

# Building a Foundation for Provincial Transitional Pain Services

*Health Canada grant awarded to Alberta Pain Strategy's Acute Pain focus area*

Pain is something that most people prefer not to experience. It is felt by everyone throughout their life, and at its root, serves an important purpose – to warn of actual or impending tissue damage.

Sometimes, **acute pain** can progress into long-term **chronic pain**, as can be the case with those who undergo surgery and develop chronic postsurgical pain (CPSP), pain that persists for more than 3 months after surgery. Targeted transitional pain care can support patients to reduce the harmful impacts of CPSP.

*Thanks to a \$1.1 million grant from Health Canada's Substance Use and Addictions Program (SUAP), research is underway to establish a framework that aims to improve access to surgical transitional pain care across the province.*

Chronic postsurgical pain can develop if acute pain after surgery is poorly managed, and a care plan is not put in place for patients as they transition from hospital to home. This can mean moderate to severe postsurgical pain lasting for months or years, negatively affecting overall quality of life and sometimes resulting in the persistent use of progressively higher doses of opioids.

The development of CPSP can have major adverse economic and health implications for the individual, their family and society.

**Acute Pain** is short-term and is caused by an illness or tissue injury. Tissue injury may be caused by surgery or trauma.

**Chronic Pain** is pain that lasts longer than 3 months. It may be harmful and debilitating.

**Transitional Pain** occurs as acute pain progresses into chronic pain. Transitional pain can be managed to prevent and/or reduce the impact of chronic pain.

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Current data in Canada and elsewhere suggest that the incidence of CPSP is 20-30% for people who undergo major surgery, and approximately 10% of all surgeries. With 270,000 surgeries performed annually in Alberta there is an estimated 27,000 new CPSP cases every year, which represents a major burden on the healthcare system.

In Alberta, access to surgical transitional pain care is limited due to staffing challenges, clinic space, funding and program availability.

Preventing and reducing chronic pain and potentially preventing opioid misuse and opioid use disorder via innovative approaches will improve access to surgical transitional pain care and will support the foundational work that is currently underway. The current SUAP grant focuses on the following four objectives:

**1**

**Creating evidence-based screening tools to enable early identification of adult and pediatric patients who are at increased risk of developing CPSP**

Two evidence-based reviews are underway and will generate a list of risk factors for CPSP in adults and children. These reviews will undergo further analysis to create brief, targeted questionnaires to identify surgical patients who are most at risk of CPSP. Once identified preoperatively, patients may be offered tailored physical, psychological, and pharmacological treatments to reduce or prevent the development of CPSP.

## **2 Improving analgesic order sets for inpatients to ensure patients are provided with evidence-based multimodal analgesia**

One known risk factor for CPSP is poorly managed acute postsurgical pain. Acute postsurgical pain is best managed with a combination of medications from different drug classes. The SUAP team is supporting the standardization of order sets in Connect Care, Alberta's provincial Clinical Information System. This work will ensure that evidence-based acute pain treatment options are widely available and easily accessible across the province.

## **3 Testing a digital health app to determine whether it can improve pain-related outcomes in surgical patients**

Digital health technologies have gained significant momentum in healthcare and the SUAP grant team is exploring whether an application (app) called Manage My Pain® (MMP) from a Canadian company, ManagingLife, can support patients' self-management of pain and help them share self-reported pain experiences with their healthcare team. The study is evaluating whether app use impacts pain-related outcomes following spine surgery. Eleven Alberta spine surgeons are participating, with patient recruitment taking place over seven months. Participants are asked to use the app and complete health-related outcome questionnaires at three time points, along with providing information on medication usage, and completing a survey on their experience and satisfaction with MMP. MMP uptake and utilization data will also be reviewed. Qualitative interviews with patients and surgeons will provide in-depth feedback on their experience with the app. Results will be available in spring 2024.

# 4

## Convene a committee under the Alberta Pain Strategy to adapt the activities from the grant for provincial spread for surgical transitional pain care in Alberta

This committee will develop a white paper with recommendations and a pathway detailing how we can cost-effectively offer the best services to CPSP patients using both existing infrastructure/resources as well as those developed within the grant.

This work, co-led by Drs. Nivez Rasic and Sanjay Beesoon, aligns with the Alberta Pain Strategy (APS), which focuses on helping Albertans manage pain across their lifespan. It will continue until early 2024 and will benefit from insight and expert guidance from researchers and health leaders affiliated with Alberta Health Services, University of Calgary, University of Alberta, SickKids Hospital, University of Toronto, and University of Washington. The goal of this grant to improve the pain care for surgical patients in Alberta by mitigating the development of chronic post-surgical pain and reducing the incidence of opioid related harms.



For further information related to this work, please contact Dr. Sanjay Beesoon, Assistant Scientific Director of the Surgery Strategic Clinical Network or Dr. Nivez Rasic, Anesthesiologist in the Department of Anesthesiology, Perioperative & Pain Medicine at the University of Calgary.

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