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Policy Analysis: Appropriate Opioid Prescribing Practices for Post-Surgical Patients

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A clinical research project submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Doctor of Nursing Practice

School of Nursing

December 2020

FACULTY COMMITTEE:

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Dedication

To all the patients who could potentially benefit from evidence-based policies. May we move away from old practices and unlock the promise of improvement through policy changes.

Acknowledgment

I would like to express sincere gratitude for the support of my family, friends, and professors. Completing this Doctorate of Nursing achievement marks a significant milestone in my life and career, which would not have happened without their endless reassurance and unwavering confidence in my abilities, making this journey successful.

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Abstract

The pervasiveness of legally prescribed opioids in the United States has led to increased post-surgical patients succumbing to opioid dependence. There is a vast disparity in pain management practices across clinical settings. The lack of well-defined policies specifying opioid prescribing practices for post-surgical patients has created inconsistency among providers. This situation creates a risk for misuse and long-term opioid dependence for patients. This policy analysis aims to implement an evidence-based opioid prescribing policy for post-surgical patients to improve current opioid prescribing practices and implement a best practice culture to reduce excessive opioid practices. Collins (2005) health policy analysis adapted from Bardachs eightfold path to more effective problem solving (2000) guided the assembly and comparison of three evidence-based policies to reduce adverse effects of overprescribing practices with opioids. Three policy options assessed prescribing guidelines, patient risk assessment tools, and multimodal analgesia therapy with the intent to implement one or more.

Keywords: dependence, opioids, policy analysis, post-surgical patients, opioid prescribing guidelines, risk assessment, pain management.

Introduction

This policy analysis will address and evaluate policy options to improve opioid prescribing practices identified at a community hospital located in Portsmouth, Virginia. According to the Centers for Disease Control and Prevention (CDC), approximately 44 people per day die in the United States of opioid prescription overdoses, more broadly, resulting in more than 16,000 deaths annually (National Institute on Drug Abuse, 2017). The Virginia Department of Health (2017) dashboard shows the state mortality rates related to an opioid overdose at 5.9% per 100,000 people; in Portsmouth, Virginia, the rate was 11.5%. The National Academy of Medicine, 2020, recommends prescribing guidelines that align and promote judicious opioid prescribing practices. Currently, the hospital does not have a policy that specifies opioid prescribing practices. The eightfold path to policy analysis by Bardach (2000) and the adapted health policy methodology by Collins (2005) guided the policy evaluations to identify evidence-based prescribing practices for post-surgical patients. This policy analysis includes geographical, political, and historical-cultural aspects of the community hospital located in the Hampton Roads region of Virginia.

Background

In March 2015, the Department of Health and Human Services released an Issue Brief in the United States describing evidence-based priorities regarding opioids (HHS, 2015). The initiative contained two broad goals: 1) reducing opioid overdoses and overdose-related mortality, and 2) decreasing the prevalence of opioid use disorders. In October of 2015, President Obama announced federal, state, local, and private-sector

efforts to address the prescription drug abuse and heroin epidemic. In 2016 the State of Virginia established a firm policy to curtail societal opioid misuse. In November of 2016, the Virginia State Health Commissioner, Dr. Marissa Levine, declared a Public Health Emergency for Virginia because of the opioid addiction epidemic. In 2017 the Virginia Board of Medicine adopted recommendations for acute surgical procedural pain prescribing, advocating for a fourteen-day supply of opioids or less.

The United States Senate introduced bill H.R.5009 in 2018, requiring the Department of Health and Human Services (HHS) to disseminate to health care providers annually updated patient history of opioid addiction in a patient's medical record. In the same year, Virginia Governor Northam issued an executive order creating the Advisory Commission on Opioids and Addiction to address prevention issues, including limited prescription opioids for misuse (Commonwealth of Virginia). In October of 2018, President Trump signed into legislation the "Support for Patients and Communities Act," addressing the opioid crisis, including treatment, and prescribing practices (American Hospital Association). Upholding the Code of Ethics to prevent no harm, the American Nurses Association (2018) issued a brief outlining a proposal to improve the opioid epidemic on a national level due to the severity of prescription opioid influence on patient outcomes.

The Centers for Disease Control Annual Surveillance report (2018) highlights patient-centered practices with opioids that center on three main emphases: 1) Selection of non-pharmacologic therapy, nonopioid pharmacologic treatment. 2) Opioid selection, dosage, duration, follow-up, and discontinuation. 3) Assessing risk and addressing harms

of opioid use to evaluate risk factors for opioid-related harms and ways to mitigate patient risk. However, given the lack of institutional policy, many healthcare facilities do not have a consistent practice that correlates with the Center for Disease Control and Prevention recommendations.

The National Institute of Drug Abuse (2018) has highlighted that healthcare costs have increased tremendously due to the lack of attention regarding this illness related to preventative care, management, and education. The Centers for Disease Control and Prevention estimates that the total economic burden of prescription opioid misuse alone in the United States is \$78.5 billion a year, including healthcare costs, lost productivity, addiction treatment, and criminal justice involvement (CDC, 2019).

Analysis Methodology

Collins method for health policy analysis (2005) assisted in guiding this policy analysis. Collins adapted (Bardach, 2000) eight-step policy analysis created for public policy analysis. The adapted eight-step method provides a process for analyzing policies specific to public health policy matters. This policy analysis applied the following eight-steps comprised by Collins (2005):

1. Define the Context
2. State the problem
3. Search the evidence
4. Consider different policy options
5. Project the outcomes
6. Apply evaluative criteria
7. Weigh the outcomes
8. Make the decision

The eight steps establish an all-encompassing summary of the facility and community in which the problem exists. Evidence-based research will assist in identifying policy options to address the stated problem. Once conducive policy options are selected, outcomes will project how each policy will support the stated problem. Criteria associated with public health risk factors, policy adaption, implementation feasibility, and economic impact and benefits outlined in the Centers for Disease Control and Prevention policy framework evaluated this policy analysis. This analysis aims to identify a policy to provide the best opioid prescribing practices to sustain and support patient and public health needs.

Define the Context

Based on the Community Health needs assessment data, the Health Care system has committed to improving the community's needs. Health care improvement efforts have focused on patient welfare to reduce opioid dependence and addiction in the community by establishing baseline opiate frequencies for the emergency department, inpatient, and outpatient. The goal is to reduce the prescribing of opiates by 5% by December 2021 and 10% by December 2022. The projected goal is to identify the scope of opiate use within the facility to effectively reduce the incidence of substance abuse and improve safe prescribing practices.

The hospital located in the Hampton Roads region of Virginia is a 346-bed not-for-profit acute care community hospital that serves approximately 432,000 residents primarily from Portsmouth, Chesapeake, and Suffolk. Overall, the Portsmouth

community experiences higher unemployment levels than any city in the State of Virginia, with Portsmouth having the highest unemployment. Median income is below the state average, with City having a higher unemployment rate than other Virginia cities. The percentage of children in single-parent households and living in poverty is above the state average. The Community has a higher rate of hospitalizations due to mental health, almost doubling the state average. Data from the 2019 Community Health Needs assessment identifies Portsmouth as a health professional shortage area for primary care and mental health. Health issues affecting the community are substance abuse (51.86%), behavioral and mental health ranking number one (59.6%).

State the Problem

The community hospital located in the Hampton Roads region does not have a policy that specifies opioid prescribing practices, creating the potential for postoperative complications and opioid dependence. Data from the CDC (2018) shows the current opioid prescribing rate in Portsmouth at 83.8%. The National Academy of Medicine, 2020, recommends prescribing guidelines that align and promote cautious opioid prescribing practices. This policy analysis aims to establish an evidence-based opioid prescribing policy featuring best practices for post-surgical patients in this Hampton Roads region.

Search for the Evidence

Three studies show effectiveness in implementing prescribing guidelines. Hill et al. (2018) conducted a study (n=234) at Dartmouth Hitchcock Medical Center. The study

evaluated patients being discharged to home and the quantity of inpatient opioid usage the day before discharge. Eighty-five percent (198 patients) were prescribed an opioid at discharge; patients consumed 38% of the prescribed pills. PredischARGE consumption correlated well with post-discharge utilization. Implementation of a prescribing guideline decreased the number of opioid drugs being prescribed to patients by 40%.

Similarly, Howard et al. (2018) compared postoperative opioid prescription sizes and patient consumption (n=2392). Data revealed that prescription size had the strongest association with opioid consumption after surgery, demonstrating that patients used an additional five pills for every ten extra pills prescribed. Two significant findings described the study; first, opioids were substantially over-prescribed after standard surgical procedures (30 pills; interquartile range, 27-45 hydrocodone/acetaminophen compared to 9 pills; IQR 1-25 pills; $P < .001$). Secondly, the quantity of opioid prescribing is associated with higher patient-reported opioid consumption even after controlling postoperative pain, with 0.53 more pills (95% confidence interval, 0.40-0.65; $P < .001$).

Finally, Weiner, Price, and Atalay (2019) demonstrated success with implementing a safe prescribing multidisciplinary guideline at Brigham and Women's Hospital in Boston. An organizational opioid stewardship program (OSP) assisted with prescribing practices for acute pain, chronic pain, and opioid use disorder. The concept created stakeholder involvement by highlighting differences between providers prescribing practices and alike surgical procedures. The adopted OSP initiative showed a reduction in the number of opioid prescriptions reduced by -73.5/month; $p < 0.001$ with

mean morphine milligram equivalents (MME) per prescription decreasing by (-0.4/month; $p < 0.001$), and the number of prescriptions ≥ 90 MME decreased (-48.1/month; $p < 0.001$).

Given growing concerns with opioid use, Agerwala and McCance-Katz, (2012) found the risk assessment tool SBIRT (screening, brief intervention, and referral to treatment) instrumental for early intervention. The method is useful in engaging patients in a brief conversation about health practices to reduce the results of detrimental health behaviors. SBIRT screening provides an assessment of substance use and identifies appropriate levels of treatment. According to Hah et al. (2018), patients taking opioids before surgery often require higher postoperative administration for extended periods, increasing vulnerability and adverse effects. Hargraves et al. (2017) conducted SBIRT screenings ($n = 21,635$) across ten primary practices. The integration showed promise with managing patient's outcomes with opioids by screening for all levels of substance use. A study by Cheung et al. (2018) demonstrated success with the Opioid Risk Tool (ORT) developed by Webster and Webster in 2005. The seven-item questionnaire was used in a pre-surgical department at a major academic hospital to evaluate patients' substance abuse, age, sexual abuse, and psychological problems, with scores ranging from 1 to 29. The study found that using the questionnaire screening tool ORT showed that 5% of patients screened stratified as high risk with eight or greater scores.

Approximately 10% of patients screened identified as medium risk, with a score of 4 to 7. Implementation of the ORT tool proved to be useful in determining high-risk populations for chronic opioid use.

Research shows that a patient's psychological, behavioral, and medical characteristics can gauge factors associated with acute surgical pain (Hargraves et al., 2017). Sun et al. (2016) evaluated chronic opioid use among opioid naïve patients in the first postoperative surgical year compared to nonsurgical patients. Using a definition of more than ten prescriptions or more than 120-day supply of an opioid in the first year showed results ranging from (0.119% to 1.41%) that acute post-surgical pain thus increases a patient's risk chronic opioid use. The study encouraged multimodal analgesia modalities consisting of multiple medications and multiple techniques to control pain and decrease opioid use. Raman et al. (2018) conducted a retrospective review of 1008 patients who received nerve-blocking medication after major colorectal surgery. Resulting in significantly lower pain scores by decreasing intravenous opioid use in the first 48–72 h, fewer opioid-related adverse effects, and decreased length of stay (7.2 vs. 9.0 days, $P=0.04$). Similarly, Barker et al. (2018) conducted a retrospective review of 560 patients undergoing outpatient breast procedures. Patients received either intravenous acetaminophen, preoperative oral acetaminophen and gabapentin or declined any preoperative analgesia.

Evidence-based research suggests that surgical patients have a 7% increased risk for chronic opioid use following surgery (Hill et al., 2017), an indication that subjective experiences of surgical pain have the propensity to uncover an individual's unknown susceptibility toward long-term opioid use. A study by Memtsoudis et al. (2018) compared patients who received only opioids during surgery to patients who received multimodal therapy, 85.6 percent of the cases were total hip or total knee arthroplasty.

The findings revealed that patients who received more than two pain relief methods in addition to opioids had an 18.5 percent decrease in opioid prescriptions after surgery compared to patients receiving opioids alone. Similarly, the retrospective analysis by Hah et al. (2017) showed that opioid naïve patients (n 641,941) undergoing total knee arthroplasty had the highest incidence of chronic opioid use amongst opioid naïve patients. Polomano et al. (2017) state that multimodal strategies are a judicious option for opioid-dependent or opioid-tolerant patients. Expounding on the association generated when multimodal regimens are used to target distinct sections of the peripheral and central pain pathways provides adequate analgesia at lower opioid dosing, reducing related risks and producing fewer opioid-related effects.

Further, data revealed that surgical patients receiving preoperative gabapentin (n=895) within 24 hours of surgery, regardless of dose, had a significant reduction in opioid consumption ($P<0.001$). For acute pain management in the perioperative setting, the American Society of Anesthesiologists Task Force (2012) advocates around-the-clock nonopioid analgesics. A meta-analysis of randomized controlled trials showed lower pain scores and reduced opioid use when IV opioids are combined with calcium channel blockers (gabapentin, pregabalin) compared with IV opioids alone.

Consider Different Policy Options

The CDC (2018) Annual Report underscores patient-centered opioid practices with three principal aims: selecting non-pharmacologic therapy, nonopioid pharmacologic treatment, and assessing risk. The following three identified policy

options to be compared include criteria to resolve the opioid prescribing deficiencies identified at the community hospital.

- (1) Implementation of opioid prescribing guidelines for post-surgical patients developed to minimize opioid prescribing.
- (2) Utilization of preoperative patient risk screenings to identify predictive patient characteristics that require low dose or alternative pain treatments.
- (3) Implementation of multimodal therapies to maximize the use of non-narcotic pain medications, pre-, and post-surgical.

Opioid Prescribing Guidelines

Prescribing guidelines that minimize opioid administration and patient consumption are preventative measures against post-surgical overprescribing. The National Academy of Medicine, 2020, recommends that Institutions establish standards that structure best practices to reduce opioid-prescribing, ensure quality improvement, and monitor clinical practice. Prescribing guidelines provide comprehensive solutions, allowing nursing to achieve advocacy aims with defined pain choices of treatment. Systematic reviews show reductions in postoperative prescriptions ranging from greater than 40% to 60% (Hill et al., 2018 and Howard et al., 2018) with prescribing guideline implementation. The benefits of prescribing guidelines far outweigh the risks, as such, eliminating adverse effects associated with respiratory depression, sedation, irritability, impaired decision making, urinary retention, and the susceptibility for long-term opioid

use. With little attention placed on post-surgical prescribing, this policy option requires conformity from provider stakeholders.

Risk Assessment Tool

The national awareness of the opioid crisis has heightened the need for early screening for opioids. Assessing a patient's risk is vital for preventing the transition from an initial opioid prescription to opioid reliance. In efforts to reduce prolonged opioid use, researchers are evaluating potential probability. Identifying a patient's risk assessment is crucial in identifying patients with aberrant behaviors and opioid use (Hargraves et al. 2017). For example, Sun et al. (2016) found that opioid naïve patients are at an increased risk for chronic opioid use; furthermore, patients receiving benzodiazepines and antidepressants are significantly more susceptible to chronic use. The CDC recommends assessment tools to understand a patient's risk and reduce the chance of opioid misuse. This policy could be successful in many ways. With the integration, a risk assessment could become an integral part of understanding patient factors associated with potential risk. Nurses trained on specific risk assessment criteria can integrate vital patient information into an appropriate plan of care. Moreover, provider practices, outpatient clinics, emergency departments, and inpatient settings could have a means to impact the issue of opioid prescribing, promoting community and facility efforts with decreasing opioid use.

Multimodal Analgesia Policy

The introduction of multimodal analgesia therapies and oral medications effectively decreases patients' risk of adverse events while lessening the likelihood of opioid dependence (American Society of Anesthesiologists, 2012). Patients discharged from an inpatient setting often undergo surgical procedures receiving a variation of opioid medications. Systematic reviews have shown that multimodal therapies are a preemptive intervention to mitigate long-term opioid usage (Barker et al., 2018 and Raman et al., 2018). An interprofessional approach with multimodal therapies could provide expertise intended to eliminate surgical pain with alternative pain modalities. The benefits of implementing this policy prevent adverse opioid side effects, which can affect post-surgical patient's susceptibility to muscle wasting, deep vein thrombosis, urinary retention, and atelectasis. A detailed formulary created through Interprofessional collaboration will provide for successful implementation.

Project the Outcomes

Opioid Prescribing Guidelines

The introduction of an opioid prescribing guideline has the potential to minimize opioid prescriptions for post-surgical patients. Unjustified prescribing is a contributing factor to the current identified problem. A systematic review examining opioid consumption was instrumental in initiating successful prescribing practices. Patients experiencing one of 12 various procedures illustrated that the number of opioids prescribed was significantly more than the quantity consumed. For example, a patient prescribed 100 pills could use 40 more pills than a patient prescribed 20 pills.

Interestingly, the initiative resulted in a 63% reduction in opioid prescriptions (Howard et

al., 2019). Research on 333 patients undergoing six different intra-abdominal procedures, including bariatric, benign foregut, hepatectomy, pancreatectomy, colectomy, and ventral hernia, formulated opioid guidelines for operation-specific procedures. More interestingly, a prescription of fifteen opioid pills satisfied the pain control needs of 88% of the patients discharged. Provider education and institution guidelines resulted in a 53% reduction of opioids prescribed after surgery (Hill et al., 2018). This policy analysis found that prescribing guidelines are effective in reducing opioid prescribing. Implementation of this policy may be challenging. Provider's concern with patient pain levels can be a deterrent with implementation. As such, (Lamers et al., 2018) contrasted 488 American and Dutch surgeons' attitudes on opioid prescribing. American providers (58%) scored high with the concern that patients would request additional medication if not provided at discharge, whereas only (5%) of Dutch surgeons selected the response.

Risk Assessment Tool

A risk assessment tool is a plausible intervention to ascertaining underlying patient health care problems. In 2018, the Joint Commission revised pain management standards to monitor patients with high-risk opioid influences, alleviating harm by identifying risk probability. These recommendations align with (Hargraves et al., 2017) research, illustrating three components of SBIRT; screening, which assesses the severity of substance use and identifies the appropriate treatment level. The brief intervention focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change, referral to treatment, providing patients identified as needing extensive treatment access to specialized care. More recently, (Cheung et al., 2018) found

success with risk assessment tools highlighting high-risk patients in perioperative settings, recommending further research piloted for post-surgical implementation.

Recognizing that the community served by this health system has higher substance abuse (51.86%) and opioid mortality rates (11.5%), a risk assessment tool would underscore the CDC public health initiatives reducing prescription prevalence rates within the community. There is an opportunity for the hospital in Hampton Roads to implement a risk assessment tool for opiates or controlled substances; therefore, providing early intervention with nonopioid medications. The health systems initiatives with the SBIRT screening tool advances potential opportunities to expand the screening tool to inpatients, primary care clinics, and provider workplaces. This policy can succeed with full training provided to nurses ensuring compliance with risk assessment screening specifics.

Multimodal Analgesia

Implementing a multimodal analgesia policy is another intervention that could fulfill deficiencies with opioid-sparing practices at this hospital. A meta-analysis of 5 randomized trials, including 4,983 adult patients, received the medications acetaminophen, NSAIDs, selective COX-2 inhibitors, which substantially reduced 24 - hour morphine consumption after surgery (Hah et al. .2017). Additionally, Memtsoudis et al. (2018) compared patients receiving opioids alone during surgery, on the day of surgery, and during recovery with patients who received multimodal therapy. Patients undergoing total hip arthroplasty receiving more than two pain relief methods in addition

to opioids showed a significant decrease of 18.5% in opioid prescriptions after surgery, 19% fewer respiratory complications, 26% fewer gastrointestinal complications, and a 12% decrease in hospital length of stay. Likewise, patients undergoing total knee arthroplasty receiving more than two pain relief methods in addition to opioids indicated an 18.5% decrease in opioid prescriptions. Thus, recognizing surgical and opioid naïve patients are at high risk for chronic opioid use following surgery; patients would benefit from techniques to reduce the risk of opioid use with multimodal analgesia (Sun et al., 2016). Specific hospital formulary steered by interprofessional stakeholder collaboration could make this policy option successful.

Apply Evaluative Criteria

The three proposed policy options were evaluated based on the Center for Disease Control and Prevention (CDC, 2018) analytical framework, which includes three domains. The domains integrate public health impact, feasibility, and economic and budgetary health system impacts. Criteria within each domain evaluated the proposed policy options. Public health impact assessed relevance with how the policy addresses the problem and influences risk factors with quality of life and health disparities. Feasibility evaluated current political forces, stakeholder endorsement, and cultural opposition due to fear of change. Economic and budgetary health system impact referred to costs and benefits of enacting, implementing value, and sustainability. The CDC analytical framework policy scoring table compared the three policy options to determine which option will best address the stated problem (See Appendix A). Policies influencing

specific criteria within each domain received either a plus symbol for meeting criteria or a negative symbol for not meeting criteria.

Opioid Prescribing Guidelines

This policy option scores high with public health impact, demonstrating far-reaching potential on a large populace of patients positively impacting disparities. Benefits are wide-ranging, reduced opioid-related mortality and morbidity. As much, there are risks associated with feasibility implementation and economic and budgetary health system impact implementation. Despite the disconcerting findings regarding increased opioid prescribing, the CDC provides only a recommendation for acute opioid prescribing, raising questions about the application. Without a national prescribing guideline, this option will receive little attention; a disconnect exists between opioids prescribed and actual post-surgical needs. Provider consensus is required to determine best practice standardization for specific surgeries; therefore, an appropriate number of opioids prescribed for procedures is required. With provider support, a hospital comprehensive initiative with opioid prescribing would serve as a powerful tool in creating change in post-surgical opioid prescribing.

Risk Assessment Tool

This policy option showed high applicability with impacting public health needs, high with feasibility adoptability and implementation, and economic and budgetary health system impact. Risk assessment tools serve as an integral component in identifying individuals who require early intervention. Previous studies have demonstrated a risk

stratification tool based on psychosocial characteristics, and patient-level predictors are a vital addition to post-surgical testing providing further insight into at-risk patient populations for chronic opioid use post-operatively (Cheung et al., 2018). Additionally, (Hah et al., 2017) explains that risk factors for chronic opioid use after surgery should be delineated and targeted with novel interventions. Benefits associated with this policy implementation embrace opportunities for patient and provider communication and safe pain treatment. Implementation would assist in eliminating the link between preventable prescribing and community disparities.

Multimodal Analgesia Therapies

This policy option shows significant relevance to the hospital's stated problem. This policy scores are high with public health impact, feasibility adoptability, and favorable economic and budgetary health system impact relative to the cost benefits value. Systematic reviews have provided salient findings demonstrating reduced opioid usage with multimodal analgesia therapies. Most recently, Barker et al. (2018) described multimodal analgesia as a method to reduce opioid use and pain scores. Moreover, the regimens are inexpensive, improve pain control, and contribute to narcotic-sparing clinical practice in the setting of a national opioid epidemic. A multimodal analgesia policy is a practical approach to mitigating opioid-sparing techniques; the strategy is particularly useful for opioid-tolerant patients (Polomano et al., 2017). Benefits associated with this policy option provide pain-relieving mechanisms targeting specific pain receptors, improving pain outcomes, patient length of stay, and opioid reducing prescribing.

Weigh The Outcomes

The three proposed policies have the potential to impact deficiencies with opioid prescribing practices. Assessment of the criteria shows that implementing a Risk Assessment Tool has the highest probability of public health impact, feasibility, and economic and budgetary impact. The CDC evaluation criteria scoring table placed multimodal analgesia as second and opioid prescribing guidelines as third.

Prescribing Guidelines

The policy has a low feasibility of successful approval. Implementation requires practice change and provider agreement to change and commitment. The lack of provider consensus on ideal prescription administration tailored to meet patient needs has created opposition.

Risk Assessment Tool

Implementation of the risk assessment tool is highly achievable and establishes a patient-centered method for evaluating significant underlying issues with opioids. The institution's proposed initiatives for implementing SBIRT screening tools in emergency departments will eliminate policy implementation barriers. Training and data collection are required to ensure the fulfillment of public health impact, feasibility, and economic and budgetary benefit.

Multimodal Analgesia Therapies

Implementation of multimodal analgesia scored well with public health impact and value. From an economic, budgetary perspective, this option could be problematic due to specific medications not listed on the hospital formulary. Practice guidelines and protocol development could also be a restrictive factor with implementation.

Make the Decision

Implementation of a risk assessment tool had the highest probability of impacting the three domains associated with public health risk factors, feasibility, and economic and budgetary health costs. The health systems SBIRT initiative commenced in October 2020; phase 1 of the initiative included communication with stakeholders, preparation for implementation, training, and onsite coordination with nursing informatics. SBIRT curriculum provided clinicians with educational workshops, modules, pre, and post-tests, and group role-plays scenarios. Data leveraged from the hospital's electronic medical record validates the degree to which nurses deliver SBIRT as proposed. Descriptive data (See Appendix B) show subcategories in the SBIRT screening tool. The SBIRT tool screened 237 patients in October, 114 males, and 123 females. The alcohol subcategory showed 18 males (15.79%), and six females (4.88%) responded, yes. All except 36 patients meet the criteria for further screening for drug use; 25 patients responded yes to substance use (12.44%), and 13 screened for mood (mental health) screening (7.69%).

Two domains encumbered prescribing guidelines 1) feasibility adaptability and implementation and 2) economic and budgetary health system impact implementation.

Feasibility implementation and economic and budgetary health system costs hampered scores with multimodal analgesia therapies.

Summary and Conclusion

Collins (2005) health policy analysis helped mitigate the policy determination that a risk assessment tool has a high probability of impacting disparate populations, feasibility, and economic and budgetary impact for the community hospital. This policy analysis has highlighted three options which the hospital could implement to improve deficiencies with opioid prescribing. Current practices in opioid prescribing deserve attention, acknowledging this hospital serves a community with complexities implementation of the SBIRT screening tool will commence advancements to improve opioid prescribing practices. Collectively the three policies can improve opioid prescribing practices through prescribing compliance, patient screening, and alternative nonopioid therapies. Thus, providing a broad range of specific methods to rectify postoperative prescribing practices while demonstrating innovation with practice change.

Appendix A

CDC Analytical Framework Policy Scoring Table

Public Health Impact	Opioid Prescribing Guidelines	Risk Assessment Tool	Multimodal Analgesia
• Risk Assessment	+	+	+
• Quality of Life	+	+	+
• Disparities	+	+	+
• Morbidity	+	+	+
• Mortality	+	+	+
Feasibility			
• Adoptability	-	+	+
• Implementation	-	+	-
Economic and budgetary health system impact			
• Comparison of the costs to enact	+	+	-
• Implementation	-	+	-
• Enforce the policy with the value of the benefits	-	+	+

Appendix B

Hospital SBIRT Utilization Data

SBIRT Screening Documentation

LOC_NAME	DEPARTMENT_NAME	Year
MARYVIEW MEDICAL CENTER	MMC EMERGENCY DEPT	2020

Date

☐ 10/1/2020
☐ 10/10/2020
☐ 10/11/2020

DEPARTMENT_NAME

MMC EMERGENCY DE... ▾

Month

10 ▾

237

Alcohol Pre-Screenings

Male

Pre-Screening(M)	Pre-screen "Yes"(M)	Pre-Screen "Yes"(M)%
114	18	15.79%

Female

Pre-Screening(F)	Pre-screen "Yes"(F)	Pre-screen "Yes"(F) Percent
123	6	4.88%

Drug Pre-Screenings	Drug Pre-Screening "Yes"	Drug Pre-Screenings Percent
201	25	12.44%

Mood Screening

PHQ-9 Screenings	PHQ-9 "Yes"	PHQ-9 Percent
13	1	7.69%

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