

Improving Health Care for patients on Opioid Substitution Treatment at Victory Square Pharmacy

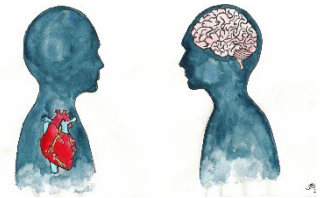


Whakakotahi

Primary Care Improvement Programme

2019/2020

Executive Summary



Everyone should have the same opportunities to be physically well Te Pou o Te Whakaaro Nui.

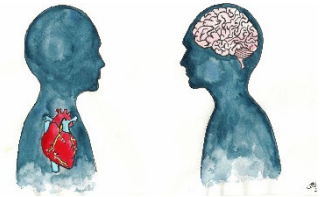
Aging Opioid Substitution Treatment (OST) patients often have high needs, can be medically complex, and have had negative experiences in the past with healthcare professionals. Additionally, financial hardship, health literacy and stigma create barriers that mean that their physical (and often psychological) health issues are neglected and not addressed.

As a community pharmacy with often daily contact with these patients we set out to address these inequities, facilitate engagement with their health providers and empower the patients to take charge of their physical health, to improve self-awareness and their quality of life.

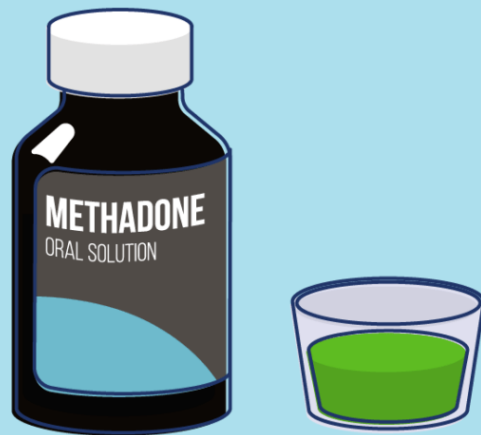
What we discovered early into the project that quality of life improvement for these patients also relied on effective pathways within the region, to provide a consistent approach to baseline diagnosis and screening such as ECG guidelines and Ultrasound guided phlebotomy for those patients that require the service. Addressing these issues would benefit not just the patients in this project, but also all OST patients in the region.

While this project is continuing until February/March 2020 we believe we have elicited some awareness of the lack of consistency in the pathways and hope to have these addressed by project end.

Problem Statement

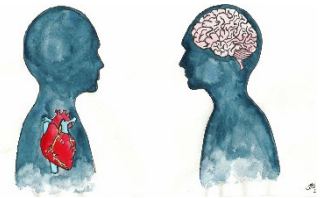


Patients who have opioid addiction often have co-morbid mental and physical health issues, but find it difficult to access health providers to either diagnose, or to help with management of their conditions.



“As soon as someone hears the word “methadone”, the whole way they treat you changes” Methadone patient

Diagnose the problem: Patient/Whanau Stories



The patient story has been an important aspect of identifying the gaps that they experience – identifying the barriers and understanding the complexity.

share your
story

CASE - 61 year old male GH

methadone 140mg daily onsite
diazepam 40mg OD onsite
sertraline 50mg daily

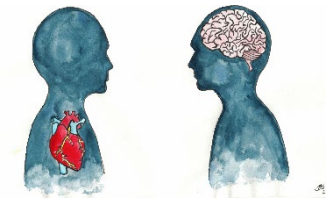
- History of substance and alcohol use
- Shuffle and stumbling gait & falls – Parkinson's??
- Early stage dementia?? MOCA conducted 14th March 2019 at AoD review = 16/30.
- Minimal influence of alcohol (supported by recent CDT test of 0.6 – March 2019)
- ECG sighted from October and has prolonged QT.

CASE – 52 year old female AS

Methadone 100mg onsite three times weekly
Multiple medications for chronic conditions

Membranoproliferive glomerulonephritis causing renal function decline – monthly blood tests required – MedLab only permitted to attempt 3 times to get blood from a vein – then she is required to have finger pricked and to sit and have blood drip into tube. Often she will have to return to repeat test as finger has been squeezed to hard and sample is hemolyzed.

Aim Statement



To improve access to ECG and blood test screening and management for OST patients at Victory Square Pharmacy from 27% to 80% by February 2020

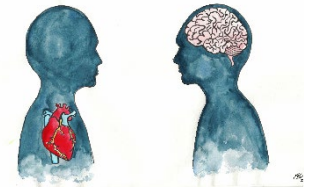
Reminder of the original Elephant sized Aim:

“To identify barriers to medical screening, treatment and management of the physical health and improve the [quality of life](#) of 30 patients enrolled on the Opioid Substitution Treatment (OST) programme at Victory Square Pharmacy by end of 2019.”

BY:

1. Comprehensive health and medication review by the community pharmacist for 30 OST clients.
2. Facilitate engagement with healthcare services and access to screening and diagnostics tests.
3. Document change in their 'quality of life' and level of engagement with health provider.

Why are we actually doing the project?



Research shows that OST patients have a biological age that is 15 years older than their chronological age, and that those patients with mental health and addiction diagnoses have a reduced life expectancy of around 20 years when compared to those who don't.

1. Access to healthcare:

- Many of these patients are reluctant to engage with primary care services due to stigma, poor health literacy, lack of services and feeling 'forgotten about'.
- There is difficulty in accessing screening and diagnostic procedures.
- Gaps in OST patient care also form when there are multiple prescribers and a restriction in the scope of what they will prescribe.

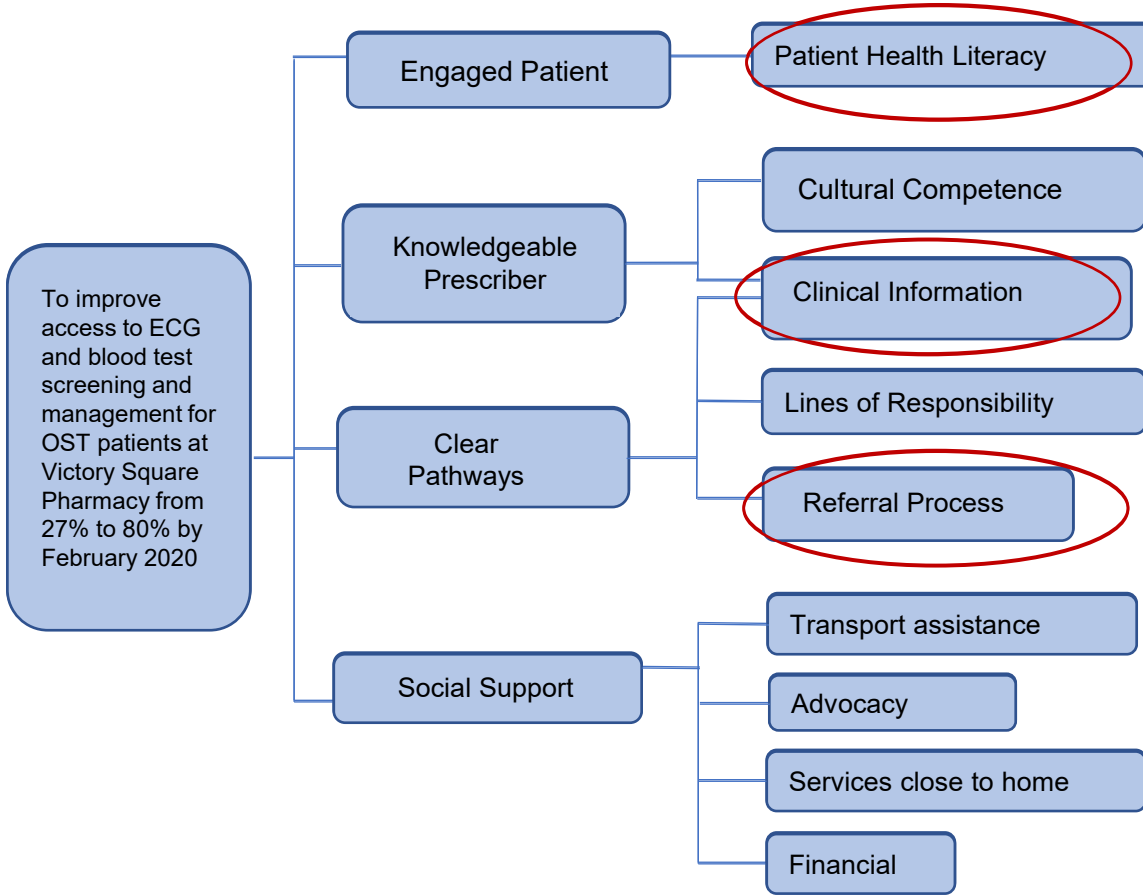
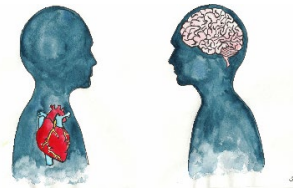
2. Fragmented Care:

- Gaps in OST patient care also form when there are multiple prescribers and a restriction in the scope of what they will prescribe.
- There are issues with patch protection as well as accessing information

3. Lack of knowledge and understanding:

- There is a lack of understanding as to the effects of OST, in particular methadone.

Driver Diagram



Change Ideas
Utilise Drug and Addiction and Mental Health funding to pay for Drs visits to address health issues
Use Nelson Bays Primary Health Vulnerable Population Fund to clear Dr and Pharmacy debt.
With patient consent, for pharmacists to attend GP appointments as clinical advocate.
Facilitate an ultrasound guided phlebotomy pathway for relevant patients requiring regular blood tests
Have case workers/Drs from AOD meet patients in consult rooms at the pharmacy (AOD office on outskirts of Nelson)
Education for GP practice staff around stigmas & barriers attached to impacts for methadone patients by Pharmacists and Victory Nurse
Develop "Clinical Pearls" about Methadone treatment &/or presentation by clinical pharmacist to GPs, Junior Drs, Specialists, ED staff.
Establish collaborative relationship with Te Piki Oranga: access to patient services, and a culturally appropriate clinical pearls session.
Pharmacy as a Healthcare Home – non-judgemental initial access point for healthcare issues.
Develop pathway for ECG assessment in OST patients: includes when other QT prolonging medications are taken.
Look at a protocol for methadone patients when they present at emergency department.
Pharmacists to be part of AOD Interdisciplinary case meetings
Point Of Care testing in pharmacy for cardiovascular risk.
MTA by clinical pharmacist for complex OST patients
Produce & provide OST patients with information about methadone's impact on their health (plain English version of "clinical pearls")
Produce a list of local health services that can be given to OST patients
Arrange referral to PHO social worker to assist with ongoing healthcare costs

Observations: Capturing the Patient Experience

The “A-HA” moment is realizing that when we were thinking that patient engagement was low due to stigma and accessibility, was actually that there is NO formalized process or pathway for these patients for healthcare providers around regular ECGs/access to screening/diagnostics.



“I am told to get my GP Doctor to refer me for an ultrasound to get bloods taken which I’ve managed once in 2 years”.



“For years I have had problems with finding a vein and the MedLab will only try 3 times to get me. So it becomes frustrating when I really need to get one”.



“From here is good but [the] Dr sux”



“I feel I have a disadvantage of keeping on top of my health issues than a person who gets from a vein regularly”.



When offering to help out as part of the project some of the expenses for GP to get them an appointment they turn it down thinking that they don’t want to be taking money “handouts”.



“I definitely haven’t had an ECG in the 5 years”

“Clinical Pearls”

Develop "Clinical Pearls" about Methadone treatment &/or presentation by clinical pharmacist to GPs, Junior Drs, Specialists, ED staff.

Methadone and the health implications of OST treatment developed for health professionals & OST patients



Sharing the information with GPs and addiction service and other relevant services

Measures: Methadone knowledge prior to, and after education session

Outcome: improved GP knowledge of the effects of methadone on their patients they prescribe for.

Next Steps: Expand to new House surgeons at the hospital



Develop patient-friendly version for clients to encourage empowerment when discussing their health

Measures: Methadone knowledge prior to, and after sitting down and discussing with the OST patient.

Outcome: Improved awareness of what methadone does to their bodies and how that can impact on their future health

METHADONE

People on methadone for opioid substitution treatment (OST) have poorer physical health than the general population, and many experience significant barriers to accessing healthcare. These are some of the common physical health issues to be aware of in this population.

PEOPLE ON OST MAY NEED TO ACCESS ULTRASOUND GUIDED PHLEBOTOMY FOR BLOOD TESTS



Cardiac: Methadone can prolong the QT interval and cause serious arrhythmias. Age, female gender, electrolyte abnormalities, some medicines and cardiac conditions are all predisposing factors. *Regular ECGs recommended*



Mental Health: Depression, Anxiety and PTSD are very common in this population. *Screening and brief intervention may be helpful.*



Gastro-intestinal: Methadone can cause constipation and may obscure diagnosis or clinical course of patients with acute abdominal conditions.

Consider stool softeners and dietary advice.



Endocrine: Long-term opioid use may cause adrenal insufficiency, leading to hypogonadism, decreased plasma testosterone and sexual dysfunction.

Methadone can also contribute to weight gain, and cause problematic sweating.



Respiratory: Methadone can contribute to respiratory depression in patients with significant COPD, or severe asthma.

Support with smoking cessation and/or inhaler review may be appropriate.



Bone Density: Methadone can directly affect bone formation and hypogonadism is recognised as a secondary cause of osteoporosis. Other risk factors for osteoporosis include tobacco and/or alcohol use.

Consider screening and fracture risk reduction strategies.



Liver: Cytochrome P450 (CYP450) 3A4, 2B6, 2C19, 2C9, or 2D6 inhibitors may result in an increase in methadone plasma concentrations, which could cause potentially fatal respiratory depression.

Patients with hepatic impairment (including hepatitis C) will metabolise methadone, and many other medicines more slowly than normal patients.



Drug Interactions (see Interaction checker):

Serotonin syndrome with concomitant use of serotonergic agents (eg, SSRIs, SNRIs, triptans, TCAs), lithium, St. John's wort, or tramadol).

Profound sedation and respiratory depression with benzodiazepines or gabapentinoids.

Additive QTc prolongation can result from antibiotics, cardiac medicines and psychotropic medicines, or diuretics causing electrolyte abnormalities.

Methadone Information for Patients

What do I need to know about taking Methadone?

Methadone is a synthetic opiate to be taken by mouth to stop the craving for opiate-type drugs in people who are addicted to them. Methadone acts on the same receptors in the brain as other opioids, and can reduce withdrawal symptoms because of it stays in your body for a longer time.



How to use methadone properly

Methadone liquid is to be taken only by mouth. The dose is different for different people. It is very important that you take your methadone, including takeaway doses, exactly as prescribed and at the time advised, to keep your blood levels stable.

Do not give your methadone to anyone else.

Do not stop taking methadone or change your dose unless you have first discussed this with the person who has prescribed your methadone



Driving and using machinery

If you are stable on methadone, you may continue to drive and operate machinery as part of normal activities. If your methadone dose is not stable or is changed for any reason you need to be careful as drowsiness may be increased and there may be side effects while you get used to the new dose.

Do not drive if intoxicated with alcohol or other drugs.



Possible Side effects

All medicines have side effects. Sometimes they are serious and require medical treatment, but mostly they require some change to the dose.

The most common side effects with methadone are nausea, vomiting, constipation, drowsiness and confusion, increased sweating, dry mouth, eyes and nose.



Taking other medicines

Some medications cause the liver to process methadone more quickly, decreasing methadone levels in the blood. This may lead to withdrawal effects.

Other medications can slow the process of methadone which can lead to an increase in methadone levels. This may cause drowsiness/intoxication.

It is important to tell your pharmacist, doctor or case manager if you are taking any other medicines, including medicines you can buy without a prescription from a pharmacy, supermarket or health food shop.

Possible effects of methadone on the body



Methadone can have some effects on your heart that can change the way your heart works. While this is an uncommon effect, it does need to be monitored to make sure no issues are being caused by your dose. This is why you need to have an ECG which looks at how your heart is beating, and these should be done yearly, or more frequently if you are on other medications or your methadone dose is increased.



Having low mood or being anxious is common in people who take methadone. If you have any concerns – anxiety or feeling depressed then speak to your health professional.



Methadone can slow your gut (intestines) movement which means that constipation can be an issue. This can be helped by using stool softeners or stimulant laxatives to help.

Drinking plenty of water and eating foods that have fibre (fruits and vegetables) can also help reduce constipation.



Using methadone long term can cause your adrenal glands not to work as well.

Methadone can reduce sex hormones which can cause a decrease in sexual enjoyment/sex drive. Women's menstrual cycles can be affected.

Increased sweating and hot flushing may also occur.



Stopping smoking is best for your breathing.

Methadone can cause difficulty breathing in patients with significant chronic obstructive pulmonary disease (COPD), or severe asthma.



Methadone increases your risk of breaking a bone as it can make your bones less dense and weaker (Osteoporosis).



Patients with decreased liver function (including hepatitis C) will process methadone, and many other medicines differently than normal patients.

If you have hepatitis C or have decreased liver function then speak to a healthcare professional



Methadone can cause a dry mouth and inhibits saliva production. Saliva protects against plaque and decay. It is important to maintain good oral hygiene, minimize sugar intake and have regular dental check-ups.

If any of these effects are concerning you – talk to your prescriber, pharmacist or caseworker.

ECG criteria and pathway

Develop pathway for ECG assessment in OST patients: includes when other QT prolonging medications are taken.



Facilitate in the development of a pathway for ECG assessment in OST patients that includes when other QT prolonging medications are being taken.



Cardiology meeting has cardiologist assigned to work on pathway for ECG
Measure of current awareness of pathway -
Facilitate all groups to consensus on pathway for OST patients



Educate GPs and addiction service about QTc risk factors with “Clinical Pearls”
education
Measure: Improvement of knowledge before and after session ✓



Liaise with health pathways team to load protocols onto Health Pathways portal – still under construction

Pathway for ultrasound guided phlebotomy

Facilitate an ultrasound guided phlebotomy pathway for relevant patients requiring regular blood tests

- NO pathway for patients currently exists.
- Develop referral process for ultrasound-guided phlebotomy

Ensure the service is patient-centred, accessible and non-judgmental

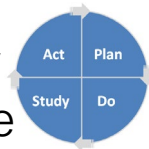


Convincing current providers of phlebotomy that there is an issue is the barrier at this stage (not just for OST patients but also for Hep C patients)

Have gathered information of how ultrasound phlebotomy is provided in Marlborough (same DHB?!); then aim to:

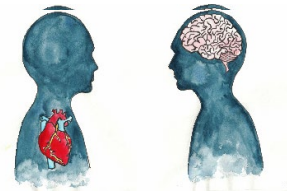


Work/facilitate with DHB radiology and laboratory managers to create pathway

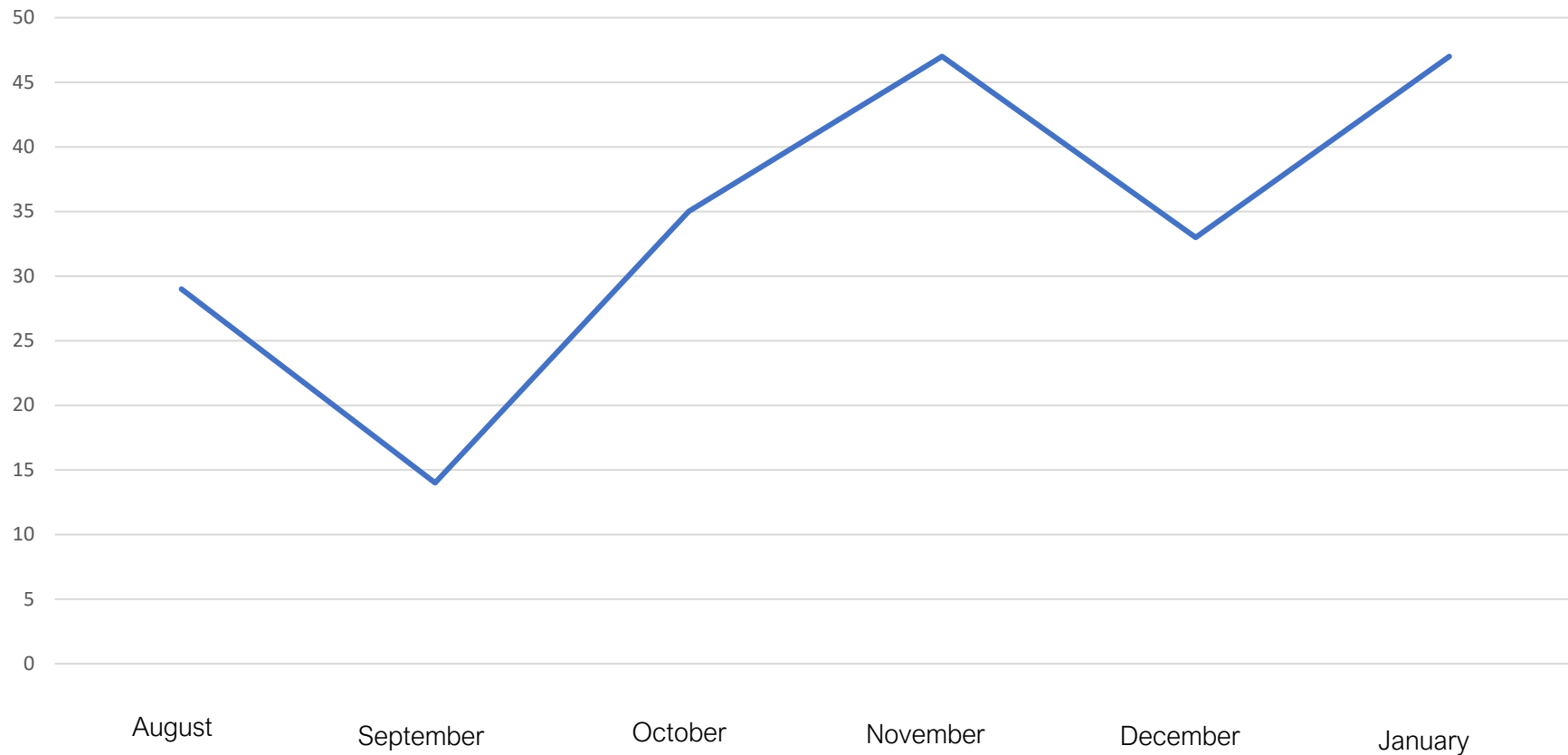


Use the developed pathway with a patient requiring blood tests via the service.

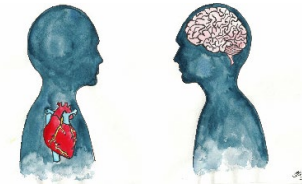
Patient Quality Scores



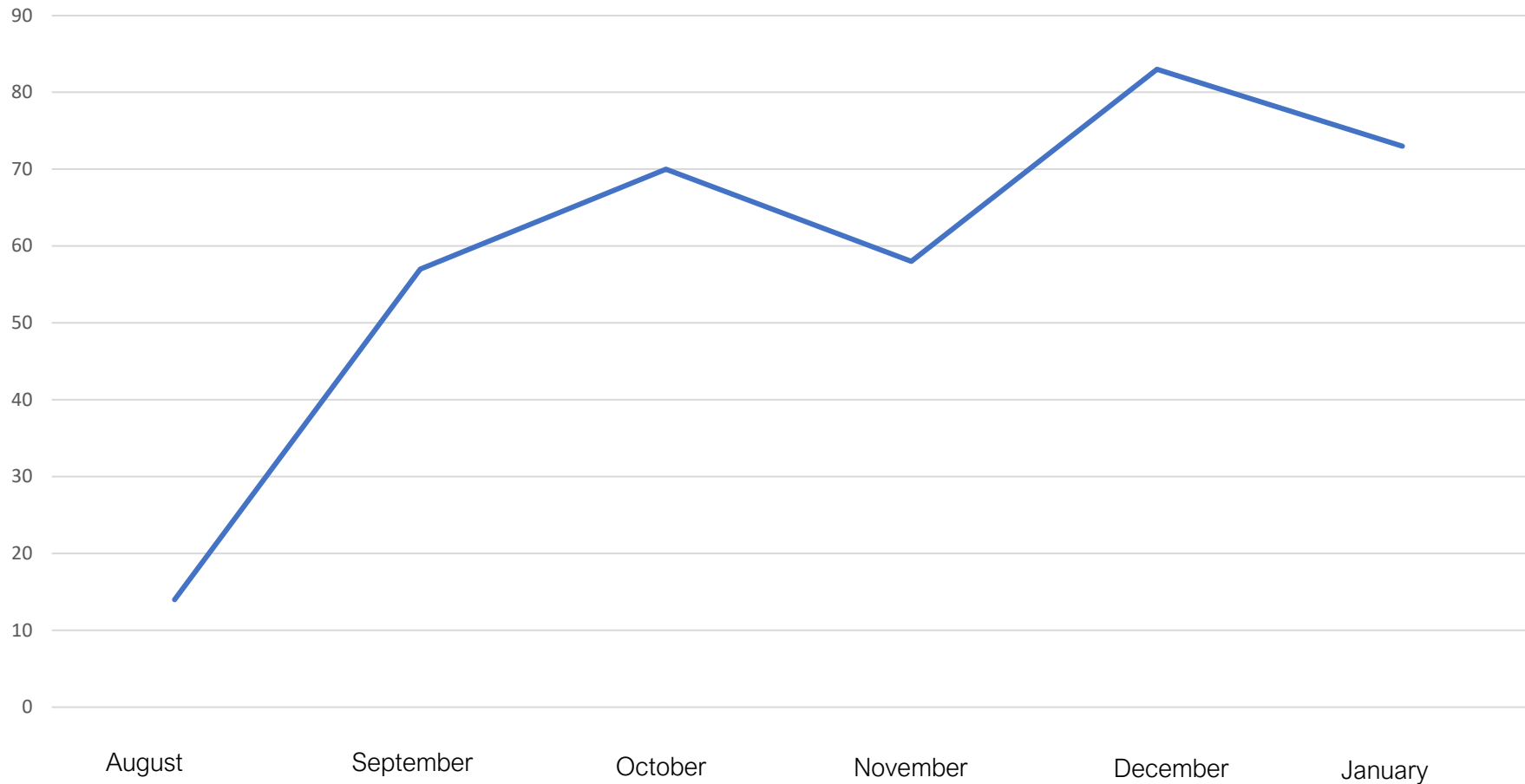
% of patients surveyed scoring ≥ 6 on a scale of 1-10 to the question:
How in control do you feel about your health?



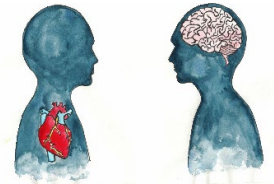
Patient Quality Scores



% of patients surveyed scoring ≥ 6 on a scale of 1-10 to the question:
How comfortable are you asking questions/advice of your healthcare provider?



Successes – Patient/Whanau Stories



Mrs LB, 57 yr old female

Fibromyalgia, obesity

Chronic pain – 3 knee replacements {2nd replacement in 1 knee from infection) and needing surgery in right ankle from collapse, paracetamol and PRN ibuprofen only pain relief for this.

12 regular medications

ACC sensitive claims patient

QT prolonging drugs - quetiapine 200mg
- Venlafaxine 150mg
- methadone 100mg

No ECG in past 2 years

No cardiovascular risk/renal function/diabetes tests in >2yrs

Patient consultation and medication review undertaken by Clinical Pharmacist

Recommendations made to GP, double appointment booked, pharmacist attended appointment with Mrs LB with her consent.

Discovered no communication links between GP and AoD

✓ Lab results done

Booked to see AoD Clinician and attended - ✓ ECG done

Appropriate options for pain relief started and patient finding relief; referral to physiotherapy services

Mr GH 61 year old male

Pharmacist involvement in facilitating healthcare needs resulted in:

- Medications prescribed in support of EtOH use
 - thiamine 150mg daily
 - multivitamin daily
 - zinc 50mg daily
 - Sertraline 50mg daily
- Blood tests done with collaboration with Hep C Nurse: Marivet prescribed – 8 week course given everyday with methadone – Hep C cured.
- Assisted change in GP collaboration with Victory Community Nurse – ordered CT scan and evidence of white matter depletion (evidence of cognitive decline).
- Shoulder x-rayed – comminuted fracture and pain relief finally and effectively prescribed – paracetamol and diclofenac
- Housing needs assessment done and due to be interviewed for appropriate housing




Sadly, GH passed away – from a suspected heart event (cardiac arrest).

Successes/Highlights

- Presenting the project to stakeholder groups – receiving the POSITIVE feedback is motivating
 - Alcohol and Drug Service
 - Te Piki Oranga
 - Tahuna Medical Centre
 - Toi Toi Medical Centre
 - NMDHB house surgeons
- Positive comments from patients about finally feeling like someone cares
- Seeing patient improvement in the cases we have worked closely with.
- Beginning to see the impact promoting the project, health professionals understanding how methadone has an effect on patients.
- Entry placed into the Nelson Marlborough DHB Health Innovation Awards

Community Pharmacists Improving Healthcare for a Vulnerable Population

Megan Peters, Deirdre MaGee, Rebecca Lukey, AS (Consumer)

What we know....

- People prescribed Opioid Substitution Treatment (OST) for opioid dependence:
 - are an ageing population who have a biological age 15 years older than their chronological age,
 - die 25 years earlier on average than the general population,
 - take medication that has significant physical health implications.
- People collect OST from their pharmacy most days of the week, and a pharmacist is often the most accessible health provider for this group.

What consumers have told us...

Consumers have identified barriers to healthcare such as difficulties accessing a blood test, experiencing stigma when seeing health providers, or feeling disempowered when discussing genuine health concerns.

"As soon as someone hears the word methadone, they whole way they treat you changes..." (Consumer)

"...I don't know my GP like I know you here – seeing you guys every day I have more of a relationship with you". (Consumer)

"For years I have had problems with finding a vein ...it becomes frustrating when I really need to get one [blood test]". (Consumer)


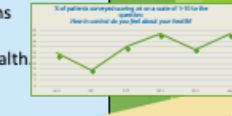


What we are doing about it...

Pharmacists and a consumer representative are working collaboratively with 30 tāngata whaiora with opioid dependence from Victory Square Pharmacy, to **empower** and **engage** this cohort with health services, while supporting them to overcome barriers to achieving health equity.

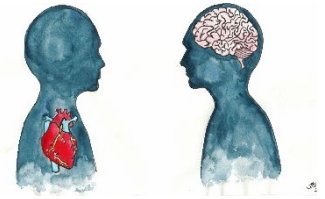
- **Support for people on OST to engage with health providers:**
 - Complex patients are receiving a clinical pharmacist medication review, and are being supported to attend DHB-funded appointments with their GP to receive a full cardio-metabolic screen.
 - Some are requesting a pharmacist attend appointments with them as a clinical advocate. Some have met with their health provider in the consultation rooms at Victory Square Pharmacy
- **Knowledgeable prescribers and informed consumers:**
 - Pharmacists are providing clinical education sessions to local GP practices and junior hospital doctors, about OST and its physical health implications.
 - A "Clinical Pearls" information sheet has been developed, in consultations with Addiction service and being adopted by Health Pathways.
 - Our consumers are working with us to develop a patient-friendly version to be made available through pharmacies, GP practices, and addiction services.
- **Clear pathways:**
 - Addressing the barriers to accessing ECGs and blood tests, necessary for cardio-metabolic screening, for this patient group.

Results so far...

- ✓ **Engagement:** Most of the surveyed OST clients now feel comfortable asking questions or advice of their healthcare professional.
- ✓ **Empowerment:** A growing number of OST clients surveyed feel in control of their health
- ✓ **Clear pathways:**
 - ✓ We have met with addiction services and cardiologists to discuss cardiology recommendations for people prescribed OST. These guidelines are now in the process of being formalised, resourced and uploaded on Health Pathways. "Everyone should have the same opportunities to be physically well." (Te Pou o Te Whakaaro Nui)
 - ✓ We are still working to improve access to ultrasound guided phlebotomy.

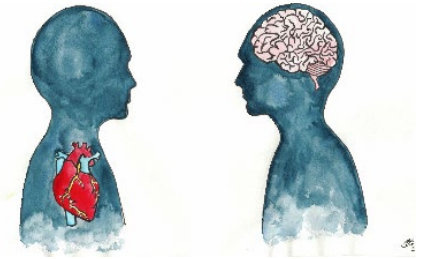
Lowlights/Barriers



- Getting lab tests done for a patient and discovering he has severely cirrhotic liver and may have liver cancer (from chronic Hep C and EtOH use) - JW had not had blood tests done for years because of the stigma and hassle that he goes through each time he needed to have blood tests done.
- Addictions clinic – they are understaffed and without full clinician team the patients are not being supported as they need to be.
- System barriers are still an issue – MedLab at hospital don't see any problem with anyone requiring ultrasound guided phlebotomy (but then no one goes because so much of a hassle in the past) – and differs with Marlborough (same DHB though) as they have system that services all those patients requiring USGP.
- Many projects are being done in the DHB and each is operating in a “silo” of trying to improve an area of healthcare. It has been difficult in some aspects with other projects overlapping but not being inclusive.
- Data is difficult to gather when what you are measuring is not always quantitative.
- *“You can lead a horse to water but you cant make them drink”* - applies to patients AND health professionals involved in the patient journey
- Quality Improvement often involves challenging the “culture” of healthcare.

Sustainability

Looking at how we encourage the maintenance of the improvement changes achieved with the project



Key areas to sustain:

Patient empowerment in their own healthcare

– regular ECG and blood tests to maintain physical health

Alcohol and Drug Service

- Improvement on current ECG protocols and having organizational champion at the AoD service to make sure this remains as part of the regular patient care plan.