. Chronic care management (CCM) and population health are two departments specifically involved in this project and have significant buy-in for this project. Additional stakeholders would be the community as continued substance abuse and

misuse leads to increased hospitalizations which are a drain on the community and resources (Saitz et al, 2013). Pharmacies could also be potential stakeholders as they will play a role in educating patients regarding their new and tapered doses and could play a pivotal role in patient understanding and adherence to the new opioid dosage.

### **Planning**

A needs assessment was conducted in the microsystem to accurately assess the challenges, and highlight areas for improvement. Results from these assessments guide the implementation of the opioid tapering tool and allow for visualization of improvements to be made. Surveys and interviews have been conducted with staff to fully understand how this issue is affecting the facility, and community.

After the needs assessment was complete, it was apparent that there is a need for a “gold standard” tool to be implemented in the care for each patient who is experiencing a reduction or cessation in their opioid pain medications. Currently, 33.3% of chronic care management patients within the microsystem are being taken off opioids with no tapering plans in place. Primary care providers will need to use this tool for each patient's plan of care who is stopping or reducing opioids.

This project will take a large amount of buy-in and effort on auxiliary staff such as the CMAs and RNs and in the clinical setting. Additionally, PCPs will need to comprehend that their participation is crucial. Ways to encourage participation includes acknowledgement in huddles, education that increased patient satisfaction leads to better ratings, and awarding “top primary care provider” each month with feedback from patients in regard to the care they have received.

### **Decision Making**

The decision making in this project was done based on current evidence regarding opioid tapering and prescribing guidelines. The decisions are made by a team of RNs within the microsystem who have identified a need in their community. Some of the decisions stemmed from the utilization of a survey which was sent out to patients prescribed opioid pain medications to gather their insight and input. Additionally, a survey was given to clinical staff such as CMAs, RNs, and PCPs. Two pain management doctors were also interviewed and given a questionnaire (Appendix G) to fill out to gather data which led the project managers to the **assumptions and conclusions** that an opioid taper with closely followed care was needed. These assumptions and conclusions are pivotal to this project. This questionnaire was developed by staff within the facility who had experience in population health, CCM and pain management.

**Comment [AG5]:** What were these assumptions and conclusions?

### **Discovery and Expected Challenges**

From the comprehensive microsystems assessment, it was discovered that 33.3% of patients are being pulled from their opioid therapies and given no alternatives for pain management and control. This led the project lead to the critical implementation of the opioid tapering tool to be presented to the PCPs. Additionally, it was discovered through the published research that,

“prescription opioid use continues to contribute to significant morbidity and mortality in the United States. In 2017, 17,029 of the 47,600 opioid-related overdose deaths involved prescription opioids. Nearly 2 million individuals in the United States have a prescription opioid use disorder. At the same time, approximately 11% of US adults report daily pain,

and an estimated 3% to 4% use opioids long-term to help manage chronic pain.<sup>13</sup>

(Dowell, Compton & Giroir, 2019).

Due to the alarming reports of chronic pain and opioid use and misuse, the community in question needs to urgently implement standards of practice surrounding opioid tapering.

Challenges are expected to arise in this project as it may be difficult to get the providers

to change their practice. One anticipated challenge is the reluctance to change or alter practice.

Providers may be nervous to taper opioids because they are still *prescribing* opioids in order for the patient to have a dosage to taper and essentially “work with” while they are being tapered.

This may be difficult to educate the PCP on why a taper is needed to decrease the dose slowly.

One strategy in getting the PCPs to agree to change their practice would be to educate them on the dissatisfaction scores and testimonies of their patients being pulled off opioids without a doctor’s visit, and without any education on continued coping skills and pain management. An additional challenge may be getting providers who are already overworked, and limited in staff, to buy into one more task and additional education and information to learn. Educational seminars and training will be provided to all clinical staff, and it will be paid time, so this should incentivize providers to attend the seminars and retain the information provided to them.

**Comment [AG6]:** Check your margins and spacing here.

**Comment [WM7]:** These two sentences are not clear, may want to rework

### **Theoretical Framework**

The *Middle-Range Theory of Self-Care of Chronic Illness* (Appendix B) was utilized when developing this project. This theory was found to be most beneficial for this project because researchers developed this theory to target the needs and unique attributes for patients within chronic care lifestyle and disability. This theory was found to be applicable, and evidence based, specific to this population (Riegel, Jaarsma, Lee, Strömberg, 2019).

This theory specifically applies to the PCP within the microsystem as well because healthcare providers take oaths to better the health and wellbeing of people, to promote autonomy and protect patients and their rights. This theory is directly tied to promoting autonomy and self-care within populations. It is noted

“Self-care can be seen as an overarching construct built from the 3 key concepts of self-care maintenance ( e.g., adherence to self-care behaviors such as regular exercise and taking medication as prescribed), self-care monitoring ( e.g., regular measurement of changes, routine testing), and self-care management ( e.g., changing the diet or medication dose based on detection and interpretation of symptoms). The 3 concepts of self-care maintenance, monitoring, and management are closely related; therefore, the performance of sufficient self-care encompasses all 3 behaviors.” (Riegel, Jaarsma, Lee, Strömberg, 2019).

The *Middle-Range Theory of Self-Care of Chronic Illness* specifically highlights the need for patients to monitor their own symptoms, adjust their lifestyle as needed, and take their medications as prescribed. This theory acts as a road map in helping providers understand why it is so important to taper opioids and adhere to the plan of care. The theory may also offer support and reassurance to the provider as they are encouraged to also care for themselves, and ensure they are performing these tasks as listed in the above quote. Self-monitoring, self-care, and self-care maintenance.

The *Middle-Range Theory of Self-Care of Chronic Illness* theory specifically contributed to the project plan because it directly relates to the individuality of chronic pain and care management patients. These patients experience different health outcomes compared to the

traditional and “normal” patients seen in the healthcare industry. Chronic illness/care patients are unique because they have lasting health conditions which span for years. Many patients only undergo acute episodes of illness or disability throughout their life and are able to recover after each incident. Chronic care patients are experiencing pain and low quality of life daily for several years, and do not have the stamina or endurance to continually recover from each health catastrophe. Research has been developed to assess the “grit” level of patients with chronic pain, and it is discovered that, grit is a predictor of success and achievement. (Nilakantan et al, 2013). While chronic care/illness patients develop persistence, their ability to continually rebound from each health condition lessens with each catastrophe. Therefore, these patients need assistance continuing to make their appointments, remain compliant with their plan of care and assistance in their ability to comprehend their continually changing plan of care from the healthcare provider.

**Comment [AG8]:** This section is much improved. Good job!

### **Actual Implementation Process**

For this project to be implemented, there will need to be a series of specific steps, performed by specific healthcare workers.. The specific steps are outlined as follows:

#### **RN/CMA:**

**Step One:** the tapering tool will have to be cleared with medical records to ensure it fits within the confines of their measurements and systems to be placed in patient’s charts. This tool will be evidence based and per the CDC recommendations. The RN and CMA are to be included in this portion of the process because they will be implementing the physical action of putting the tapering tool into the patients physical chart. The RN and CMA must be familiar with the look, feel and formatting of the tool.

**Comment [AG9]:** What does the CMA and RN have to do with this? This step needs much more explanation and also a description of the tool. Maybe just make this step about the tool and how it will be vetted by the facility.

**Step Two:** The tool will be delivered to the primary care clinic. The RN and CMA will share this tool in the morning huddle with the PCP, prior to the meeting regarding the policy change. This will allow staff to become familiar with the tool.

**Step Three:** All staffs attendance is required at an educational seminar regarding workflow changes to accommodate opioid tapering tool in patients visits. This training will be one hour over the lunch break, held on two separate days to get all staffs' attendance. During this training, tips and tricks of utilizing this tool will be presented, as well as its importance with evidence based literature and data presented to the team. (Bender, 2014, Dowell, Compton & Giroir, 2019, Dowell et al, 2022). Refer to appendix D for a sample of educational ideas to start the conversation regarding opioid tapering.

**Comment [WM10]:** I have to wonder if maybe the education can be done over 30 minutes rather than 60 minutes?

**Step Four:** Begin implementing the project by utilizing tapering tool at each patient visit as applicable. This will be accomplished by the CMA and RN inserting the tapering tool into each patient's chart as it applies to their care. The way this will be done is by daily chart reviews by the clinical CMA, to prepare charts for the following day. If the patient is seen to have opioids in their medication list, a tapering tool will be inserted into their patient chart to prompt the provider to address this during their visit. There will also be an electronic database within the EMR, for the CMA and clinical RN to send messages to the PCP regarding patients opioid use, and patient concerns. The RN and CMA will get an additional wage increase of \$1 an hour more for their participation, work to prepare charts and mitigate patient concerns pre appointment in this role.

**Providers:**

**Step One:** Providers will be invited to listen to a guest speaker at their mandatory monthly PCP meeting. The speaker will give information about a new roll out of the tapering tool, and answer any preliminary questions providers have prior to their education luncheon seminar. Providers will hear about current local practices surrounding opioid prescribing and patient outcomes. Information regarding their ratings via Pres Ganey, and the importance of patient compliance based on those ratings will be given. During this meeting the head of Primary Care will start the conversation about work flow changes to the opioid taper implementation

**Step Two:** Providers will be sent an information follow up email, including all CDC guidelines and recommendations, with specific mention and detail of individualized plans. Providers will be given a link for opioid tapering resources sent to their emails and accessible on the portal.

**Step Three:** Providers will meet with RNs and CMAs during morning huddles and examine the newly developed tool which will be inserted in every chart prior to introducing it at the primary care clinic.

**Step Four:** All staff will be required to attend an educational seminar regarding workflow changes to accommodate opioid tapering tool into patients visits. This training will be one hour over the lunch break, held on two separate days to get all staffs' participation. During this training, tips and tricks of utilizing this tool will be presented, as well as its importance with evidence based literature and data presented to the team. (Bender, 2014, Dowell, Compton & Giroir, 2019, Dowell et al, 2022).

**Step Five:** The provider will begin using this tool and provide education to the patient during their face to face or telehealth visit. The provider will begin the opioid taper and provide applicable community based resources and support for the patient as they start this taper. The

**Comment [WM11]:** While this step is important as providers need the resources, I think you will get much better compliance and "buy in" if you can quickly present the facts and stats at a routine physician meeting of providers. They are much more likely to open an email if you have spoken to them first.

**Comment [AG12]:** This is duplicative.

provider will also clearly communicate with the pharmacy at this time regarding the reduction in opioid medications to mitigate any confusion or lapse in information.

**Follow Up:** Once the patient has finished their taper, within one month, they will be given a survey via mail, to complete and give feedback as to how this process worked. This data can be used to further improve the delivery and education of this tapering tool implementation. Six months after the patient's taper has been completed, they will have a follow up with the PCP to address any concerns and gather health data for future project modifications. One year post taper will be a final visit with the PCP to discuss continued healthcare needs and concerns.

**Budget**

The budget for this project will include a pay raise for CMAs, RNs, the cost of printing, staffing costs, the cost of training and education, as well as the incentive gift cards for patient participation.

**Table 1: Budget for tapering tool implementation.**

Educational Cost	Gift Card Cost	Printing	Staffing
Staff: 25 individuals Time: 2 hours	Patients: 10 3 Gift cards a piece	Forms printed: 1500	One CMA, One RN \$1 more an hour. Additional two hours of work a week(two hours for RN, two hours for CMA) to

**Comment [WM13]:** I am not clear in this budget with staffing costs. I know staff will be paid \$1.00 more hourly, I thought it was for a full shift which is \$8.00 per shift per staff member? This is not clear.

			implement this change of work flow. Budget encompasses \$1 more an hour for two staff members for an entire year.
Average of \$40 an hour Total: \$2,000	Gift cards: \$5 Follow up, 1 month, 3 months, 6 months Total: \$150	Cost per print: 0.25 cents Total: \$375	Additional \$4 a week in staffing costs 4x52 (yearly costs) Total: \$208

Overall costs for the project: \$2,733, budget covers an entire year of costs because it will take at least 10 months to implement the full taper(10% each month, 100% taper after 10 months). Patients are required to follow up at twelve months, so the budget encompasses one full year.

**Comment [AG14]:** Where is the timeline and you need a better description of the tapering tool.

**Evaluation Tool and Outcome Measures**

Evaluation of this project will occur at one month post opioid cessation; six months post opioid cessation and one year post opioid cessation. These milestones are important to assess the functioning of the patient. Patients will be given surveys at each one of these times, these surveys will include evidence based tools and questionnaires including: Chronic Pain Coping Inventory Survey, Coping Strategies Questionnaire, Sleep Problems Questionnaire (SPQ), Treatment Satisfaction Survey. See samples in Appendix H. These tools have been proven to provide

**Comment [WM15]:** Restate the goal of your project here. I thought the idea was to implement a tapering tool not to ensure patients are pain free after one year of tapering? You may want to focus this evaluation on the goal, you can always add patient outcomes at a later step in the project, keep it simple.

**Comment [WM16]:** I don't think you need this third evaluation

adequate and relevant results/information for patients who are being taken off opioid pain medications (Murphy et al, 2013). To improve compliance and participation in these surveys, patients will be awarded a \$5 gift card to the hospital cafe. The patient will return the questionnaire/survey and then they will be eligible to receive their \$5 gift card the next time they come in.

The outcome measures of this project are: compliance by the PCP in utilizing this tapering tool, increased utilization of opioid tapering rather than abrupt discontinuation (this will be tracked by current tracking programs in place at the facility), increased compliance to opioid tapering, These outcomes will be measured and determined by the survey and questionnaire results. Knowledge and educational gaps will also be identified by the data compiled and attained from these questionnaires. Please refer to Appendix E for a sample questionnaire.

### **Summary**

Many efforts have been taken to discontinue opioid prescription in the last decade, including the new guidelines given by the CDC (CDC, 2022). While opioid prescribing is becoming a less frequent occurrence, opioid tapering implementation needs to be emphasized as an integral and crucial part of opioid discontinuation. The PCPs in Facility X hold the key to a better quality of life for the patients they care for. This can be accomplished with an opioid tapering guideline.

### **Chapter 4: Introduction**

The purpose of this project was to educate primary care providers (PCP) within the selected microsystem (Facility X) to utilize the proposed opioid tapering protocol and guidelines. The goal of this project would be to have every PCP implement the opioid tapering tool in each

patient who is experiencing a reduction in pain medications. An opioid tapering schedule of 10% each month until the opioid dose is zero and new evidence-based guidelines for opioid tapering and cessation were presented and addressed to the healthcare staff and providers in the chronic care management and population health departments. The following sections addressed in this chapter are a project summary, discussion, implications and recommendations, and conclusion. The project summary will include significant findings and the conceptual framework as it applies to the population selected. Additionally, stakeholders and the impact on the community will be discussed. Throughout the remainder of the paper, discussion regarding the literature, evidence based practice and how it supports the implementation of the opioid tapering tool are presented. Furthermore, specific recommendations and templates are included to guide physicians in achieving more optimal care for their care management populations.

**Comment [WM17]:** Good, simple and clean goal, I don't recommend adding patient outcomes to this goal.

### **Project Summary**

The purpose of this project was to educate the staff and primary care providers in the microsystem on the CDC tapering guidelines (see Appendix F) . Chronic pain management and chronic care management patients are commonly not able to access the medications and therapies they need. This has devastating consequences on their overall health. Improper case/care management of these patients can lead to detrimental health outcomes not only for the patient, but also for the community. With inadequate education, medication management, and close follow up by a healthcare team, patients utilizing opioids are at a significantly higher risk for emergency room visits, hospitalizations, and adverse health outcomes. On average patients using opioids are seen in the emergency department 7.1 times more often than the general population. (Lewer et al, 2020).

The literature shows the monumental financial impact opioid use and misuse has on society “The total annual Opioid Use Disorder (OUD)-related costs to the U.S. in 2018 were \$786.8 billion to society, \$93 billion to taxpayers, and \$89.1 billion to the healthcare sector”(Murphy, 2020, Abstract). The rationale continues to grow for providers to eliminate opioid prescription, and the CDC guidelines allude to opioid prescription cessation, but many providers have taken these guidelines too literally. The CDC guidelines recommend developing a personalized, individualized care plan to slowly taper opioid use over a long period of time for optimal patient care. A balance between opioid prescription and discontinuation must be met to address this discrepancy in patient care.

This project encompassed questionnaires, surveys, patient and provider interviews, a literature review, and opioid tapering tool development. The tasks this project set out to achieve were ambitious and impactful not only for the facility but also for the community. Surveys, data collection, and questionnaires were completed and evaluated. The information gathered from these sources led project leaders to create budgets, propose a standard opioid tapering tool based on CDC recommendations and schedule meetings with clinical staff and PCPs. The exact results are to be determined as the meetings and roll out of this project are in process. It is projected that there will be 80% PCP adherence rate to the opioid tapering tool in the first year, and 100% adherence rate in the second year.

### **Theory**

The patients within this microsystem are chronic pain patients, typically of older age, and of little health literacy. The PCPs in this microsystem must address these patients as they meet the patient where they are. The *Middle-Range Theory of Self-Care of Chronic Illness* suits this

project best as this theory specifically highlights the need for patients to monitor their own symptoms, adjust their lifestyle as needed, and take their medications as prescribed. This theory is extremely beneficial for the providers to understand and apply to their practice as it encourages self-management and self-care. With patients having specific and tangible buy in, they can improve their health for the lifetime.

### **Impact**

The expected impact of this project on the chronic pain patients and the community will result in decreased opioid misuse and abuse disorder cases. While change is difficult, and it will take some adjustment on all accounts, a decrease and eventual cessation of opioid use will benefit patients, and other stakeholders such as the clinical staff, PCP, pharmacies, and the community. Opioid addiction is a critical issues that pagues our communities. Thedecrease in opioid prescription will lessen the chance the community has for developing a larger issue with opioid addiction. In addition, there will be less of a financial impact on the community as many emergency room visits are linked to opioid misuse (Lewer et al, 2020). By creating a closely monitored tapering schedule, with follow up, patients will be more educated, have clear instructions to follow, and more resources to utilize.

Additional impact expected from this project is PCP understanding and utilization of the opioid tapering tool for new patients and established patients alike. The true impact will be noticeable at the one, three, and six month follow ups with patients who have been tapered off their opioid medications. It is also expected that if providers successfully implement current tapering standards, they may be open to future quality improvement initiatives.

### **Discussion**

The extensive literature search for this project indicated support of opioid cessation. The new CDC guidelines released in 2022, encouraged providers to never prescribe opioids, and many PCPs take this literally when assuming care for patients switching physicians. In Community X the PCPs who had assumed care of chronic pain patients often failed to complete an extensive medication reconciliation and consider previously prescribed opioids. The CDC recommends individualized care plans and encourages providers to treat patients with a personalized approach.

Guidelines are best practice for patient outcomes. As previously discussed in this paper, educational seminars and trainings will be held to educate the PCP on developing personalized opioid tapering schedules for each patient prescribed opioids. The PCPs will utilize the guidelines to create a tapering schedule for every appropriate patient. (CDC, 2022).

Additionally in the literature, it is found “Opioid tapering is an essential clinical tool to utilize for a variety of reasons, including safety and analgesic optimization. The need for individualized regimens reveals a corresponding need for healthcare providers who can actively manage patients throughout the process” (Kral et al, p.1, 2022). This project specifically encourages providers to use an opioid tapering tool as it will provide the best outcome for the patient. Upon initiating and utilizing the questionnaire as well as the interviewing process, some barriers include limited staffing to follow patients' care.

**Comment [AG18]:** See comment above about this data.

### **Anticipated Outcomes**

The anticipated outcomes of this project were increased primary care providers' use of opioid tapering guidelines, acceptance of the new opioid tapering tool, increased patient compliance with opioid taper schedule, decrease in emergency room visitation related to pain crisis from opioid cessation, and increased patient satisfaction with care team and PCP as

evidenced by an increase in Pres Ganey patient satisfaction scores for the specific clinic and specific PCP.

### **Challenges and Benefits**

Expected challenges with the implementation of this project include patients' initial dissatisfaction, miscommunication, misunderstanding, reluctance to change, reluctance to initiate taper from PCP, and staff frustration. Additionally, expected challenges include the ability and willingness of the PCPs to change their practice, and alter their daily workflow.

These challenges are expected because staff will be asked to add additional tasks to their workload, and the PCPs will be asked to change their current practice. In a study comparing staff's readiness to change, frustrations with current practice, and acceptance of new programs/technologies, it is found that staff wanted to change, but were reluctant to leave the old system (Tilley, et al, 2024). This study may be used as an example of the anticipated challenges and barriers facing facility X in the adoption of change to include an opioid taper in everyday practice.

The benefits for facility X after the implementation of this project are vast. It is predicted that patients will over time have an increased health literacy and feel more empowered to make informed decisions in relation to their own healthcare. This is one of the main aims of the *Middle-Range theory of self-Care of Chronic Illness*. The *Middle-Range theory of self-Care of Chronic Illness* specifies that some main goals are to promote autonomy and improved health based on the investment and decision making of patients ( Riegel, Jaarsma, Lee, Strömberg, 2019).

Furthermore, benefits from this project include acceptance and utilization of the opioid tapering tool to create lasting rapport, trust and communication between PCP and patient,

decreased hospitalizations related to opioid use and misuse, increased patient satisfaction with follow up care and communication from the healthcare team.

### **Implications and Recommendations**

#### **Educational Gaps**

Prior to the beginning of this project, there was substantial room for improvement in communication between patients and providers. Additionally, there was a lack of understanding of the CDC opioid prescription guidelines released in 2022. Providers were encouraged to not prescribe any type of opioids. Additionally, due to shortages providers did not have the bandwidth to compile medical records and medications when assuming care for patients to create a holistic care plan which addressed their chronic pain. This led to a large educational gap in patients care and between medical staff.

Furthermore, PCPs did not understand the need to change their practice and were unsure of their role in this new proposed change. Medical staff such as RNs and CMAs were also unsure what they could do in their role to improve the care their patients on opioids were receiving.

Implications from this project on policy and practice include a change of work flow, increased time in patient appointments, increased time to chart, and increased communication needed between nursing staff, PCP and pharmacies. The PCPs will need to alter their prescribing, alter their charting and documentation to accommodate for the change in practice of adding the opioid tapering schedule. These are challenges as the facility is already understaffed, but the proposed pay increase for staff should help mitigate this issue.

**Comment [AG19]:** This section could use a little more work. The implications seem weak.

#### **Additional Projects and Research**

One specific recommendation after the implementation of this project would be to encourage the facility when hiring new primary care providers, to include the opioid tapering

tool and guidelines in their orientation. If the new PCPs can get this training during their onboarding, and immediately include this in their practice, there will be less complications as their employment continues. With training the PCP initially, may immediately include the chart prep, conversation with patients new to them regarding opioid tapering, and understand the continued need to check in frequently with patients. Once the standard tapering guidelines are successfully implemented into practice, project focus can shift to patient outcomes and safety. A final recommendation would be to have the quality measures staff member monitor the CDC's website and recommendation center for changes in opioid prescription practice. The PCPs may also monitor their staff's satisfaction and burn out risk these additional tasks could potentiate.

### Conclusion

Opioid use and misuse are leading causes of death in people worldwide. Efforts have been taken to discontinue opioid prescription in the last decade, including the new guidelines given by the CDC (CDC, 2022). While opioid prescribing is becoming a less frequent occurrence, opioid tapering implementation needs to be emphasized as an integral and crucial part of opioid discontinuation. Healthcare staff should be adequately educated and trained in all options related to pain relief and optimization in patients who suffer from chronic and acute pain.

This project adequately addressed the discrepancy in opioid abrupt discontinuation. During the Transfer of Care (TOC) or assumption of new patients, the PCP will be able to competently assess and care for their patients who are on opioid pain management therapy. This project compliments a comprehensive plan to address opioid use and misuse through educational seminars, alteration in chart prep, online portal access and information regarding opioid prescription rules, regulations, and recommendations. By providing PCPs the information, and

**Comment [AG20]:** Write this out - you haven't used this abbreviation before.

training to include opioid tapers into their daily practice, patients will have a better chance at long term success.

### **CNL Competency**

The role of a master's prepared nurse specializing in clinical nurse leadership, previously introduced as a CNL, is to ignite change within the healthcare facility that provides employment for the CNL. A CNL has the capability to be specialized in healthcare facility transformation, evidence-based practice implementation, teamwork, leadership, and ability to analyze current research and apply it to a microsystem or selected setting. Specific CNL competencies directly related to this project include;

“Participate in the design and implementation of new models of care delivery and coordination...Evaluate the efficacy and utility of evidence-based care delivery approaches and their outcomes at the microsystem level...Collaborate with healthcare professionals, including physicians, advanced practice nurses, nurse managers and others, to plan, implement and evaluate an improvement opportunity.” (American Association of Colleges of Nursing, p. 11, 2013).

A CNL has and always will be an advocate for change, improved patient care and safety, and continue to encourage optimal health within their community through evidence-based research, and quality improvement project implementation. This project has the potential to change the lives of patients suffering from chronic pain, drastically improve the well-being of the community as a whole by facilitating close, personalized and competent healthcare which will exponentially improve patients' overall health and wellbeing.

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**Comment [AG21]:** Be sure to check if all of your references are in proper APA format.

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## Appendix A

### CDC Tapering Guidelines Sample

“This clinical practice guideline includes 12 recommendations for clinicians who are prescribing opioids for outpatients aged  $\geq 18$  years with acute (duration of  $< 1$  month), subacute (duration of 1–3 months), or chronic (duration of  $> 3$  months) pain, excluding pain management related to sickle cell disease, cancer-related pain treatment, palliative care, and end-of-life care (Box 3). The recommendations are not intended to be implemented as absolute limits of policy or practice across populations by organizations, health care systems, or government entities.” (Dowell et al, 2022)

In summary, the categorization of recommendations was based on the following assessment:

- A number of nonpharmacologic treatments and nonopioid medications are associated with improvements in pain, function, or both that are reportedly comparable to improvements associated with opioid use (7–11).
- Evidence exists that multiple noninvasive nonpharmacologic interventions improve chronic pain and function, with small to moderate effects in specific pain conditions, and are not associated with serious harms. Compared with medication treatment, for which benefits are anticipated while patients are taking the medication but are not usually expected to persist after patients stop taking the medication, multiple noninvasive nonpharmacologic interventions are associated with improvements in pain, function, or both that are sustained after completion of treatment (9).
- Nonopioid drugs, including serotonin and norepinephrine reuptake inhibitor (SNRI) antidepressants, pregabalin or gabapentin, and nonsteroidal anti-inflammatory drugs

(NSAIDs), are associated with small to moderate improvements in chronic pain and function. Drug class-specific adverse events include serious cardiovascular, gastrointestinal, or renal effects with NSAIDs and sedation with anticonvulsants (8).

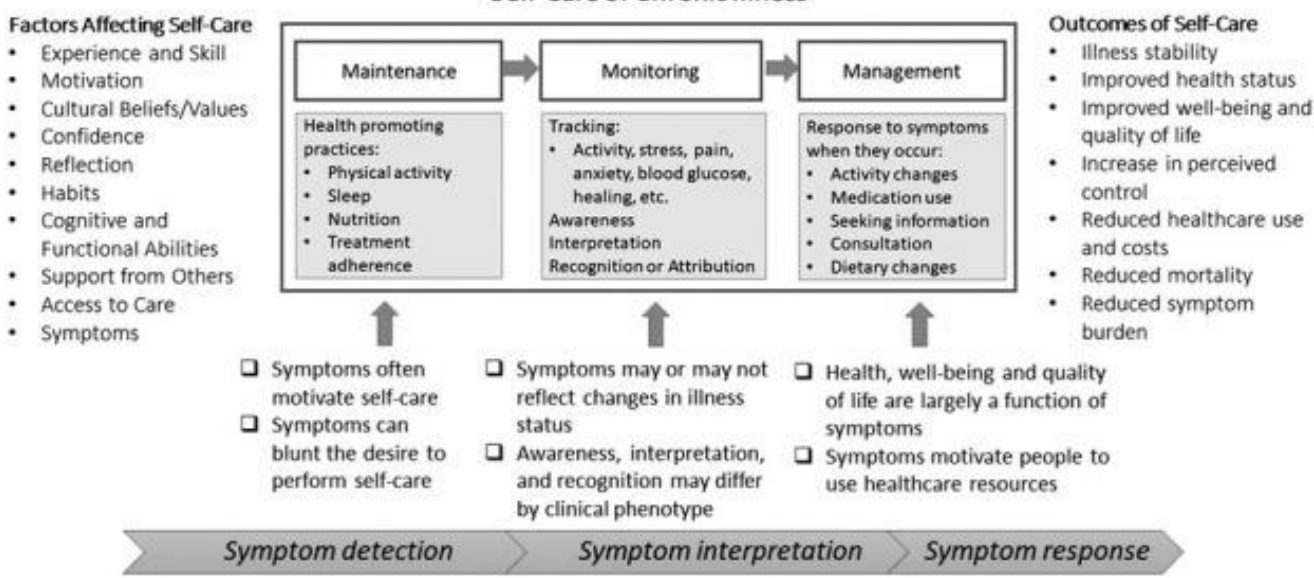
- Opioid therapy is associated with similar or decreased effectiveness for pain and function versus NSAIDs across multiple common acute pain conditions (10). Opioid therapy is associated with small improvements in short-term (duration of 1 to <6 months) pain and function compared with placebo, with increased short-term harms compared with placebo, and with evidence of attenuated pain reduction over time (between 3 and 6 months versus between 1 and 3 months) (10). Evidence exists from observational studies of an association between opioid use for acute pain and long-term opioid use (10). Evidence on long-term effectiveness of opioids remains very limited (7); a long-term (12 months) randomized trial of stepped therapy for chronic musculoskeletal pain found no difference in function and higher pain intensity after starting with opioid therapy compared with starting with nonopioid therapy (74). Evidence exists of increased risk for serious harms (including opioid use disorder and overdose) with long-term opioid therapy that appears to rise with increase in opioid dosage, without a clear threshold below which there is no risk (7).
- No validated, reliable way exists to predict which patients will experience serious harm from opioid therapy and which patients will benefit from opioid therapy (7).
- Discontinuing opioids after extended periods of continuous opioid use can be challenging for clinicians and patients. Tapering or discontinuing opioids in patients who have taken them long term can be associated with clinically significant risks (68), particularly if

opioids are tapered rapidly or patients do not receive effective support.” (Dowell et al, 2022)

**Appendix B**

Middle Range Theory Of Self Care

**Self-Care of Chronic Illness**



Riegel, Jaarsma, Lee, Strömberg, 2019

**Appendix C**

Pocket Guide

“Consider tapering to a reduced opioid dosage or tapering and discontinuing opioid therapy when your patient

- requests dosage reduction

- does not have clinically meaningful improvement in pain and function (e.g., at least 30% improvement on the 3-item PEG scale)
- is on dosages  $\geq 50$  MME\*/day without benefit or opioids are combined with benzodiazepines • shows signs of substance use disorder (e.g. work or family problems related to opioid use, difficulty controlling use)
- experiences overdose or other serious adverse event
- shows early warning signs for overdose risk such as confusion, sedation, or slurred speech.” (CDC, 2018)

### Appendix D

## Opioid Tapering Flow Sheet

**START HERE**

Consider opioid taper for patients with opioid MED > 90 mg/d or methadone > 30 mg/d, aberrant behaviors, significant behavioral/physical risks, lack of improvement in pain and function.

- 1 Frame the conversation around tapering as a safety issue.
- 2 Determine rate of taper based on degree of risk.
- 3 If multiple drugs involved, taper one at a time (e.g., start with opioids, follow with BZPs).
- 4 Set a date to begin and set a reasonable date for completion. Provide information to the patient and establish behavioral supports prior to instituting the taper. See OPG guidelines.

**OPIOID TAPER**

**Opioids**

Basic principle: For longer-acting drugs and a more stable patient, use slower taper. For shorter-acting drugs, less stable patient, use faster taper.

- 1 Use an MED calculator to help plan your tapering strategy. Methadone MED calculations increase exponentially as the dose increases, so methadone tapering is generally a slower process.
- 2 Long-acting opioid: Decrease total daily dose by 5–10% of initial dose per week.  
Short-acting opioids: Decrease total daily dose by 5–15% per week.

(Michigan Safer, 2024)



**Appendix E**

Coping Strategies Questionnaire

“This 27-item questionnaire measures the use of strategies for coping with pain by assessing six domains: Distraction; Catastrophizing; Ignoring pain sensations; Distancing from pain; Coping self-statements; and Praying. Patients rate the frequency of their use of the specific strategies using a seven-point Likert scale ranging from 0 “Never do that” to 6 “Always do that”; each domain is scored separately, with higher scores indicating greater use” (Monticone et al, 2014).

**Appendix F**

Sample opioid taper schedule.

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
Opioid dose decreased by 10% from initial dosage.	Opioid dose decreased by 10% from last dosage.(20% from initial dosage)	Opioid dose decreased by 10% from last dosage.(30% from initial dosage)	Opioid dose decreased by 10% from last dosage.(40% from initial dosage)	Opioid dose decreased by 10% from last dosage.(50% from initial dosage)	Opioid dose decreased by 10% from last dosage.(60% from initial dosage)	Opioid dose decreased by 10% from last dosage.(70% from initial dosage)	Opioid dose decreased by 10% from last dosage.(80% from initial dosage)	Opioid dose decreased by 10% from last dosage.(90% from initial dosage)	Opioid is discontinued completely.

**Appendix G**

This is a sample of what questions were asked to the PCPs and clinical staff in the microsystem.

Do you care for patients on opioids?

Do you prescribe opioids? Why or why not?

Do you taper opioids?

Do you do a full medication reconciliation on established patients?

Do you do a full medication reconciliation on new patients?

Do you have time to care for patients?

On a scale of 1-10 do you feel you have the resources to do your job well? 1 being no I have 0 resources, 10 being yes, I am supported and have the resources I need.

Have you read the CDC 2022 opioid prescribing guidelines?

Do you feel like you are appreciated at your job?

Do you feel you make a difference at your job?

Would receiving a pay raise incentivize you to add tasks into your workflow?

Sample of 27 questionnaire.

Item	(Loading)	Rosen	Swar	Tuttle
<b>Factor 1: Distraction</b>				
3. I try to think of something pleasant.	(.545)	DA	—	DA
30. I replay in my mind pleasant experiences in the past.	(.678)	DA	DIS	DA
31. I think of people I enjoy doing things with.	(.753)	DA	DIS	DA
43. I think of things I enjoy doing.	(.766)	DA	DIS	DA
45. I do something I enjoy, such as watching TV or listening to music.	(.666)	IBA	DIS	—
<b>Factor 2: Catastrophizing</b>				
5. It's terrible and I feel it's never going to get any better.	(.723)	CAT	CAT	CAT
12. It's awful and I feel that it overwhelms me.	(.768)	CAT	CAT	CAT
14. I feel my life isn't worth living.	(.677)	CAT	CAT	CAT
28. I worry all the time about whether it will end.	(.690)	CAT	CAT	CAT
38. I feel I can't stand it anymore.	(.768)	CAT	CAT	CAT
42. I feel like I can't go on.	(.702)	CAT	CAT	CAT
<b>Factor 3: Ignoring Pain Sensations</b>				
20. I don't think about the pain.	(.597)	IS	IS	IS
24. I don't pay any attention to it.	(.733)	IS	IS	IS
27. I pretend it's not there.	(.653)	IS	—	—
35. I just go on as if nothing happened.	(.574)	IS	IS	IS
40. I ignore it.	(.697)	IS	IS	IS
<b>Factor 4: Distancing from Pain</b>				
1. I try to feel distant from the pain, almost as if the pain was in somebody else's body.	(.634)	RS	RS	—
18. I try not to think of it as my body, but rather as something separate from me.	(.790)	RS	RS	RS
34. I imagine that the pain is outside of my body.	(.805)	RS	RS	RS
46. I pretend it's not a part of me.	(.728)	RS	RS	RS
<b>Factor 5: Coping Self-Statements</b>				
6. I tell myself to be brave and carry on despite the pain.	(.705)	CSS	—	IS
8. I tell myself that I can overcome the pain.	(.597)	CSS	—	IS
23. I tell myself I can't let the pain stand in the way of what I have to do.	(.647)	CSS	IS	IS
37. Although it hurts, I just keep on going.	(.610)	CSS	IS	IS
<b>Factor 6: Praying</b>				
17. I pray to God it won't last long.	(.853)	PH	PH	PH
32. I pray for the pain to stop.	(.810)	PH	PH	PH
41. I rely on my faith in God.	(.826)	PH	PH	PH
<b>Factor 7: Increasing Activity</b>				
2. I leave the house and do something, such as going to the movies or shopping.	(.570)	IBA	DIS	—
16. I walk a lot.	(.703)	IBA	—	—
<b>Factor 8: Hoping</b>				
15. I know someday someone will be there to help me and it will go away for awhile.	(.665)	PH	PH	PH
21. I try to think years ahead, what everything will be like after I have gotten rid of the pain.	(.554)	PH	—	DA
25. I have faith in doctors that someday there will be a cure for my pain.	(.687)	PH	—	PH
<b>Factor 9: Reinterpreting Pain Sensations</b>				
4. I don't think of it as pain, but rather as a dull or warm feeling.	(.600)	RS	RS	RS
10. I count numbers in my head or run a song through my mind.	(.505)	DA	—	RS
11. I just think of it as some other sensation, such as numbness.	(.668)	RS	RS	RS
<b>Items dropped:</b>				
7. I read.		IBA	—	—
9. I take my medication.		IPB	—	—
13. I play mental games with myself to keep my mind off the pain.		DA	—	—
19. I relax.		IPB	—	—
22. I tell myself it doesn't hurt.		IS	—	IS
26. No matter how bad it gets, I know I can handle it.		CSS	IS	IS
29. I lie down.		IPB	—	—
33. I take a shower or a bath.		IPB	DIS	—
36. I see it as a challenge and don't let it bother me.		CSS	IS	IS
39. I try to be around other people.		IBA	DIS	—
44. I do anything to get my mind off the pain.		IBA	—	DA
47. I do something active, like household chores or projects.		IBA	—	—
48. I use a heating pad.		IPB	—	—

Rosen = Rosenstiel and Keefe, 1983 (ref. 8); Swar = Swartzman et al., 1993 (ref. 10); Tuttle = Tuttle et al., 1991 (ref. 9); DA = Diverting Attention; IBA = Increasing Behavioral Activity; CAT = Catastrophizing; IS = Ignoring Pain Sensations; RS = Reinterpreting Pain Sensations; CSS = Coping Self-Statements; PH = Praying and Hoping; IPB = Increasing Pain Behavior; DIS = Distraction.

(Monticone et al, 2014).