

Background

- Opioid-related harm is a public health crisis with the death rate continuing to climb in Canada with over 32,000 opioid-related deaths, between January 2016 and June 2022.
- Pharmacists are ideally positioned to lead Opioid Stewardship Programs (OSPs) to improve, guide, monitor, and evaluate the use of opioids to support and protect human health.
- Rural and remote Family Health Teams (FHT) often lack access to specialized clinicians in chronic non-cancer pain (CNCP), including the care of a pharmacist.
- Despite rapid growth of videoconferencing (VC) technology to improve healthcare access in these communities, the effectiveness of a pharmacist-led OSP in remote and rural Canadian settings has yet to be studied.

Methods

Study Aim

To evaluate the feasibility and effect of a remote pharmacist-led OSP for CNCP using VC technology in a small Northern Ontario FHT without access to a specialized clinician in CNCP.

Objectives

- To understand clinician, administrative staff and patient experiences and satisfaction with the pharmacist-led OSP.
- To measure the changes in patient pain management, adherence to the 2017 Canadian Opioid Guidelines, OSP pharmacist recommendations (acceptance and implementation), and communication with engaged patients and prescribers and pharmacist workload.

Intervention Details

- At the initial VC session (week 0), the OSP pharmacist conducted a comprehensive review of the patient's medical and medication history, performed any necessary assessments, education and recommended treatment adjustments if deemed appropriate.
- At sequent VC sessions (week 1, 2, 4, and 10), the pharmacist followed up with patients and monitored their response to their therapies. Scheduling of the sessions were adjusted based on the patient's needs and pharmacist's professional judgement.

Measurements Used

OSP Assessment and Communication Tool, Brief Pain Inventory, SMART goals, EHR opioid toolbar, community pharmacy medication list, Opioid Contract, Opioid Risk Assessment, online surveys, semi-structured interview guides, and study communication (verbal, fax, EHR).

Study Population

- Adult with chronic non-cancer pain **AND** 50 morphine equivalent dose (MED) for ≥ 30 days **OR** less than 50 MED with persistent problematic pain **AND/OR** experiencing undesired adverse effects were eligible to participate.
- Eligible patients were identified using the EHR Practice Solutions, FHT clinicians (MD, RN, NP), community pharmacy and community physicians.

Results

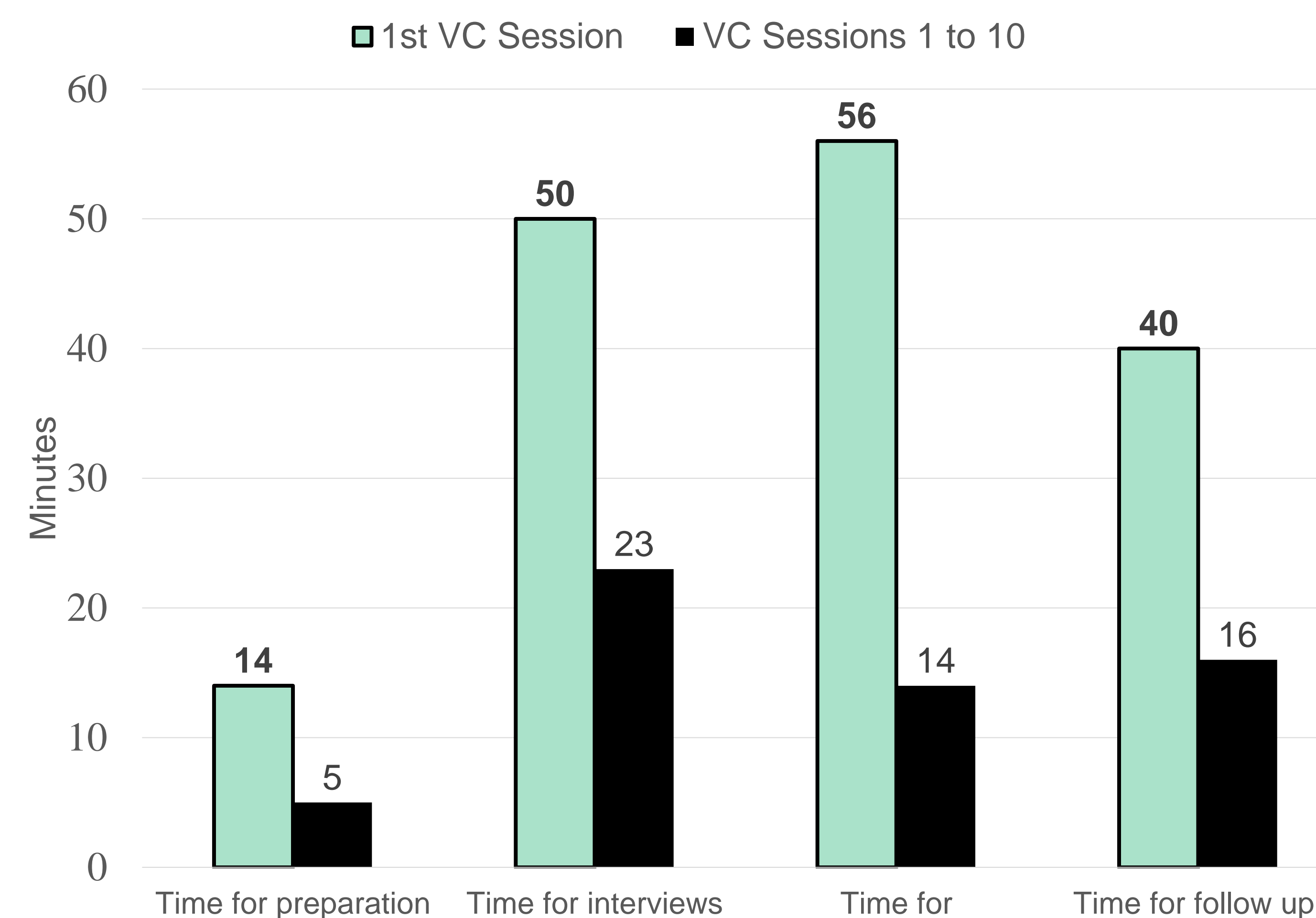
Table 1: Baseline Demographics (n = 19)

Mean Age (Range)	54 ± 9 (34 – 68)
Gender	Female 10/19 (53%) Male 47% (9/19)
Ethnicity	First Nations 7/19 (37%)
Indications for Opioid Therapy	Upper body pain 9/17 (53%)
	Back pain 5/17 (29%)
	Hip pain 2/17 (12%)
	Rheumatoid arthritis 2/17 (12%)
	Sciatic pain 2/17 (12%)
	Depression 2/17 (12%)
Risk Assessment Factors	History of alcohol abuse 2/17 (12%)
	History of illegal drug abuse 2/17 (12%)
	Psychiatric condition (e.g., ADHD, OCD) 1/17 (6%)
	History of prescription drug abuse 1/17 (6%)
	Mean Risk Score
Categorized as Low Risk	14/17 (82%)
Categorized as Moderate Risk	3/17 (18%)
Mean MED	39.6 (range 9-90)
Mean Pain Score	6 (range 3-9)

Table 2: Impact of Intervention

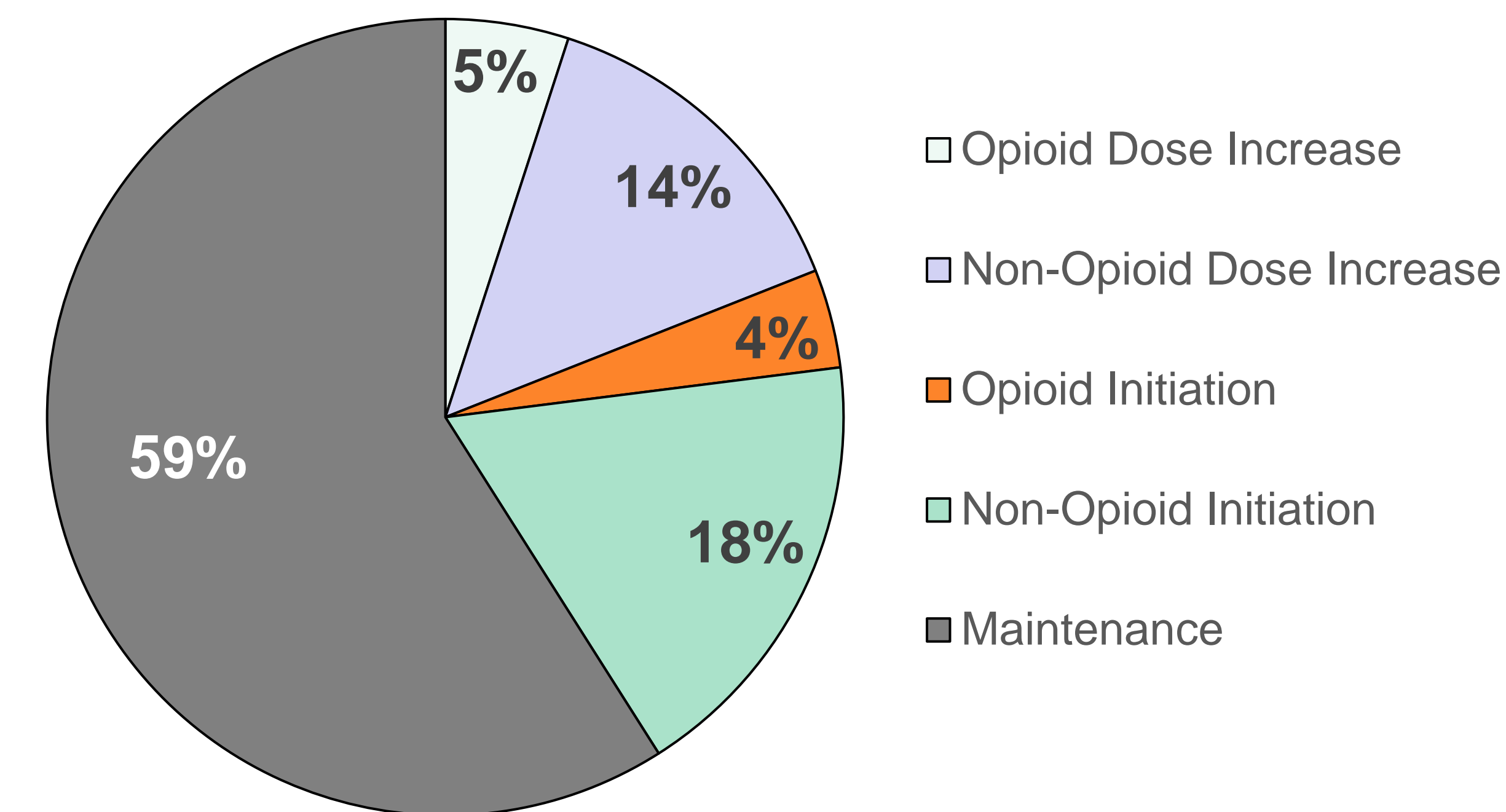
Mean Number of VC Sessions	3 (1-6)
Duration Between VC Sessions	3 weeks (1-6)
Mean Risk Score	Low (mean score of 1 ± 1)
Categorized as Low Risk	11/12 (92%)
Categorized as Moderate Risk	1/12 (8%)
Clinically Important Difference in MED ($\geq 28.2\%$ change)	Decrease in MED - 3 patients Increase in MED - 2 patients
Change in pain score as compared to baseline measures	33% (4/12) of patients had a decrease in pain score

Figure 1: Study Session Workload for OSP Pharmacist (Weeks 0 to 10)



63% of pharmacist recommendations were accepted and implemented.
1 patient was successfully tapered off oxycodone.

Figure 2: Implemented OSP Pharmacist Recommendations (n = 22)



"... [what] we've done is just adapted the OSP program into an opioid monitoring program ... we have taken that as a role model, and we use it in now going forward as how we address our opioid patients ... If there's something new that we can do for them, or if they're interested in decreasing their opioid [pause] consumption. Then, you know, that's we just conducted almost exactly the way that we did in the study. Only now it has become a mainstay in the family health team ... it's opened up a lot more patients that we are able to service with this."

Themes Generated From Conducted Interviews

Impacts of the Intervention

- Increased patient engagement through follow-ups and check-ins.
- Flexible and balanced recommendations for the optimization of opioid therapy.
- Opportunity for increased professional discussion on opioids and pain management.
- A role model for opioid monitoring and pain management.
- Interest in continuing to use the interprofessional opioid stewardship model.

Challenges

- Program timing (occurred during physician turn-over) and staff availability.
- Clarifying the scope of practice with patients.
- Scheduling considerations.

Recommendations

- Add OSP pharmacist to regular team check-ins and meetings.
- Increase OSP telepharmacist involvement.

"... the only modifications we did was making it look kind of like, uh, renewable [pause] service. So, each year anyone who is on opioids under our roster will be [pause] reassessed ... in their [doctor's] absence, we had tried to bridge care with virtual nurse practitioners. So, in order to keep it safe when prescribing narcotics virtually, that's just a ... a red flag on its own, we've incorporated the telepharmacy to do that check. So, the opioid assessment, uh pain assessment, and, at the same time, if, during their interview, they maybe notice a red flag, they will alert us and we will have ... will let the nurse practitioner know so that they can ... they can make the determination if prescribing will be safe or not ... they want us to do the exact same thing for all of their patients."

Results Continued

Survey Findings

- Engaged clinicians (physician and nurse practitioner) felt **more confident** in initiating and managing new patients on opioids when the OSP telepharmacist was involved and they felt the program **improved the continuity of care**.
- Engaged clinicians also indicated they would like **continue**, and **recommend having the OSP telepharmacist** managing chronic opioid therapy for their patients.
- Conflicting opinions were found around the impact of the study on the time clinicians spent on chronic opioid therapy issues for their patients (1 agree, 1 disagree).
- Program participants (n=2) reported that the OSP VC sessions were **valuable**, were willing to **recommend** to family and friends and were **satisfied** with the care received.

Conclusions

- This pilot study was well received by both patients and their providers with a positive impact as evidenced in the surveys, interviews and clinical measurements.
- Due to its acceptability and success, the OSP will be expanded into another rural remote Canadian site this year.
- This virtually delivered pharmacist-led OSP, and its affiliated components, hold promise as a potentially feasible and effective intervention in remote and rural Canadian communities that have limited or no access to CNCP opioid stewardship expertise.

Disclosure

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