Understanding and Managing Pain after Surgery

Pilot testing the Manage My Pain app with patients attending a transitional pain service and patients having elective surgery in Calgary, Alberta

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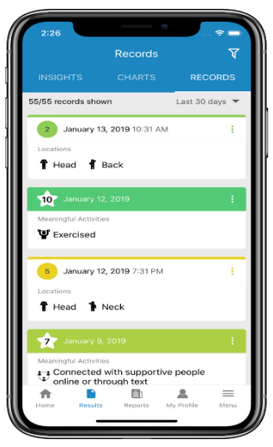
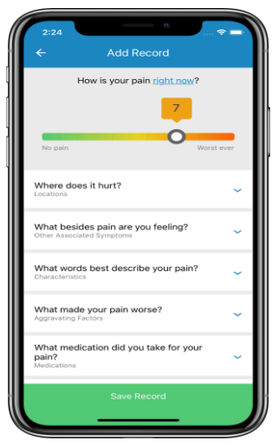
Background: the challenge of chronic postsurgical pain

- Pain is a natural outcome of surgery and usually subsides within a few days/weeks. When pain persists for 3+ months it is referred to as chronic post-surgical pain (CPSP) [1]
- CPSP is estimated to affect ~10% of adult surgical patients (range 10-50% depending on patient and surgical factors)[2]
- CPSP can cause functional impairment, poor quality of life, and economic burden for patients. It is also associated with increased opioid use and higher risk of developing an opioid use disorder[3].
- Implementing cost-effective tools and processes to identify and manage patients at risk of developing CPSP before surgery, along with better monitoring and management of pain during the transitional postsurgical period could improve patient and system outcomes.





A tool to self-monitor pain

Manage My Pain (MMP) is an app developed by ManagingLife. People can measure, monitor, and manage their pain symptoms by completing a daily assessment of pain acuity, pain impacts, pain medications, and a pain diary. Patients can generate reports in the app to share with their clinicians, or a MMP clinician portal can be established where clinicians can track patient self-assessments. Information sharing can enhance communication and support treatment decisions.

The Feasibility Study

Alberta Health Services (AHS) is assessing uptake, utilization, experience, and impact of using of the MMP app in two settings:

(i) As a support for patient intake and remote patient self-monitoring at the Transitional Pain Service (TPS), South Health Campus. Clinician utilization of the MMP clinical portal is also being evaluated;

(ii) As a postsurgical pain self-monitoring tool with elective surgery patients. We will consider whether self-monitoring can identify people at risk of transitioning to chronic pain and if self-monitoring has any impact on patient or health system outcomes.

Study A: TPS Clinic

SAMPLE

New patients attending TPS clinic (~50), TPS clinicians (~4)

RECRUITMENT

TPS booking clerks obtain consent to contact, researcher completes informed consent by telephone

DATA SOURCES

- MMP app data: download/uptake, utilization
- Clinical questionnaires completed at intake (via app)
- Online patient experience surveys (day 30 and 90)
- Qualitative telephone interviews (~ 10 participants)
- Implementation log/feedback notes
- Qualitative telephone interview with TPS clinicians

Study B: Elective Surgery

SAMPLE

Elective surgery patients at SHC (~1000)

RECRUITMENT

Admitting clerks hand out study card with QR code/URL for REDCap e-consent, baseline survey, MMP download link

DATA SOURCES

- MMP app data: download/uptake, utilization
- Online surveys (including EQ5D, pain intensity, pain catastrophizing, depression & anxiety scale, global surgical recovery index) at baseline, day 4, 30, 90
- Online survey of patient experience at day 30 and 90
- Participant chart review (3 months post-surgery)
- Administrative health system utilization data

Current Status

Wave 4 of the Covid-19 pandemic and the cancellation of elective surgeries in Alberta has delayed this project.

Three clinicians and 11 patients are currently enrolled in Stage A. Recruitment will continue till March 2022. Stage B recruitment will begin in late November. Findings will be reported in Summer 2022.

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