PHYSICIAN QUALITY IMPROVEMENT COHORT 8

Project Summaries

2023 - 2024

PQI PHYSICIAN QUALITY IMPROVEMENT Specialist Services Committee | island health

Overview

The Physician Quality Improvement (PQI) program is a collaboration between Island Health and the Specialist Services Committee of Doctors of BC. PQI offers a range of training and education opportunities that all work to build medical staff capacity to participate in and lead quality improvement.

The PQI Program is led by the PQI Joint Steering Committee, which consists of four major key partner (stakeholder) groups: clinically active physicians, patient partners, Island Health representatives and Specialist Services Committee representatives. This committee is responsible for setting and supervising the strategic direction of the PQI Program.

PQI Cohort training is a one-year program in which QI skills are developed through learning action projects. The application process is competitive and guided by the Island Health PQI Steering Committee. Medical staff accepted to the program work closely with the PQI team of physician faculty and support staff.

Cohort 8 began the program in September 2023. In October 2024, 17 medical staff graduated from Island Health PQI Cohort 8. This is a summary of their achievements.

Table of Contents

Project Summary

Name & Specialty	Location	Project Aim
Dr. Stuart Bax & Dr. Cal Shapiro Family Practice Project Link	Victoria	By June 2024, improve colorectal screening events completed via CanScreen by 300%.
Dr. Sienna Bourdon Family Practice Project Link	Victoria	By June 2024, reduce the number of Shoreline Medical Brentwood Bay attached patient visits to the Saanich Peninsula Hospital Emergency Department with less urgent or non-urgent conditions (i.e. Canadian Triage and Acuity Scale score 4-5) by 20%.
Dr. Victoria Cook Clinical Immunology & Allergy Project Link	Victoria	By June 2024, 80% of patients <2 years of age referred to my community allergy practice for possible food allergy will be seen within 8 weeks of referral.
Dr. Shelly Mark Psychiatry Project Link	Nanaimo	By September 2024, the Developmental Disability Mental Health Team (DDMHT) aims to improve access, participation and engagement by 50% for patients in the Central/North Vancouver Island region with mild range of intellectual disabilities involved in the newly designed and adapted Cognitive Behavioural Therapy (CBT)group therapy sessions for anxiety management.
Dr. Laura Matemisz Emergency Medicine Project Link	Comox Valley	By May 2024, the aim is to increase Comox Valley Hospital (CVH) Emergency Department (ED) patient follow-up visits at the Comox Valley Urgent and Primary Care Clinic by 25%.
Dr. Jane McGregor Family Practice - Obstetrics Project Link	Victoria	By June 2024, 100% of patients will be 'satisfied' or 'very satisfied' with the process of finding prenatal care at Grow Health.
Dr. Jill Norris Family Practice Project Link	Victoria	By June 2024, 90% of my patients will continue to rate their overall experience of care as positive (i.e., 4 or 5-rating), as I implement Slow Medicine Principles.
Dr. Sarah O'Connor Pediatrics Project Link	Victoria	By July 2024, reduce the average length of stay (LOS) in the Victoria General Hospital (VGH) emergency department by 25% for children who have been admitted to pediatric inpatient medicine.
Dr. Andrew Robb Family Practice – Sports Medicine Project Link	Comox Valley	By June 30 2024, the wait time (from time of referral to Comox Valley Orthopedics clinic to time of first appointment) for a newly referred elective patient to see Dr. Michael Loewen will be reduced by 50%.

Project Summary

Name & Specialty	Location	Project Aim
Dr. Sand Russell-Atkinson Family Practice Project Link	Comox Valley	By July 1 2024, the total number of medications per resident at The Views long-term care (LTC) facility will be reduced by 10%.
Dr. Sara Sandwith Family Practice Project Link	Comox Valley	By June 2024, 90% of Dr. Sandwith's pregnant patients at Wavecrest Medical Clinic will rate their care as "Good" or "Excellent". Staff and clinicians will also rate their experience of working at Wavecrest as "Good" or "Excellent" during that time frame.
Dr. Valeria Stoynova Internal Medicine Project Link	Victoria	By July 31 2024, the inhaler-related carbon footprint from inhalers dispensed in the Emergency Department (ED) and on inpatient ward 5 North (5N) will be reduced by 15%.
Dr. Anas Toweir Family Practice & Emergency Medicine Project Link	Port McNeill	By September 30 2024, there will be a 20% reduction in the number of patients who seek medical attention in the Port McNeill Emergency Department (ED) who are triaged as less-urgent (4) or non-urgent (5) using the Canadian Triage and Acuity Scale (CTAS) and are clinically appropriate to receive care in the community Primary Care settings.
Dr. Michelle van den Engh Psychiatry Project Link	Victoria	By June 2024, patients' experience of attuned responsiveness in psychotherapy will increase by 15% in Dr. Michelle van den Engh's practice.
Dr. Jennifer Williams Gastroenterology	Nanaimo	By August 2024, staff and providers in the Endoscopy Unit at Nanaimo Regional General Hospital (NRGH) will report a 20% increase in their understanding and recognition of Trauma Informed practices (and patients and staff will experience humanity-centered healthcare).
Dr. Katie Zhu Emergency Medicine Project Link	Cowichan Valley	By June 30 2024, we aim to increase the application rate of topical anesthetic to 50% for children aged 0-12 years undergoing bloodwork at Cowichan District Hospital (CDH) Emergency Department (ED).

Promotion of Increased Colorectal Cancer Screening Uptake in the Greater Victoria Area

Physician Lead: Dr Cal Shapiro; Dr Stuart Bax

Location: Victoria

Specialty: Family Medicine

Background:

- Patients without access to preventative care are presenting with more advanced disease.
- Lack of access disproportionately affects unattached patients leading to an 'attachment gap' which in turn leads to worsening outcomes and increased system costs.
- Specifically for colorectal cancer screening, unattached patients face even more challenges given that an ordering provider is needed to arrange testing. This contributes to increased risks of morbidity and mortality from missed diagnosis of colon cancer.

Problem:

- Attachment rates to a primary care provider on Vancouver Island are some of the lowest in the country.
- CanScreen is a GP-led clinic that launched in Spring of 2023 dedicated exclusively to improving access to publicly funded cancer screening and surveillance tests for unattached patients.
- While the clinic aims to ensure equitable access to cancer screening services, higher referral rates are needed to ensure this goal is met given that there is capacity within the team to screen more patients who may not know about the program but are eligible for screening.

Patient Voice:

Two patient partners joined the QI project and served on an Advisory Committee throughout the year. Both partners had a history of cancer, were unattached at the time of first screening and diagnosis, and both faced several challenges trying to access care and maintain continuity after initial positive screens. Through the Advisory Committee, these partners were actively involved in advocating for change amongst clinicians who are intimately involved in the cancer care process. They also shared the following quotes:

Patient Partner #1: *"I wouldn't be here if I didn't advocate for myself."*

Patient Partner #2: *"I have no access to any preventative care… no GP, no NP… nothing. (It's) very scary."*

Aim of Project:

Improve colorectal screening events completed via CanScreen by 300% by June 2024.

Measures:

Outcome Measures

- Total number of completed colorectal cancer screening tests (FIT tests and colonoscopies) completed per week (Figure 1).
- The number of FIT Tests completed per week (Figure 2).
- The number of screening or surveillance colonoscopies completed per week (Figure 3).

Process Measures

- The number of general cancer screening bookings per week.
- The number of specific colorectal cancer screening bookings per week.

Balancing Measures

- Clinician time necessary to manage administrative burdens associated with unique unattached workflows.

Action Taken:

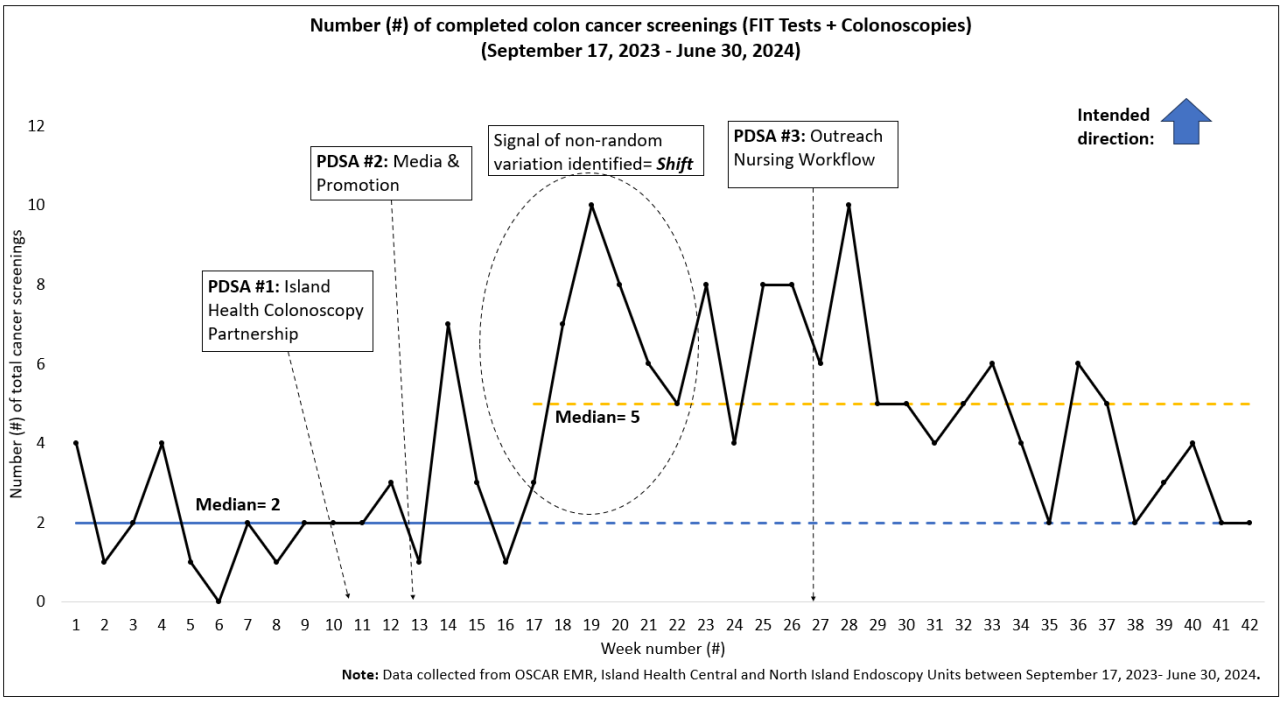
QI work was undertaken by the project leads in the setting of their outpatient community clinic (CanScreen - virtual). Engagement occurred with several stakeholders and partners at a local and regional level. Change ideas that became interventions were as follows:

- Media & Promotion: Regional and National News Coverage in fall of 2023, followed by a dedicated 20-minute podcast slot on CBC's 'White Coat Black Art' in December of 2023.
- Engagement and subsequent partnership with the Central and North Island endoscopy clinics whereby unattached patients are linked to CanScreen to facilitate screening or surveillance colonoscopy.
- Engagement and eventual outreach with a local community nursing clinic allowing RN-led distribution of stool FIT kits to eligible unattached patients under MD supervision.

Data Analysis:

- Data was collected from 2 primary sources: The clinic's OSCAR EMR and online booking tool (with support from Doctors of BC technology department) and from the nurses managing the Island Health central and north endoscopy clinics.

Figure 1.



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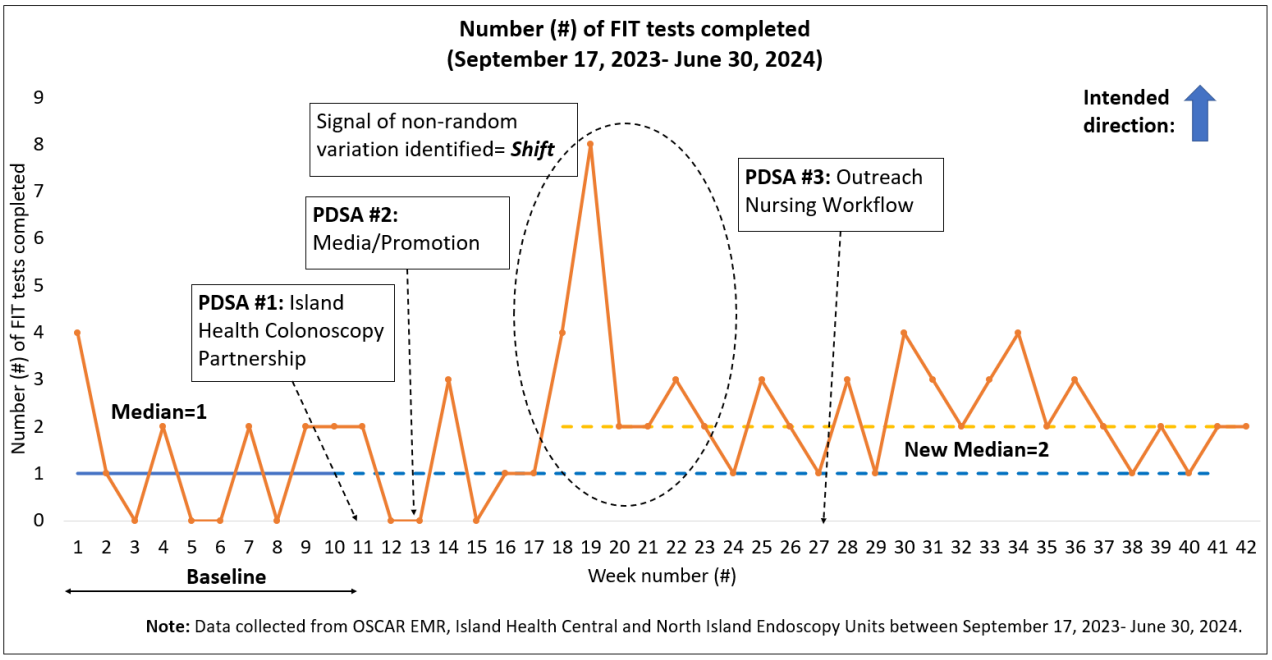

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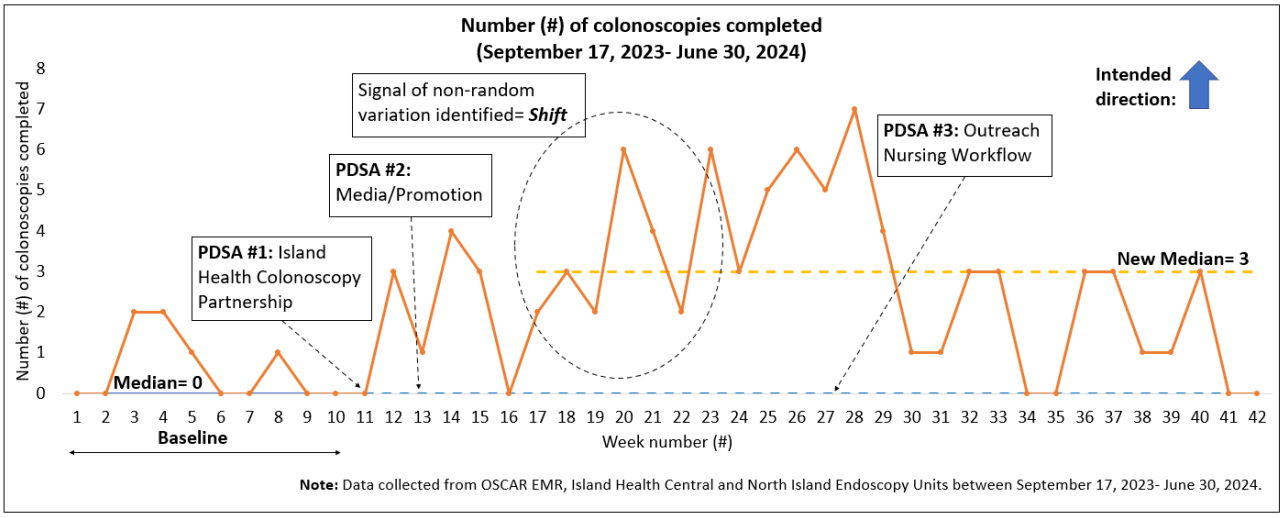


Lessons Learned:

- We found that the number of patients booking preventative health visits and completing cancer screening tests was highly correlated to the timing of marketing or media releases. Targeted marketing and promotion were effective interventions to increase the number of FIT kits completed and colonoscopies booked shortly after. However, patients must have the ability to book and complete their appointments rapidly. If there is a delay in ability to access testing improvements in uptake and completion of testing is quickly lost.
- We have used the momentum from the initial advertising campaign to help partner with Island Health who have been distributing posters for our clinic and related breast screening intervention across Island Health sites. Engagement with the Health Authority has allowed for sustainable media and promotion interventions.
- Our engagement and partnership with the Central and North Island Endoscopy clinics have led to a significant and sustainable increase in screening & surveillance colonoscopy uptake amongst unattached patients.
- Our final intervention regarding direct-to-patient FIT outreach was not successful. The main barrier to success was that the clinic we performed outreach at did not have a patient demographic suitable to FIT testing. A large percentage of their patients were elderly and outside the age range for screening or did not meet other exclusion criteria for testing. Lessons learned can be applied to future outreach to ensure patient demographics are more appropriate.

Next Steps:

- We have applied for Spread (SQI) funding in efforts to expand the service and apply PQI lessons to other screening interventions. We have developed parallel partnerships for breast screening with Island Health
- In a related Shared Care project, we are advocating for operational funding to expand and stabilize the service longer-term.

- We have already begun to spread our work with other divisions interested in screening and preventative health care projects, most recently presenting at MedTalks for the Sechelt Hospital Foundation.

Improving urgent access at the Patient Medical Home to reduce Emergency Department Visits

Physician Lead: Dr Sienna Bourdon

Location: Shoreline Medical- Brentwood Bay

Specialty: Family Medicine

Background:

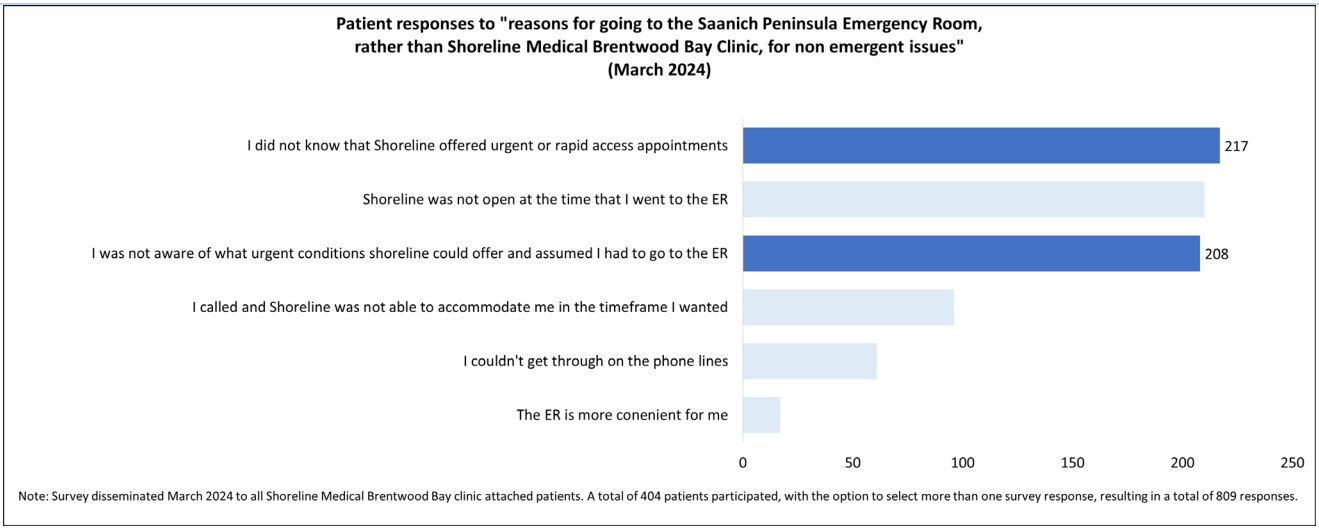
- Over the last two years, Saanich Peninsula Hospital Emergency Department (SPH ED) has seen significant volumes of attached patients presenting for reasons that could be managed within the primary care clinic. Data supports that ~70% of these weekday visits were from attached patients.
- Patient visits to the ED that could have been visits within primary care result in higher costs to the system (>$1000/patient visit in ED vs ~$50/patient visit in the clinic), overburdens an already stretched ED, and bottlenecks care for the more urgent and emergent patients in the ED.

Problem:

- While this problem extends beyond any single clinic, attached Shoreline patients accounted for over 1000 of these visits to the SPH ED for Canadian Triage and Acuity Scale (CTAS) 4/5 conditions (minor and easily managed in clinic) within the previous year.
- Shoreline has multiple rapid access appointments available in each provider's schedule every day, but they were often getting inappropriately booked up in advance, compounding the problem.
- Neither Shoreline staff nor Shoreline attached patients benefit from this current state. For staff, accommodating same-day appointments has historically been challenging, compromising the wellness of the team and leading to stress and moral injury. Medical Office Assistants (MOAs) have expressed frustration in the amount of time it takes and the difficulty in accommodating these bookings. Understandably, patients are also frustrated when they are unable to see a provider in a timely manner or are stuck waiting in the ED for hours.

Patient Voice:

To better understand the problem from a patient perspective, communication and surveys were sent out to patients of the Shoreline Medical Brentwood clinic to which a total of 404 patients responded. Of the response received, "*I did not know that Shoreline offered urgent or rapid access appointments*", and "*I was not aware of what urgent conditions Shoreline could offer and assumed I had to go to the ER*" were identified as major contributing factors and helped to inform future PDSA strategies around patient education.



Aim of Project:

By June 2024, reduce the number of Shoreline Medical Brentwood Bay attached patient visits to the Saanich Peninsula Hospital Emergency Department with less urgent or non-urgent conditions (i.e. Canadian Triage and Acuity Scale score 4-5) by 20%.

Measures:

Outcome Measure

- Number of Shoreline Medical Brentwood Bay attached patient visits to SPH ED for CTAS 4/5 issues between Monday-Friday.

Process Measures

- Percentage (%) of rapid access appointments being booked inappropriately (>48h) per "booking guideline".

Balancing Measures

- MOA ease of booking same day appointment.
- Percentage (%) of rapid access appointments unfilled.

Action Taken:

PDSA #1: MOA and provider education on new booking guidelines:

- Education provided in written form and every MOA had access to electronic and printed guidelines.
- Weekly MOA surveys alongside verbal feedback throughout the process and I attended huddles to answer any questions.
- Small changes were made to the schedule templates for rapid access appointments and a standardized rapid access booking template was used to improve compliance.

PDSA #2: Patient communications (survey and booking info):

- Information sheet was distributed through Shoreline's patient portal to provide education of booking guidelines.
- Patient survey was distributed to inform future interventions.

PDSA #3: Patient communications (follow-up on booking info):

- Communication was informed in part with the assistance of a patient partner.

- Focus was on reminding patients of the process to access urgent appointments at the Shoreline Medical Brentwood Bay clinic as well as options other than going to the ED.
- We attempted to launch online booking for the rapid access appointments but encountered IT challenges, so it is still in progress.

Data Analysis:

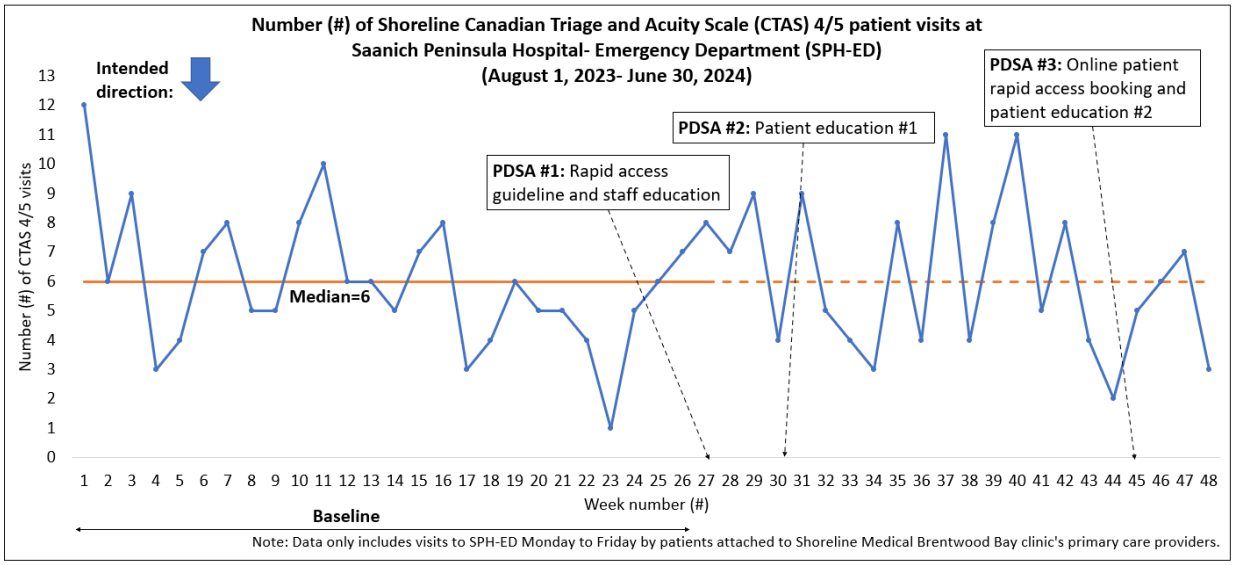
- No changes observed in the outcome suggests that ED visits are impacted by various factors. Despite this, we were able to streamline clinic workflows, inform our MOAs of booking strategies, and educate patients on what conditions we can address at Shoreline, saving them a visit to Saanich Peninsula Hospital's ED.
- As per the booking guideline, less patients were being scheduled more than 48 hours in advance of their appointment. Additionally, MOA satisfaction with both the quality of the booking process and the ease of booking has significantly improved and was sustained 4 months after implementation.
- Patient feedback about the communication has also been very positive:

  "When the topic of healthcare comes up in my circles, the comments indicate that shortage of doctors and spots available to get in to see a doctor deter people from even trying to make urgent appointments at their clinic and would not even be thought to be an option."

  "This is a wonderful project for Shoreline to implement. Province-wide this would take so much stress off ER, and the longitudinal care is so much better."

  "Long story short, if you make a tool/process that allows me to request an urgent appointment online and have someone confirm that appointment within a reasonable time period, I am less likely to go to San Pen ER."

Figure 1.



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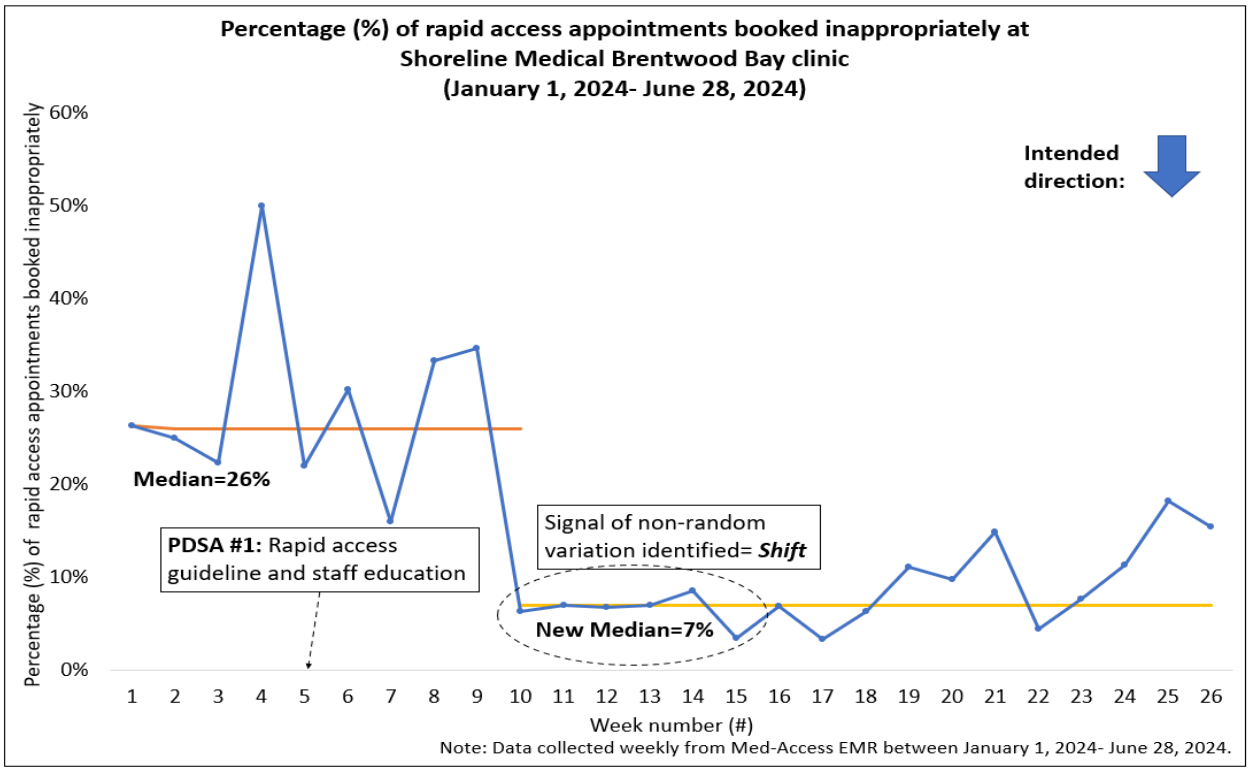


Lessons Learned:

- Upfront communication and consultation with the whole team is key to buy-in and success of a major process change.
- It is difficult to effect change in the complex and unstable system that is primary care right now, there are so many drivers contributing to the problem.
- Successes within our circle of control were easy to celebrate and build on positive momentum within the team.
- Patient behaviour is complex, every week we had multiple unfilled rapid access appointments, yet patients are still showing up in the ED.
- Process measure data collection was difficult initially due to a lack of standardized schedule templating and inconsistency amongst physicians with use of the templates.
- Physicians change their schedules often and the clinic needs to remain flexible to their needs, not instituting processes that are too rigid

Next Steps:

- Continue to improve the IT around online booking for patients to book rapid access appointments.
- Strengthen sustainability of new processes within clinic through things like MOA "quizzes" on the guidelines and follow up communications to the team and patients.
- Spread the project to our partner clinic, Shoreline Sidney then hopefully to other clinics within our PCN. A huge number of attached patients are seen in UPCCs and EDs across the province. If we can increase access to their primary provider, this could have a massive impact province wide. I have already met with Tristan Smith (Director-Primary Care Strategy & Innovation, MoH) about this problem.

Fast access to consultation for pediatric food allergy

Physician Lead: Dr Victoria E. Cook

Location: Victoria, BC

Specialty: Clinical Immunology & Allergy

Background:

- Life threatening food allergy can be prevented through early introduction of common allergenic foods. Delays in assessment therefore lead to delays in food introduction, increasing the risk of developing life-threatening food allergies.
- Oral immunotherapy and food ladders are a treatment option for food allergy that are safest and most effective when initiated early, with best data in the infant population.
- Counselling provided by referring physicians varies widely, and the information provided may be at odds with current guidelines and recommendations. Many parents defer introduction of priority allergens or otherwise withhold foods while awaiting assessment, which increases the risk of life-threatening allergy. Families require urgent support in introducing other priority allergens to prevent food allergy, and to avoid relevant allergens and effectively manage reactions if they occur.

Problem:

The current wait time for patients <2 years of age referred for possible food allergy at our clinic is 5 months, far beyond our target assessment time of 1-2 months, resulting in delays in time-sensitive interventions including early allergenic solid introduction and initiation of oral immunotherapy (OIT) when indicated.

Patient Voice:

"We were told not to try any other nuts until we met with you [allergist]. I wish we had known earlier that it was important to keep trying new foods, because we might have been able to prevent an allergy." - Patient seen prior to start of intervention

Aim of Project:

By June 2024, 80% of patients <2 years of age referred to my community allergy practice for possible food allergy will be seen within 8 weeks of referral.

Measures:

Outcome Measure

- Time between referral and first visit.

Process Measure(s)

- Visit length (minutes).
- Number (#) of follow up visits prevented.
- Number (#) of referrals prevented (next step).

Balancing Measure(s)

- Patient reported satisfaction with the intervention.
- Reactions +/- emergency department visits results from recommended interventions.
- Administrative burden as measured by number of emails directed to RN and MOA related to interventions.

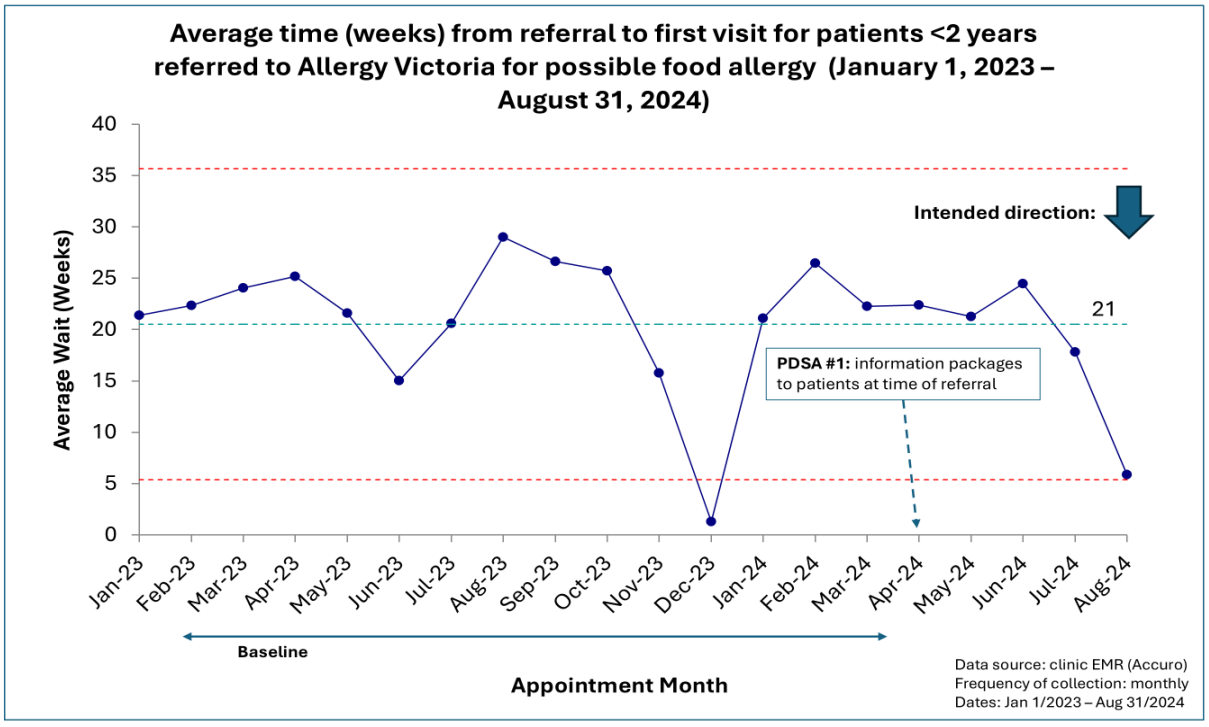
Action Taken:

Patient education was our initial target, as early tests of change identified the potential for increased capacity through reduced visit length and need for follow up visits. From January – April 2024, we developed information packages and a central repository of information on our public facing website, tailored to the various referral complaints. We enlisted the help of patient partners to provide feedback on content as well as survey design.

Data Analysis:

- Between April 18, 2024 – August 31, 2024, 182 referrals have been eligible for the intervention, and 145 information packages have been sent. 78 patients have been booked and 67 have yet to be booked. Four patients were contacted to be booked but expressed that after reviewing the provided information they no longer required assessment.
- Mean time from referral to initial visit is 20 weeks pre intervention and was stable (Figure 1).
- Average post-intervention visit length for patients who had reviewed the information dropped to 39 minutes compared to the average pre-intervention visit length of 60 minutes (Figure 2).

Figure 1.



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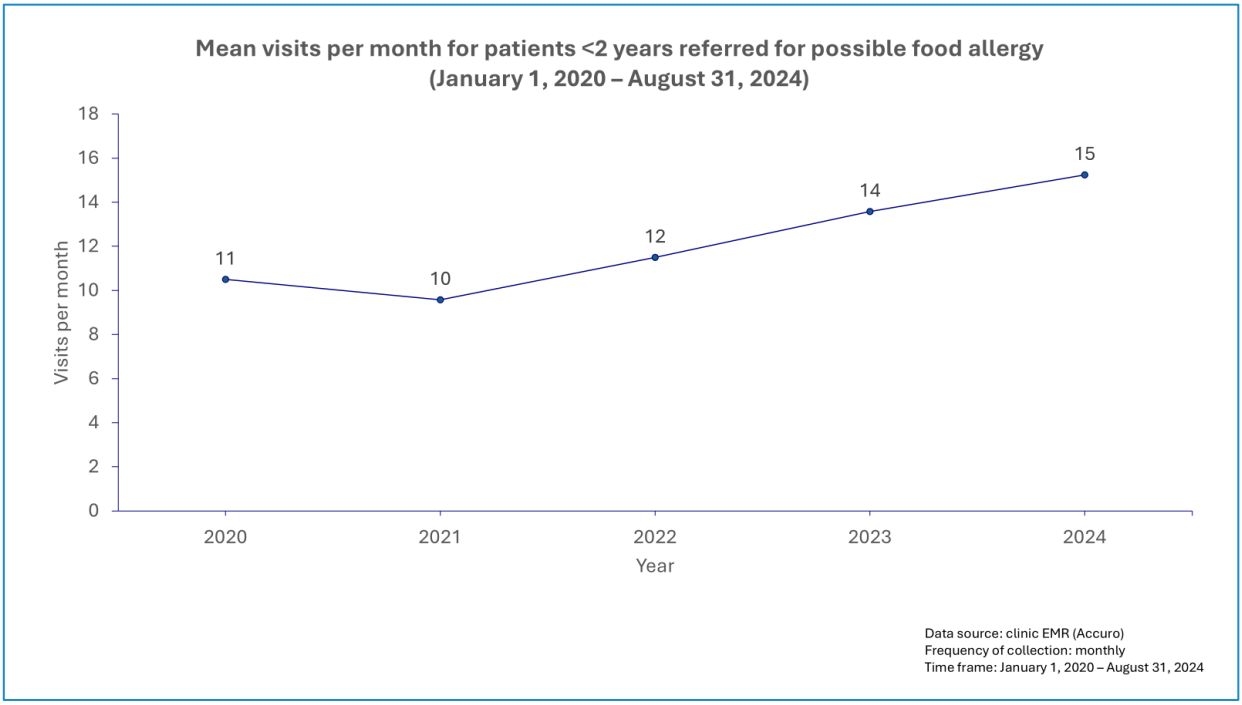


Lessons Learned:

- Review of information package ahead of visit results in reduced visit length and need for follow up.
- Intervention reported as helpful by 100% (25/25) caregiver survey respondents.
- Uptake of intervention is a major barrier to impact with only 40% reviewing information.
- Email address not included for 30% of referrals, resulting in increased administrative burden.
- 88% (22/25) caregivers reported receiving limited or contradictory information from referring providers.
- Achieving a sustained reduction in wait times is a long-term (2-3 year) goal.

Next Steps:

- Future directions: work with Pathways, hospital EMR providers to facilitate information package distribution.
- Project dissemination: abstract accepted to Canadian Society of Allergy and Clinical Immunology Annual Scientific Meeting as oral presentation (Banff, 2024); presentation will be by Dr Kristine Jegnathian (Pediatrics Resident PGY-3)

Improving Access, Participation and Engagement in Cognitive Behavioural Therapy (CBT) for Anxiety Management Group Therapy Sessions for Individuals with Diverse Abilities

Physician Lead: Dr A. Shelly Mark

Location: Nanaimo

Specialty: Psychiatry

Background:

- Anxiety is a common and significant issue among individuals with Intellectual Disability (ID), with prevalence rates ranging from 15% to 35%. Without counselling, many patients have unmanaged or undertreated anxiety, leading to emotional distress, functional impairment, behavioural outbursts, and hospital encounters.
- Individuals with intellectual disabilities have significant barriers in accessing therapy sessions to address their anxiety. Some of the innumerable barriers include being eligible to participate in general Mental Health & Substance Use ('MHSU') programs, finding a therapist in community with a "right fit", or sustaining private pay counselling due to cost constraints.
- CBT (cognitive behavioural therapy) is an evidence-based intervention and a part of the biopsychosocial approach to mental health care. Research indicates that individuals with mild to moderate ID can benefit significantly from CBT, especially when caregivers are involved, and interventions are adapted. Furthermore, approximately 50-70% of participants in CBT programs experience significant improvement in their anxiety symptoms.

Problem:

- ID participants accessing group medical visits offered here on Vancouver Island face all of the obstacles above, with one of the key challenges being that their participation from week to week can vary despite being registered for the sessions.
- This means that despite being connected to these supports, participants are still struggling to attend sessions which could benefit them greatly.
- Locally, contributing factors for these absences range from conflicting schedule commitments, having difficulties sustaining attention during sessions, and not being able to readily apply learning materials in their daily lives without supports which could lead to disengagement from the program.

Patient Voice:

Sample of feedback received through patient surveys:

- Patient: "I get to talk about my stuff, and I feel better."
- Patient: "I enjoyed the talk about situations, it was actually fun."
- A patient family member: "These are difficult concepts and I liked how they were presented."

- A patient family member: "This is a wonderful opportunity for individuals like 'D'. I already mentioned that I haven't seen another series of sessions like this, tailored to individuals with DD. Thank you!"

Aim of Project:

By September 2024, the Developmental Disability Mental Health Team (DDMHT) aims to improve access, participation and engagement by 50% for patients in the Central/North Vancouver Island region with mild range of intellectual disabilities involved in the newly designed and adapted Cognitive Behavioural Therapy (CBT) group therapy sessions for anxiety management.

Measures:

DDMHT created CBT learning modules that are adapted to the diverse abilities of patients with ID. The clinic delivered weekly group therapy sessions as part of an 8-week CBT series, over the course of October 2023 to August 2024. The first series assisted in establishing the baseline in terms of the discovery process of the optimal numbers of patients to contact, patients enrolled and of patients participating in the group sessions.

Outcome Measure

- Percentage (%) of enrolled patients attending each group therapy session.

Process Measure(s)

- Percentage (%) of patients enrolled in group therapy sessions.
- Percentage (%) of group therapy session attrition.
- Number (#) of patients contacted in group therapy sessions/goal of 10 participants, across 4 series of 8-week group therapy sessions.
- Number (#) of forms completed/Number (#) provided to participants who attended session.
- Likert scale indicating patient satisfaction of group therapy session.

Balancing Measure(s)

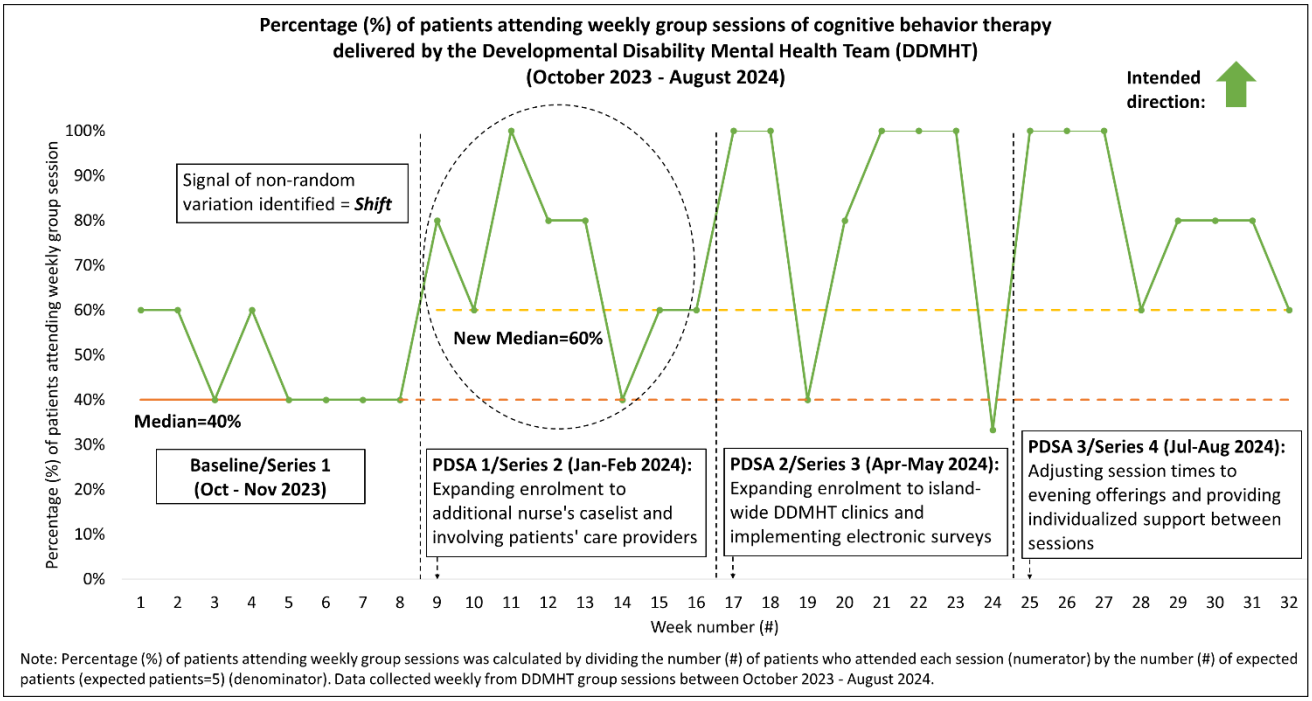
- Patient self-reported anxiety score
- Number (#) of hours from nursing co-facilitator, regional nurses and admin in supporting project.

Action Taken:

Change ideas and PDSAs were implemented over the course of 4 series:

- Centralizing patient enrolment; sequentially expanding enrolment in a step wise process, from increasing number of nurses' case list, to including both Vancouver Island clinics, to finally island-wide patient recruitment and enrolment.
- Identifying appropriate family members and care providers to be involved in supporting patients.
- Refining learning materials with each series.
- Transforming paper and email forms into electronic surveys.
- Arranging for follow-up discussions if patients or supports choose or requested, to enhance inter-session skill development and implementation.
- Adjusting session time to accommodate for patient's other commitments.

Data Analysis:



Note: Percentage (%) of patients attending weekly group sessions was calculated by dividing the number (#) of patients who attended each session (numerator) by the number (#) of expected patients (expected patients=5) (denominator). Data collected weekly from DDMHT group sessions between October 2023 - August 2024.

- DDMHT conducted therapeutic sessions for 30 distinct patients, equating to 112 individualized Cognitive Behavioural Therapy (CBT) sessions. Initial attendance rates for these sessions were directly linked to patient enrolment, with approximately 40% of enrolled patients attending. The attrition rate across all session series was between 50% and 60%.
- A notable reduction in anxiety severity was observed, with a 22-42% decrease in Generalized Anxiety Disorder-7 (GAD-7) self-reported scores.
- As a result of our changes, nursing and staff hours increased by approximately 2 hours per week.

Lessons Learned:

- Having a centralized system with the group co-facilitator contacting the patients directly, instead of their usual nurse, helped patients feel more informed of the group therapy, and improved enrolment rates. Expanding the group therapy sessions to additional nurses and clinics further increased patient eligibility and enrolment.
- Patients who had family or other care providers attend sessions had improved attendance, increased participation during sessions, and higher completion rates of home practice and survey feedback forms.
- Check-ins scheduled with patients between sessions were impactful and allowed patients to discuss their main concerns, explore their worries in a CBT framework and felt that their issues were heard. In-session data collection is highly effective, and integrating data collection within the session, such as the GAD-7, significantly improves the likelihood of obtaining data.

- Shifting sessions to after-hours was expected to improve attendance by reducing conflicts with work/commitments. While initial attendance numbers were higher, the attrition rate appears consistent with previous groups, suggesting that other factors beyond scheduling may be contributing to attrition.
- It was planned to incorporate individualized support throughout the weekly sessions, though this change idea was challenging to implement due to limited nurse co-facilitator availability and their subsequent departure. However, in retrospect, this change idea would have likely yielded moderate-high impact for the patients, though at high effort and staffing costs for the program as a balancing measure.

Next Steps:

There are ample opportunities to expand and spread the project:

- Potentially, publishing visual learning materials as a resource
- Spreading the group therapy sessions across health authorities
- Spreading beyond the health care system, including schools, day programs, group homes and other care agencies, such as MCFD, CLBC etc.

The Best Care in the Best Place: Emergency Department (ED) to Rapid Primary Care Follow-up in the Comox Valley

Physician Lead: Dr Laura Matemisz

Location: North Island Hospital Comox Valley Emergency Department and the Island Health Comox Valley Urgent and Primary Care Clinic

Specialty: Emergency Medicine

Background:

Patients seen in the Emergency Department (ED) often need timely follow-up after their acute care visit but have no access to health care other than repeat ED visits. Other patients also frequent the ED with low acuity problems due to a shortage of family practitioner and walk-in clinics. All of this contributes to increased ED wait times and overcrowding which has been shown to worsen patient outcomes, lower patient satisfaction, and carries high overall health care costs.

Problem:

Comox Valley Hospital (CVH) Emergency Department (ED) patient visits and wait times are increasing. Patients requiring follow-up within the Comox Valley could be accessing care at the local Island Health Urgent and Primary Care Clinic (UPCC) but the referral pathway between the ED and the UPCC has yet to take off as a means to effectively reroute patients away from the ED.

Patient Voice:

Verbal patient experience from an ED visit: *"It would be nice not to have to wait all this time in the ED for this problem. I know it wasn't an emergency, but I didn't know where to go."*

Aim of Project:

By May 2024, increase Comox Valley Hospital (CVH) Emergency Department (ED) patient follow-up visits at the Comox Valley Urgent and Primary Care Clinic (UPCC) by 25%.

Measures:

Outcome Measure

- Number (#) of referrals from the CVH ED to Comox Valley UPCC

Process Measures

- Number (#) of ED physician referrals.
- Number (#) of ED nursing and allied health professional referrals.
- Total number (#) of referrals with intention to provide timely follow-up to decrease admissions and repeat ED presentations.

Balancing Measures

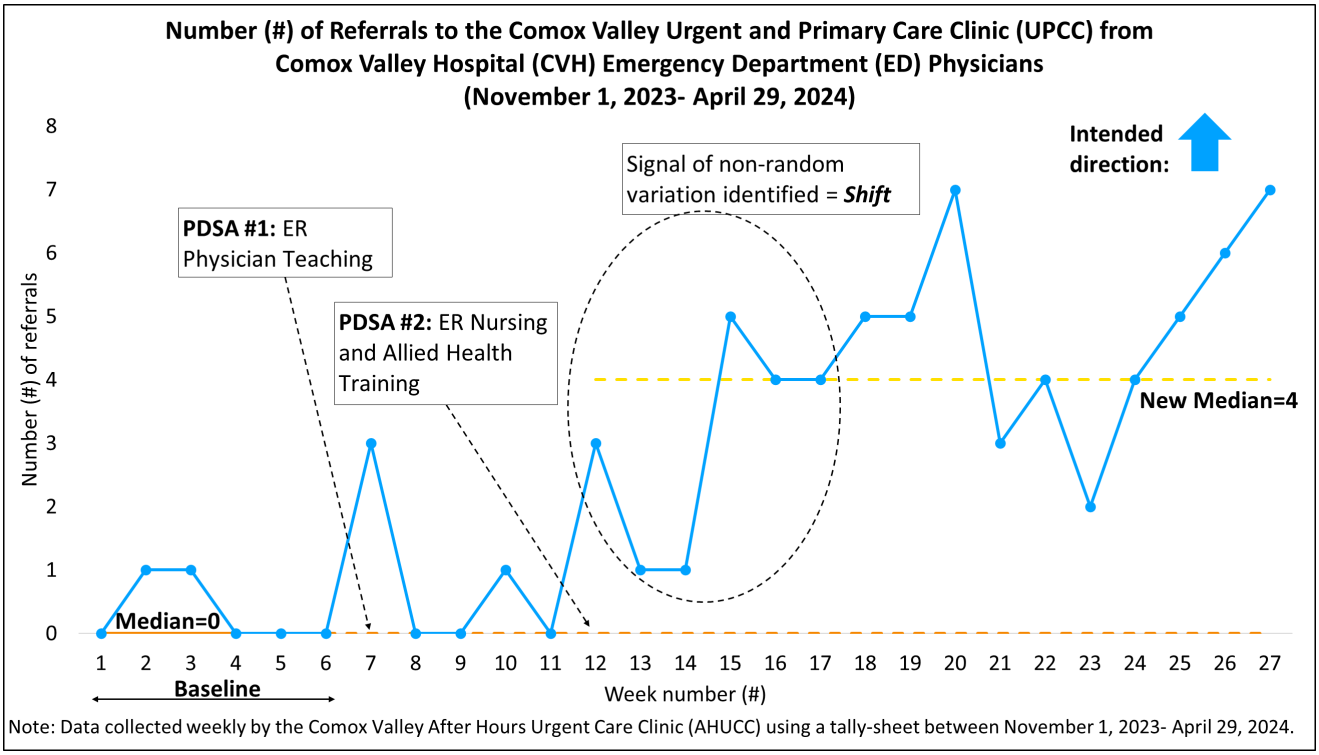
- CVH UPCC physician capacity
- CVH UPCCC nursing capacity
- Number (#) of inappropriate referrals for patients who should have been admitted or followed up in the ED.

Action Taken:

Prior to testing change ideas, I engaged the CVH UPCC to better understand their workflow, to co-design change ideas, and to establish stronger linkages between their site and the CVH ED.

- PDSA #1: ED physician education and resources (referral form, referral indications)- included initial meeting and bimonthly email reminders.
- PDSA #2: ED nursing and allied health education and resources (referral form, referral indications for allied health follow-up)- included initial meeting and weekly reminders at morning nursing meetings.

Data Analysis:



Note: Data collected weekly by the Comox Valley After Hours Urgent Care Clinic (AHUCC) using a tally-sheet between November 1, 2023- April 29, 2024.

Lessons Learned:

- Lesson #1- Appropriate community primary care follow-up will be utilized by patients if there is a pathway developed.
- Lesson #2- Nursing and allied health underutilized outpatient follow-up pathways which is an area for improvement.
- Lesson #3- It is essential to have engagement from your community partner for this model to work (thanks to Dr A. Tura and UPCC Nursing Lead Whitney Schaefer).

Next Steps:

- Formalize referral pathway for ED to UPCC primary care follow-up. Include this in new physician orientations and locum manual.
- Continue to advocate for nursing and allied health to refer to UPCC for follow-up for their tasks as the UPCC has expanded nursing hours and allied health supports.
- Continue connection with UPCC by having dedicated ED lead.

Finding Prenatal Care, A Patients Perspective

Physician Lead: Dr Jane McGregor

Location: Growth Health, Victoria
Specialty: Family Medicine - Obstetrics

Background:

- Victoria is currently in a maternity care crisis. The number of deliveries in Victoria has remained stable at around 3000 per year, or slightly increasing. The number of family practice obstetrics (FP-OB) providers who do antenatal, intrapartum, and postpartum care in Victoria went down dramatically from 51 to 24 in the last 3 years.
- In a community survey completed in Sept 2023, 5.7% of respondents had not had any prenatal care as they had not been able to find a provider. 49% of respondents found it hard to figure out what options were available and/or found it challenging to find someone accepting patients for their due date.

Problem:

- Pregnant people in Victoria experience significant system navigation issues when trying to find out which FP-OB's and Midwives are accepting patients for various due dates.
- Grow Health alone received 70-100 calls per month between Sept 2024 and January from patients that it was unable to accept for care.
- Patients in distress, non-OB family doctors feeling like they have nowhere to send their pregnant patients, and FP-OB physicians delivering patients with substandard or no prenatal care is becoming an ever-increasing source of moral distress for both physicians and our staff that urgently needs to be addressed.
- While the system truly requires more FP-OBs in order to match demand, other avenues within the system could improve patient satisfaction so that patients feel more supported in a time of need.

Patient Voice:

- "This was a very stressful process when I was supposed to be calm and happy. I felt no one cared and that I was without any help and was alone."
- "A lot of places listed online were actually closed. Needs to be updated. When I was pregnant last year, I had no doctor. Called maybe 30 places. It is so hard to find a doctor right now. Very scary."
- "I found it hard to find an up-to-date list, also many offices seem to not have a voicemail service and it was difficult to call during office hours."

*quotes captured from pre-project anonymous community survey

Aim of Project:

By June 2024, 100% of patients will be 'satisfied' or 'very satisfied' with the process of finding prenatal care at Grow Health.

Measures:

Patients who were accepted to Grow Health for pregnancy care were surveyed on intake. These surveys continued throughout the QI project with a couple of additional questions added once the central self-referral was in use.

Outcome Measure(s)

- "I am satisfied with the process of finding a maternity care provider in Victoria." (1-5 Likert)
- "I found it easy to find a list of available providers to contact when seeking care." (1-5 Likert)
- "Why / why were you not satisfied?" (qualitative)

Process Measure(s)

- Number (#) of phone calls patient made before being accepted at Grow Health.
- Reason patient came to be attached to clinic ("How did you find us?")

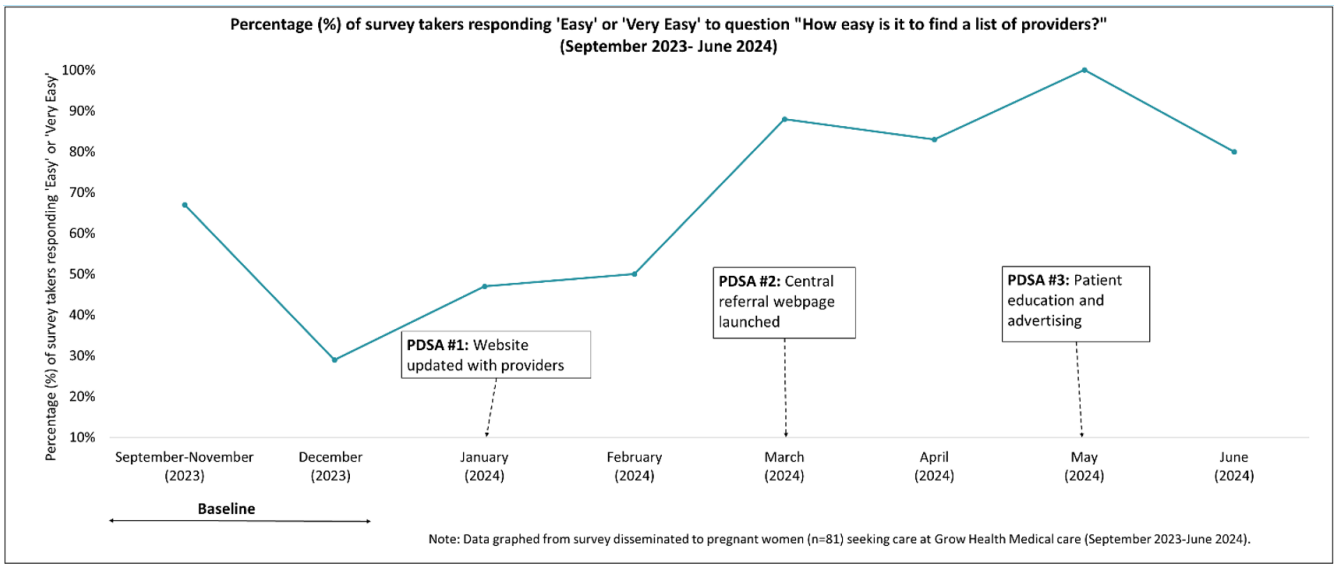
Balancing Measure(s)

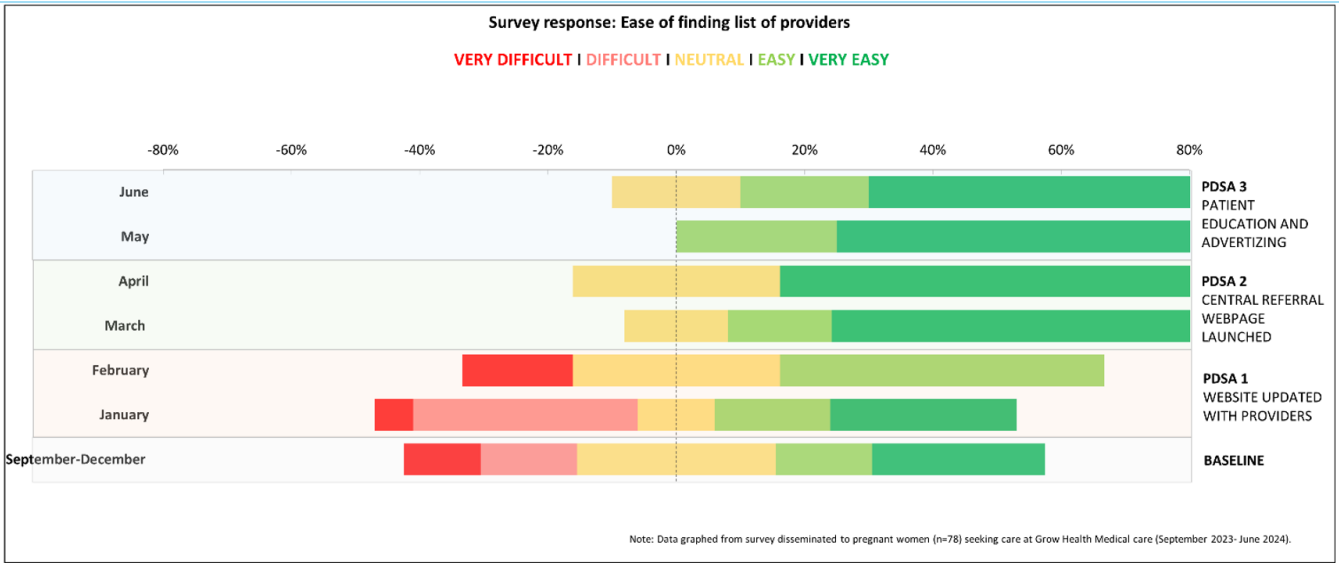
- Number (#) of phone calls MOAs received where patients were not accepted for care.

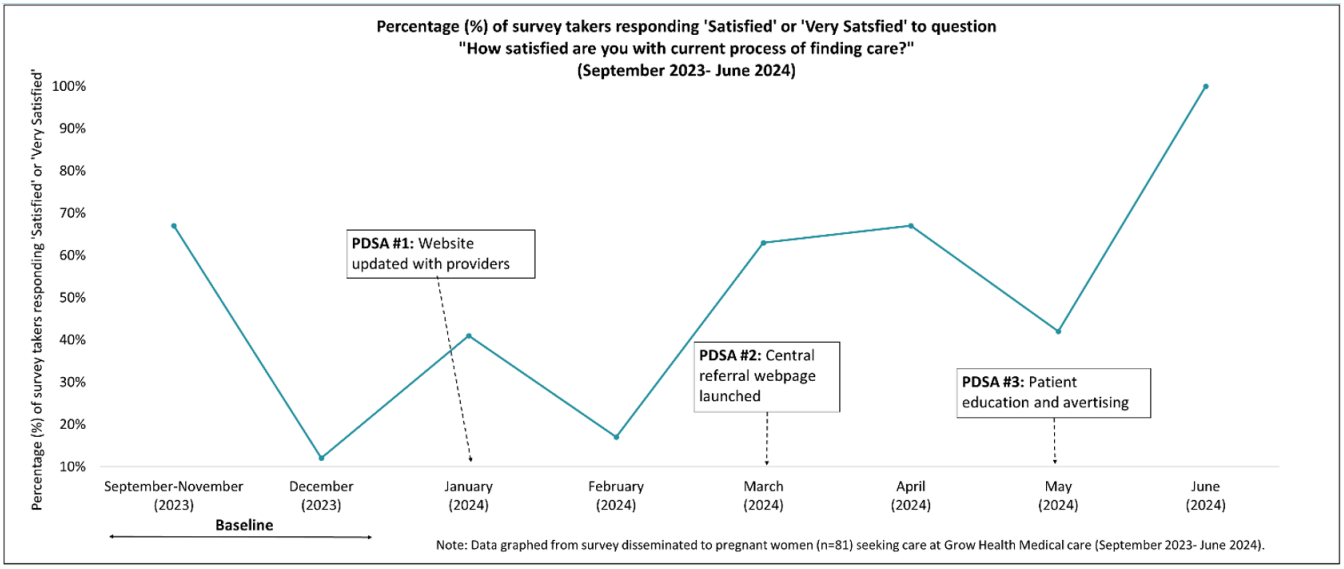
Action Taken:

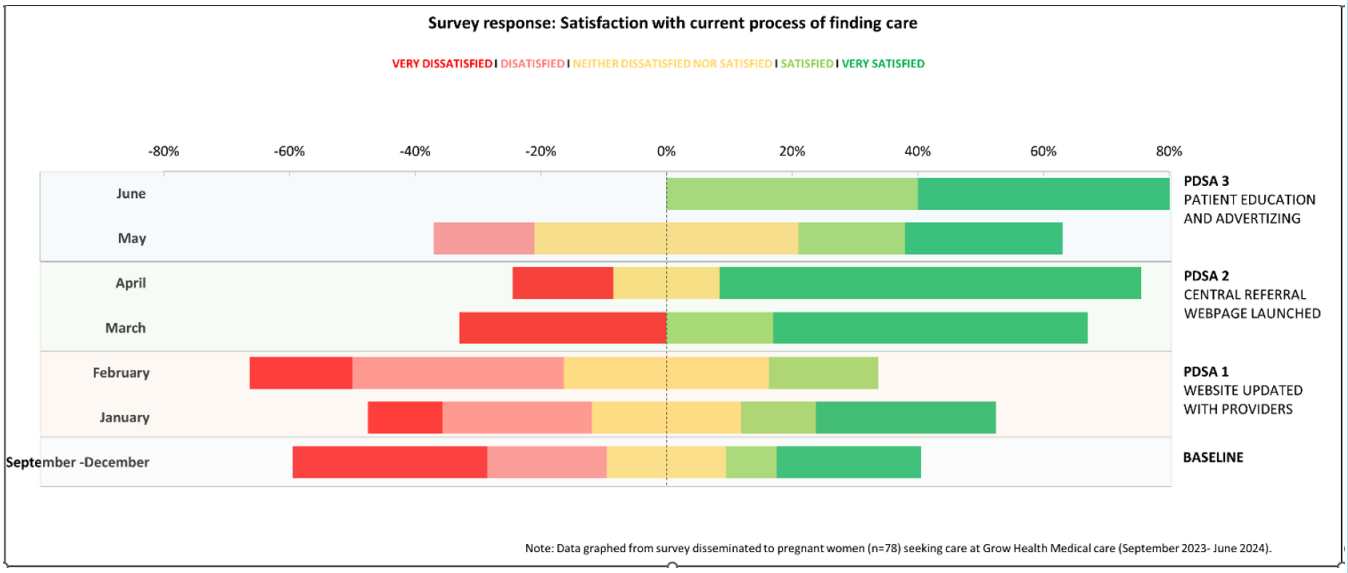
- Updated Coastal Maternity website with contact information for all providers in Victoria (including those not in our call group).
- Created and tested a central self-referral for coastal maternity group.
- Communication strategy to increase use/knowledge of self-referral program for pregnancy care.

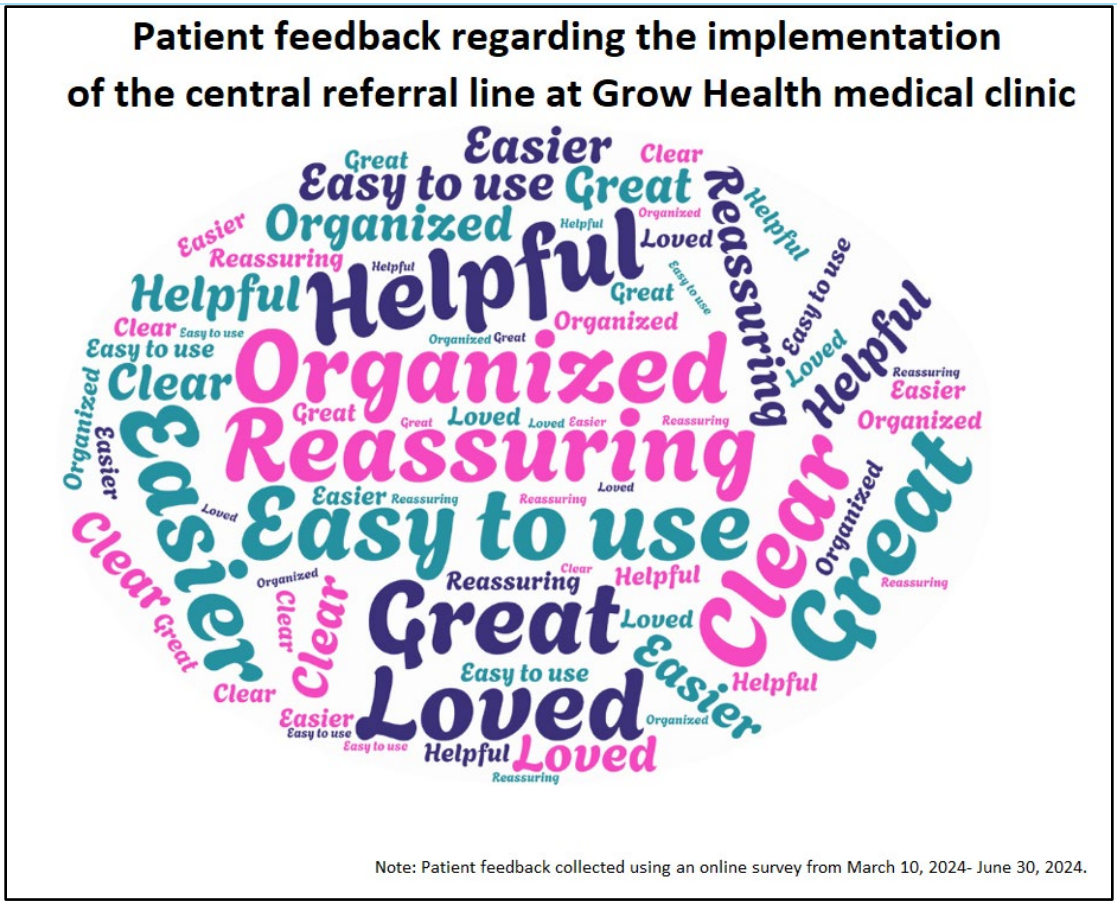
Data Analysis:




Survey response: Ease of finding list of providers
VERY DIFFICULT | DIFFICULT | NEUTRAL | EASY | VERY EASY
-80%
-60%
-40%
-20%
0%
20%
40%
60%
80%
June
May
April
March
February
January
September-December
PDSA 3 PATIENT EDUCATION AND ADVERTIZING
PDSA 2 CENTRAL REFERRAL WEBPAGE LAUNCHED
PDSA 1 WEBSITE UPDATED WITH PROVIDERS
BASELINE
Note: Data graphed from survey disseminated to pregnant women (n=78) seeking care at Grow Health Medical care (September 2023- June 2024).


Percentage (%) of survey takers responding 'Satisfied' or 'Very Satsfied' to question
"How satisfied are you with current process of finding care?"
(September 2023- June 2024)
Percentage (%) of survey takers responding 'Satisfied' or 'Very Satisfied'
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
PDSA #1: Website updated with providers
PDSA #2: Central referral webpage launched
PDSA #3: Patient education and avertising
September-November (2023)
December (2023)
January (2024)
February (2024)
March (2024)
April (2024)
May (2024)
June (2024)
Baseline
Note: Data graphed from survey disseminated to pregnant women (n=81) seeking care at Grow Health Medical care (September 2023- June 2024).


Survey response: Satisfaction with current process of finding care
VERY DISSATISFIED | DISATISFIED | NEITHER DISSATISFIED NOR SATISFIED | SATISFIED | VERY SATISFIED
-80%
-60%
-40%
-20%
0%
20%
40%
60%
80%
June
May
April
March
February
January
September -December
PDSA 3 PATIENT EDUCATION AND ADVERTIZING
PDSA 2 CENTRAL REFERRAL WEBPAGE LAUNCHED
PDSA 1 WEBSITE UPDATED WITH PROVIDERS
BASELINE
Note: Data graphed from survey disseminated to pregnant women (n=78) seeking care at Grow Health Medical care (September 2023- June 2024).



Lessons Learned:

- Number of providers available for pregnancy care is still a large driver that I was unable to address.
- Patients appreciate having a central place for information and being able to refer directly.
- MOAs appreciate less phone calls from people we are unable to accommodate both from a work efficiency, and a moral distress point of view.
- Having an engaged and responsive tech partner was essential to our success.
- Engaging and training multiple different offices to use a new workflow system was challenging but overall, I was very appreciative of how engaged my team was throughout.
- Both patient partners and patient qualitative feedback was invaluable to assessing our change ideas.

Next Steps:

- Continue collecting data to achieve a more a more robust run chart for interpretation.
- Work to spread centralized self-referral to other communities through SQI program.
- Work on underlying problem drivers, particularly recruitment and retention of FP-OB providers.

Making Time for What Matters: Slow Medicine, Improving Physician Experience, Positive Patient Experience

Physician Lead: Dr Jill Norris

Location: Victoria

Specialty: Family Medicine

Background:

- Relationship matters in medicine, especially in longitudinal primary care. The quality of the physician-patient relationship impacts physician burnout and contributes to primary care doctors leaving the practices.
- When patients experience care from their physician as compassionate there are improved outcomes, decreased overdiagnosis/investigation/treatment. When they have positive experiences of care their well-being, healing and trust in the health care system is facilitated. When they have negative experiences, this can lead to harm, mistrust, and non-adherence physicians' recommendations, unwillingness to seek medical attention or double doctoring to get the care they expect.
- Many family physicians are burnt out; they have many competing demands on their time and focus, even within a single appointment visit. Physicians often will bring their sense of overwhelm (the constant feeling of being behind, the many care tasks, guideline-based care demands, plus whatever new issue/s that the patient is there for today) into their encounter with their patients. This creates an environment that doesn't engender a compassionate, whole person approach.
- The internal physician context contributes significantly as well- a positive physician-patient relationship can be enhanced by our own self-awareness and cultivation of self-compassion, well-wishing and compassion towards our patients and actions and stances underscored by a deeply respectful (I – thou vs I – it) orientation towards our patients.

Problem:

- My current workflow/schedule does not enable the care I want to provide. Though my patients experience my care as compassionate and addressing their needs, the way I was doing that contributed to my burnout.
    - My current workflow didn't include a formal way to enable my intent to bring compassion and care to my patients and myself, nor how to address the lack of those attitudes when not there.
    - The time allotted in my schedule for indirect care was inadequate.
    - High value indirect care wasn't prioritized and scheduled.
    - Low value indirect care was increasing burnout and took away from high value care.
- I wanted to improve my workflow such that it would enable me to practice with self-compassion, and compassion and respect for my patients, and enable me to address more efficiently and effectively what matters to my patients.

- I noticed the recurring thought that I was inadequately prepared for some appointments with patients (I hadn't taken time to think about their diagnosis, review treatment options, etc.)

Patient Voice:

The anonymous, in-person patient survey captured several quotes, many of which are shown below:

"*5 stars, for sure!!*"

"*Love your kindness and caring*"

"*(shows compassion) she always does!*"

"*So happy and grateful to have Dr. Norris helping me be my best self*"

"*All staff are lovely, friendly and appointments respectful. Short waitlist too, thanks for all you do!*"

"*We so appreciate Dr. Norris' kindness, compassion, care and knowledge. Thank you!*"

"*Dr. Norris is the best! Very helpful and good at addressing my cares and concerns!*"

"*Always amazing whole person care!*"

"*We feel very fortunate to have such a dedicated and caring doctor.*"

Aim of Project:

By June 2024, 90% of my patients will continue to rate their overall experience of care as positive (i.e., 4 or 5-rating), despite changes to my way of practicing medicine.

Measures:

Outcome Measure

Patient surveys after in person visits which asked about:

- Patient's perception of physician's compassion/saw them as a whole person.
- Patient's perception of whether physician understood what mattered to them.
- Patient's perception of how well what mattered to them was addressed.
- Patient's perception of how necessary the appointment with me that day was.

Process Measures

- Times compassion/meta practice done tally sheet.
- Number (#) of appointments that had reason for visit listed.
- Frequency of scheduled anticipatory indirect care done, and outputs from that.

Balancing Measures

- Monitoring physician burnout.
- Monitoring physician accessibility via # of days until 3rd next appointment.
- Impact on physician income

Action Taken and Data Analysis:

This QI work was done within my private community family practice. Patient surveys were used to collect data for my primary outcome measure. There were six questions assessing patients experience of their visit (compassionate, whole person care, what mattered being

identified and addressed and necessity of their visit). Survey results highlighted consistent positive patient experience.

- PDSA #1: Daily mindfulness (well-wishing and compassion practice towards myself, and towards my patients booked to see me that day) practiced 99% (117 days) of the time prior to seeing patients, resulting in increased provider calmness, equanimity, resiliency and perspective of limits and capabilities. A shift in conceptualization of patients upcoming visits from a task (I –it) to more relational (I –thou) was also noted.
- PDSA #2: Increased the number of appointments that had a reason for visit identified on schedule by clarifying at time of booking and improving agenda setting at the beginning of the visit.
- PDSA #3: Performed weekly review of upcoming appointments for eight weeks, spending an average of nine minutes per week reviewing the upcoming week and 35 minutes per week doing high value indirect care (talking to specialists, reviewing important information to share with patients, thinking about difficult/unclear diagnosis and developing a plan to address them).
- PDSA #4: Additional 30 minutes in am for indirect care, improve experience of work, less "feeling behind before starting". Average number of patients seen per week didn't significantly change.
- PDSA #5: Use of Trail Medical AI Scribe decreased perception of time spent charting and cognitive fatigue at the end of the day.

Lessons Learned:

- My original project aimed to improve my patients' experience of compassionate care in their visit with me; it turned out that they already did experience my care as consistently compassionate. My project then shifted to improve overall general experience of their visits with me; that too was already pretty good. I realized that it was the gap between how I wanted to practice and how I was practicing that was driving me. I implemented change in line with my values and that enabled me to provide the care I wanted and confirmed through patient surveys that my care continued to be experienced as positive.
- I learned the importance of current state analysis to identify problems/areas for improvement as patients already experienced my care as compassionate, whole person and focused on what matters to them – despite a belief this could be improved.
- Though my patients report consistently high levels of perceived compassionate, whole person care and that didn't improve during the project; the intervention of the mindfulness practice improved my experience of self-compassion and compassion/respect for my patients.
- My compassionate awareness of my own experience was a useful tool to reveal common personal narratives towards myself or my patients – having identified them I could assess whether those judgments were true, helpful or kind, and consider adjusting my thinking or my behaviour.
- Workflows can affect our ability to offer compassionate, patient centred, thoughtful, effective and efficient care. By building in time in my schedule to more accurately reflect the time it takes to review labs, diagnostic results, consults, I can reduce my

sense of busy-ness, and enable me to be more present. By scheduling regular time for indirect care for complex patients, I can better provide longitudinal care, rather than recurrent episodic care. By using a medical AI scribe tool – I have been able to decrease low-value charting time, and mental exhaustion.

- Introducing these new practices to my workflow has had no impact to my income.

Next Steps:

- Look to assessing sustainability – by continuing to measure accessibility (next 3rd appointment)
- Track indirect time (amount, and types of activities)
- Look into possibilities to spread to several other physicians

Length of stay of admitted pediatric patients in the Emergency Department at Victoria General Hospital (VGH)

Physician Lead: Dr Sarah O'Connor

Location: Victoria

Specialty: General Pediatrics

Background:

Emergency departments (EDs) are overrun with high patient volumes, often have no empty bed spaces, and are faced with staffing shortages, which result in delays in patient care. Children who enter the ED and require admission to the hospital often wait to be brought up from the ED to the pediatric ward. During this delay, they often do not receive the appropriate pediatric care, they are exposed to communicable diseases, and to traumatic experiences.

Problem:

- Children who are admitted from the ED to the Pediatric ward at Victoria General Hospital (VGH) wait on average 2 hours from time of admission to time of arrival to the Pediatric ward.
- This waiting time does not include the 4-6 hours they were in the ED before being seen by the Pediatric team.
- While the Pediatric team forms only one part of the patient's journey from ER to Pediatrics, to eventual discharge, there are a number of pieces within our scope that we can address to ensure that patients do not spend unnecessary time in hospital.

Aim of Project:

By July 2024, reduce the average length of stay in the VGH emergency department by 25% for children who have been admitted to Pediatric inpatient medicine.

Measures:

Outcome Measure

- Average length of stay (hours) for admitted pediatric patients awaiting a bed.

Process Measures

- Percentage (%) of discharges from the pediatric inpatient ward completed by 11:00 am.
- Percentage (%) of time each week that ward rounds start by 9:30am (Monday to Friday only).

Balancing Measures

- Percentage (%) of patients transferred from the inpatient ward to the Intensive Care Unit within 4 hours of arrival to the ward.

Action Taken:

A series of interventions were carried out on the pediatric inpatient ward primarily with the pediatricians and nursing team who have influence over discharge time from the pediatric ward:

- Institute a daily check in between the charge nurse and rounding pediatrician at 9:00am to identify patients suitable for early discharge.
- Start rounds daily at 9:30am.
- Create a charge nurse to pediatrician communication slip outlining early discharge patients and sick patients to prioritize rounding order.
- Include name of bedside nurses on the communication slip to facilitate nursing presence on rounds.
- Email updates to nursing and pediatrician staff throughout project.

Data Analysis:

- No changes observed in the outcome suggests that patient time spent in the ED awaiting inpatient bed is impacted by various factors (Figure 1). Project interventions also did not influence the percentage of pediatric patients discharged by 11:00 am (Figure 2).

Figure 1.

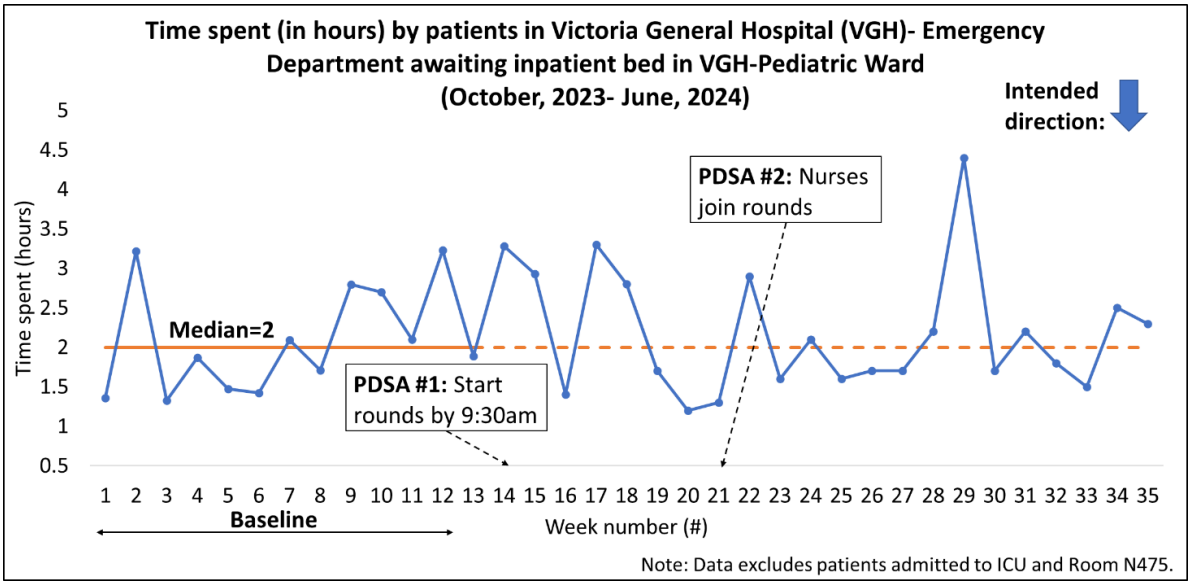
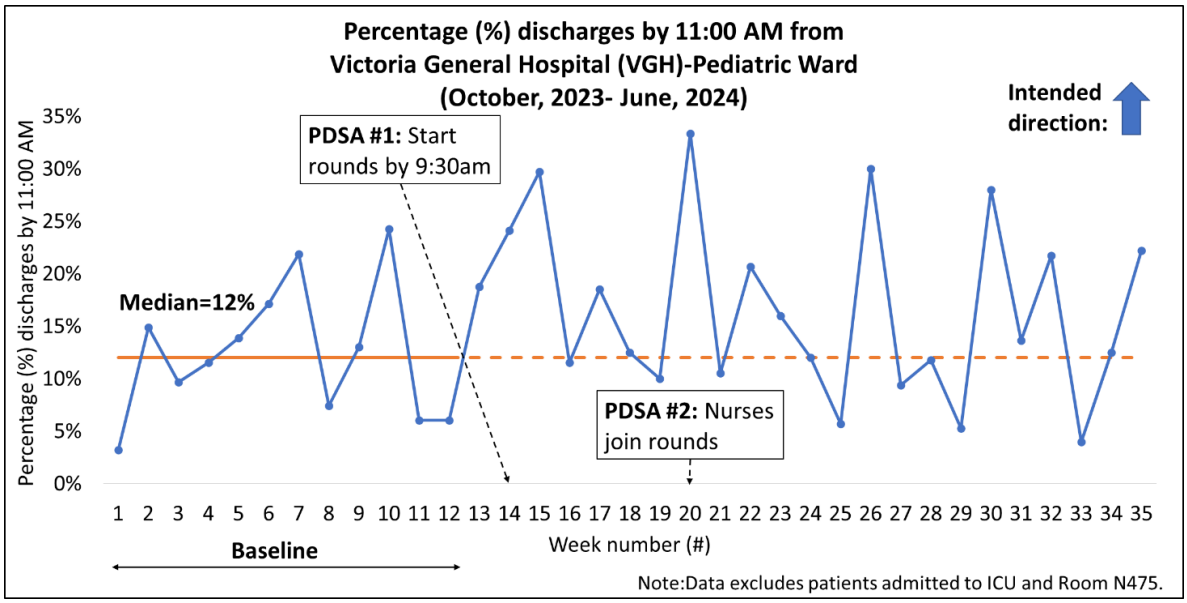


Figure 2.



Lessons Learned:

- It is difficult to effect change with a team and in a work environment that I am only periodically working in.
- Simple tools that integrate seamlessly with existing workflow are easiest to implement but difficult to sustain.
- Improvements geared at reducing overall length of stay for pediatric patients requires efforts made by all teams involved within a patients' care journey through the hospital. While this project focused on changes that the pediatric unit could control within its scope, broader system engagement (ED, portering, nursing staff) are needed to address a patients' overall length of stay.

Next Steps:

- Build culture of QI on our inpatient ward through workshops for permanent staff (nursing, allied health).
- Formalize the charge nurse to pediatrician communication tool.
- Continue to work towards nursing presence on daily rounds.

Comox Valley Orthopedics Referral Process Improvement

Physician Lead: Dr Andrew Robb

Location: Comox, BC

Specialty: Family Practice – Sports and Exercise Medicine

Background:

- The Ministry of Health, in collaboration with the Provincial Surgical Executive Committee and the health authorities, continues to prioritize timely access to appropriate scheduled surgical procedures, optimally manage surgical waitlists, and improve the patient experience.
- In British Columbia, two parts of the patient's journey to scheduled surgery are measured and monitored. These parts are called 'Wait to See a Surgeon' and 'Wait for Surgery'. Both wait times represent a component of the total time a patient may wait for scheduled surgery and are dependent on the triaging process.

Problem:

- The current "Wait to See a Surgeon" time at the Comox Valley Orthopedics Clinic is variable between providers, and many patients spend significant amounts of time waiting to see a specialist (wait times vary between 3 weeks and 1.5 years).
- Many people referred to the clinic are waiting unnecessarily to see a surgeon and/or undergoing advanced imaging. While people wait for their first clinic appointment, they may not be receiving active treatment nor being assessed for appropriateness of surgical intervention. This is adding to wait times for those requiring surgery.

Aim of Project:

By June 30, 2024, the wait time (from time of referral to Comox Valley Orthopedics clinic to time of first appointment) for newly referred patients to see Dr. Michael Loewen will be reduced by 50%.

Action Taken:

This project focused on the specific triaging practices of two clinic physicians – Dr. Michael Loewen (Orthopedic Surgeon) and Dr. Andrew Robb (Family Practice – Sports and Exercise Medicine). The first opportunity to see the value of triaging came from a single meeting when they co-triaged 20 patients on the bottom of Dr. Michael Loewen's waitlist: 9 of these patients were redirected to another provider, 6 were expedited, 4 were inappropriate, and 1 was left on the list. From that meeting, these additional change ideas were tested:

- PDSA #1: New electronic notification of "To be Triaged" for all new referrals to Dr Michael Loewen. (Adopted)
- PDSA #2: Dr Andrew Robb triaging all new clinic referrals referred to "First Available Provider". (Adopted)
- PDSA #3: Education with Comox Valley Hospital (CVH) Emergency Department (ED) physicians on ability to refer to a non-surgical musculoskeletal provider. (Not yet tested)

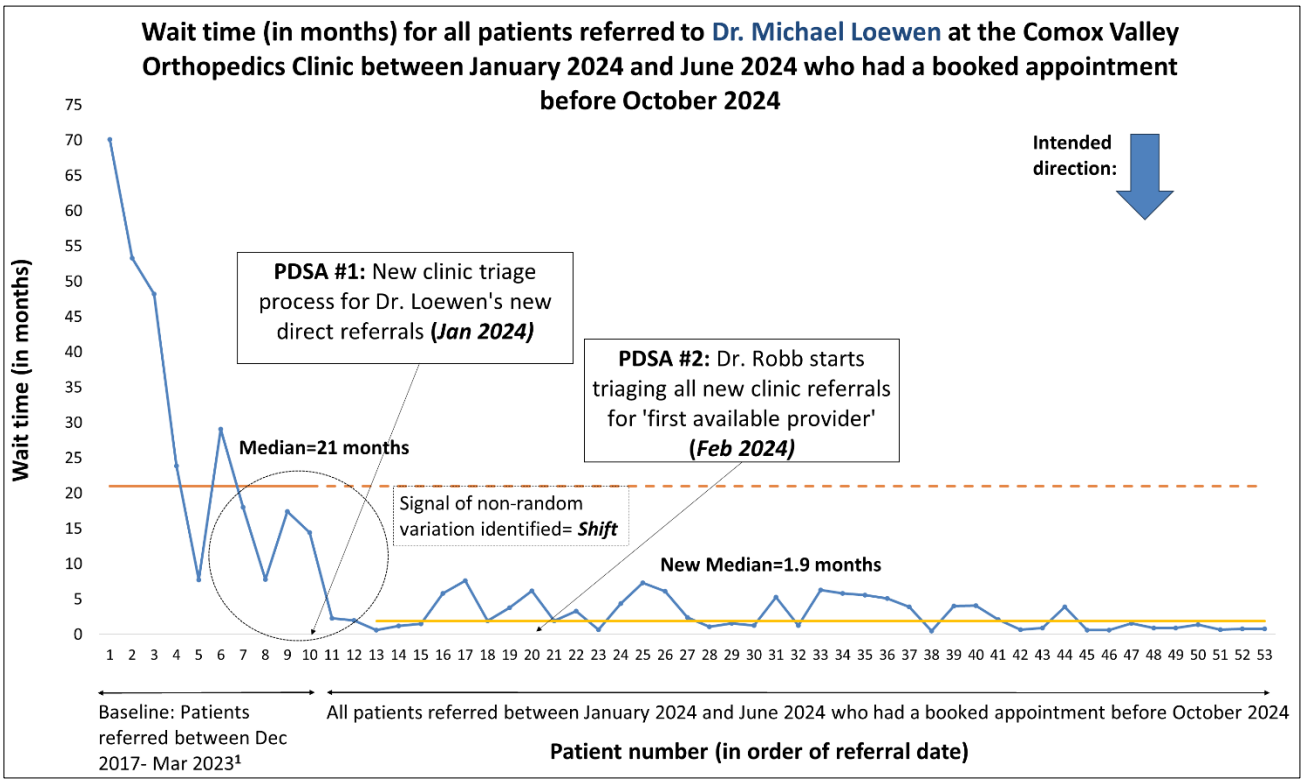
Data Analysis:

Over a 9-month period, patients newly referred to either Dr. Loewen, Dr. Robb or "First Available Provider" were being seen between 1.7 months to 1.9 months (Figure 1 and Figure 2).

From the beginning of the project to the end of the project, the total number of patients on both waitlists were collected:

- Dr Loewen: **321** (January 2024); **337** (September 2024)
- Dr Robb: **0** (January 2024); **315** (September 2024)

Figure 1:

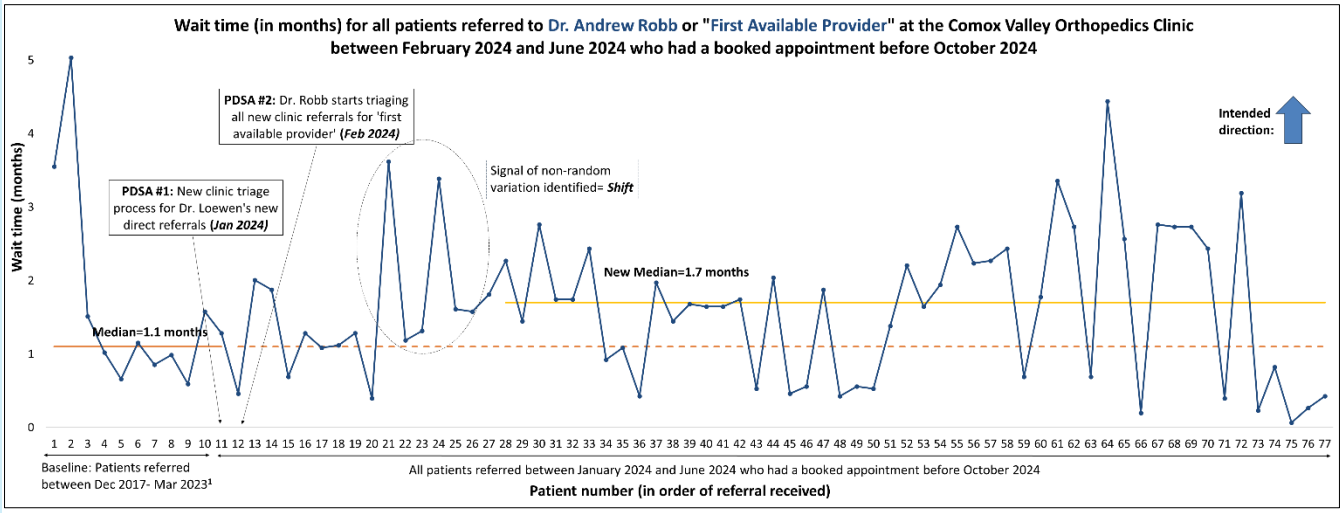


Note: Wait time calculated at time of first booked appointment (as difference between date of referral and date of appointment). Patients referred before January 2024 were excluded from analysis. Patients without booked appointments are not captured. Data was collected from Plexia Electronic Medical Record on a weekly basis.

¹ Random sampling of 10 patients with first clinic appointment between September and December 2023

Limitations of the data: Figure 1 only represents the wait time of the patients who were seen between January and September 2024 and is not representative of the wait time for all new referrals received between January and June 2024. This data may only represent newly referred patients who were triaged as more urgent. More data points over longer periods of time are needed.

Figure 2:



Note: Wait time calculated at time of first booked appointment (as difference between date of referral and date of appointment). Patients referred before January 2024 were excluded from analysis. Patients without booked appointments are not captured. Data was collected from Plexia Electronic Medical Record on a weekly basis.

[1] Random sampling of 10 patients with first clinic appointment between September and December 2023

Lessons Learned:

- By introducing new triaging processes for all newly referred patients to Dr Loewen, Dr Robb and the "First Available Provider", Comox Valley Orthopedics was able to reduce the overall wait times for the first clinic appointment for these new referrals.
- Patients who are not newly referred to Dr Loewen, Dr Robb or "First Available Provider" are still experiencing long wait times as there is no standard triaging practice for these patients at the clinic.
- The wait time for patients to see Dr Robb, as well as the number of patients on his waitlist has steadily increased and will need to be continually monitored.
- There was decreased physician availability as well as a steady increase in the absolute number of incoming referrals to the clinic during the project period which greatly impacted the ability to decrease the waitlist size.

Next Steps:

- Continue existing triage practices for newly referred patients to Dr Loewen, Dr Robb and "First Available Provider".
- Reassess the triage processes for waitlisted patients who were referred prior to January 2024.
- Assess the triage processes for other physicians and surgeons in the office and align clinic practice and expectations.
- Communicate referral processes and expectations with community physicians.

Navigating the Journey of Deprescribing with the Frail and Elderly

Physician Lead: Dr Sand Russell- Atkinson

Location: Comox Valley, *The Views* Long Term Care Facility

Specialty: Family Medicine, Care of the Elderly

Background:

- Medication and disease modification change as people advance in age and frailty as most individuals transition from proactive disease modifying goals to supportive, quality of life goals.
- The medication review process in long term care (LTC) has advanced in its effectiveness, and there has been excellent progress in improving this process. However, we are still inappropriately prescribing in this fragile population.
- Polypharmacy, and the inappropriate use of antipsychotics have both been identified as being significant contributions to poor patient outcomes from Federal, Provincial and Regional (Island Health) priorities.
- We can identify from Island Health facility 'heat maps' that the North Island is not meeting expected standards in the context of polypharmacy (i.e. 'number of medications per resident') despite adequate interest and effort from facilities and prescribers.
- Many prescribing/deprescribing efforts have made initial benefit but with limited sustainability or sustained prescriber uptake due potentially to poor record keeping/follow up, and poor education resources for staff, prescribers, residents, and families.

Problem:

- Residents at *The Views* have often been on many medications long term with uncertain present benefit, and we know that there are risks with many of these medications.
- With a reduction in medical intervention, including serum monitoring, residents may be on medications despite inadequate monitoring. Further, deprescribing or prescribing can be done safely in LTC where there are care teams that can monitor for adverse effects.

Patient Voice:

Quotes were captured from residents throughout the project, a selection of which is shown below:

- Resident #1 with moderate to severe dementia: "They are silly," before focused discussions, and after, "They ask if I want to take them, I feel in control, we decide."
- Resident #2 with severe dementia: before interventions had very guarded behaviour, expressive suspicion, and paranoia. After, while dancing, says "*Perfect.*"
- Resident #3 with very severe aphasia, came to the facility after palliative intervention and severe deprescribing, stabilized in facility. When asked about medication:

"...*not*...*take*...*die*." Interpretation was that they felt the withdrawal of medication meant they were dying, and the medications were helping them live. We chose reassuring language regarding their living state, and discussed reasons medication was not specifically helping them. We chose to continue medications with no harm and potentially low efficacy.

Aim of Project:

By July 1, 2024, the total number of medications at The Views long-term care (LTC) facility will be reduced by 10% per resident.

Measures:

Outcome Measure

- Number (#) of medications per resident at *The Views* LTC facility.

Process Measures

- Percentage (%) of residents under my care as most responsible physician (MRP) who have a 'deprescribing plan'.
- Number (#) of residents who have three or more sources of information in their appropriate 'deprescribing plan'.
- Percentage (%) of 'Yes' responses to physician question: "Did you have enough clinical information to make informed decisions about prescribing during this intervention".
- Percentage (%) of 'Yes' responses for survey to care teams, prescribers, and patients/families: "Were you aware of the link to medication specific information on the division website/Facility Education Source".

Balancing Measures

- Use of inappropriate medications (American Geriatric Society Beers Criteria).
- Behavioural and psychological symptoms of dementia related to medication administration.
- Self-reported confidence of prescribers in understanding the LTC patient perspective of medical intervention in general.
- Self- reported understanding by prescribers of pill burden.

Action Taken:

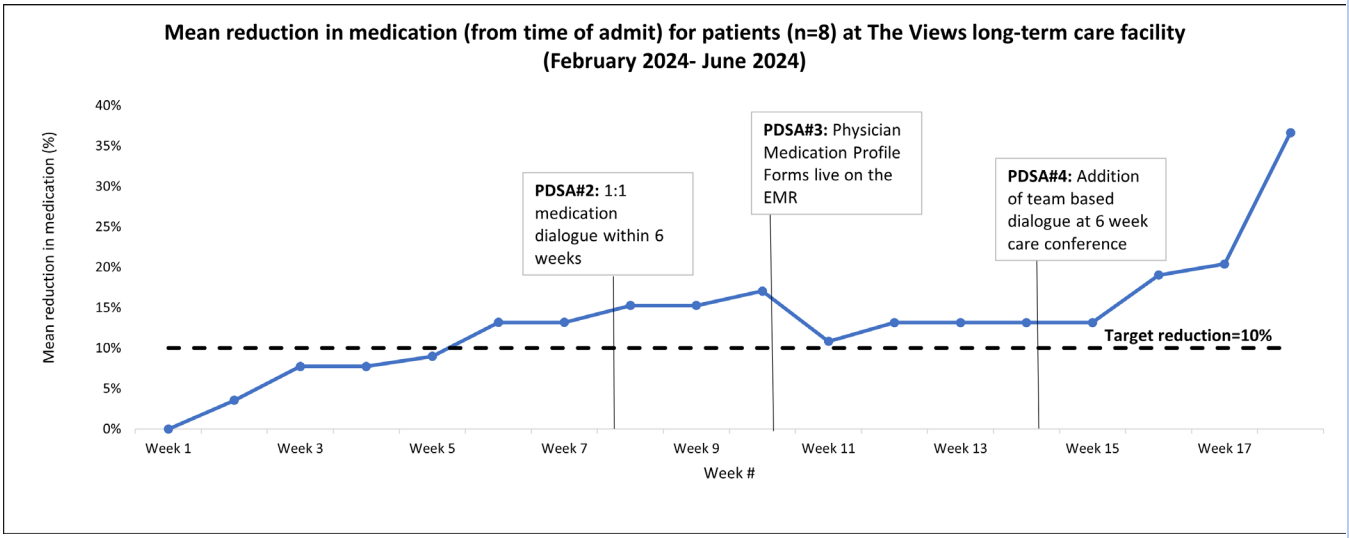
- PDSA #1: 1:1 medication dialogue at admission to enable care team to inform prescribers of patient +/or family perception on medication use (abandoned)
- PDSA #2: 1:1 medication dialogue within 6 weeks of admission as residents differ in when they have transitioned to a state where they are receptive to more complex goals of care conversations (overwhelmed at admission).
- PDSA#3: Establish a form for the EMR to hold documentation on dialogues between opinion of care team, providers, residents and their families on medications.
- PDSA #4: Embed discussion around residents' historic relationship with medications and medical intervention to care conference and medication review platforms attended by Care Team and Family.

- PDSA #5: Follow up discussions with family +/or residents after appropriate prescribing plan has been established, to ensure it is consistent with goals of care, and to determine frequency needed to keep up to date.

Data Analysis

Our team focused on a cohort of 8 residents that were admitted to *The Views* from February through March. We encouraged discussions around medications and 1:1 discussion with residents themselves. We ran data on the number of medications taken from the eMAR each week (Figure 1).

Figure 1



Lessons Learned:

- Admission was too overwhelming. Residents and their families were needing to go through transition to facility living and establish feeling of belonging and safety before we could advance discussions to robust end.
- Care team and patient discussions needed to be 1:1.
- Providers need to be involved in some of these 1:1 discussions – either with family, resident, or care team member.
- Initiating this dialogue about how someone feels about taking the medication (as opposed to explaining to our residents/families why we think they should take the medication) dramatically changed medication related behaviours of dementia. It enabled care teams to feel more empowered to accept a resident's 'in the moment choice to not receive medication', and it enabled residents to feel involved and empowered in the medication process.
- Based on experience, deprescribing is a conversation best suited at 6-week care conference at which time the whole team could discuss the outcome of these discussions.

Next Steps:

- Fine tune Provider Medication Form to hope to have a more dynamic functionality and become more user friendly.

- Introduction of 'Provider Medication Form' at care conference and medication reviews.
- Prescribing information made available to care teams, residents, families and prescribers to encourage discussion.

Beyond Do No Harm: Improving pregnancy care by dismantling barriers to person-centred, evidence-based care

Physician Lead: Dr Sara Sandwith

Location: Wavecrest Medical Clinic – Courtenay, BC

Specialty: Family Practice

Background:

Individuals who access routine pregnancy care in BC have most of their contact with the health care system in community clinics. The experience of that care can have a large impact on patients at a critical time, and may influence their feelings of safety, their access to evidence-based care, and ultimately, their pregnancy outcomes.

People's experiences of pregnancy care can be heavily affected by a person's visible and invisible barriers, and by unrecognized biases within the health care system (both individual and systemic). Not understanding these barriers and biases impacts a provider's ability to plan appropriate care and can lead to poor patient experience, discomfort with the system, and lowered health outcomes.

Problem:

At Wavecrest Medical Clinic, pregnant patients can experience barriers to accessing pregnancy care for a wide range of reasons including office factors, provider factors, and factors related to visible and invisible patient qualities (such as neurodiversity, body diversity, racialization, gender identity, history of trauma, and more). Patient satisfaction at Wavecrest is tied into all of these factors and needs to be addressed through sequential quality improvement tests of change to maximize patient experience without also compromising provider and staff wellbeing within the clinic.

Patient Voice:

- "This project gives me hope that pregnant people in BC will receive care that is thoughtful and without weight bias. I get so excited knowing that there are providers who care about this topic and are willing to make small but really impactful changes to their practice that, when important to patients, are REALLY important and can affect their experience." - Project team member.
- "I anticipate that there can be huge impact from very little change in practice. The benefit is that for those patients who are affected, they will be seen as a whole person, not just a patient number. I also anticipate that this could be easily adopted by others. [...] This could have a really positive impact on some vulnerable patients and communities who may be treated with other biases." - Project team member.
- "Oh, my goodness, I'm so relieved. As soon as I found out I was pregnant again, I was nervous about having to go through that every visit. I'm so excited; I can already tell how different my care is going to feel this time around." - Patient with first pregnancy in 2017 who is newly pregnant in 2024.

- "I had a patient tear up with relief when she realized I wasn't going to make her step on the scale as I brought her into the room for her visit. She said, "Oh my goodness, I don't need to do that anymore?!" - Medical Office Assistant at Wavecrest Medical Clinic.

Aim of Project:

By June 2024, 90% of Dr. Sandwith's pregnant patients at Wavecrest Medical Clinic will rate their care as "Good" or "Excellent."

Action Taken:

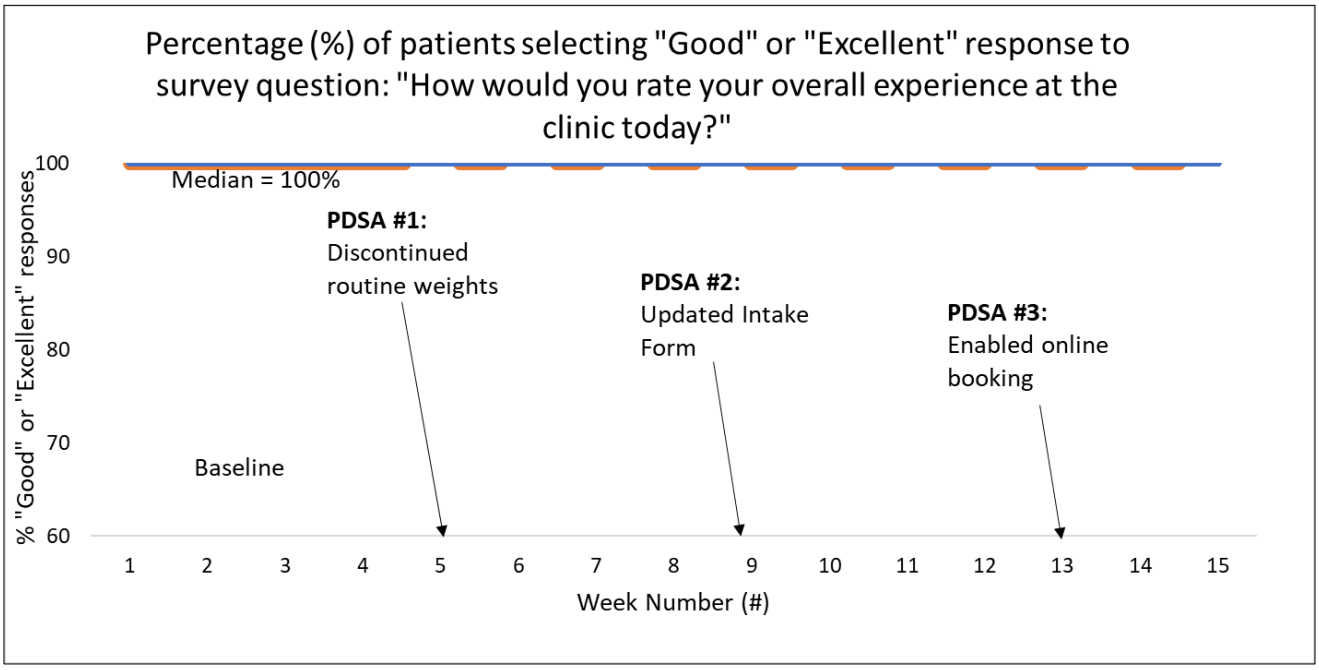
This work took place at Wavecrest Medical Clinic where Dr. Sandwith works alongside three other physicians and two Medical Office Assistants, providing full-service family medicine as well as maternity care. The changes tested included:

- Discontinuation of routinely weighing every pregnant person at every prenatal visit (Adopted).
- Implementation of a holistic "whole person" intake form that gave people an opportunity to share key values, fears, hopes, and needs for their prenatal care (Adopted).
- Enabling full online booking for the clinic, hopefully reducing barriers to scheduling timely and appropriate prenatal visits (Adopted).
- Developing a weight neutral "one pager" with health and lifestyle recommendations to support a healthy pregnancy (Adopted).
- Developing a tool for shared decision-making for plus-sized pregnancy and birth (Refining).

Data Analysis:

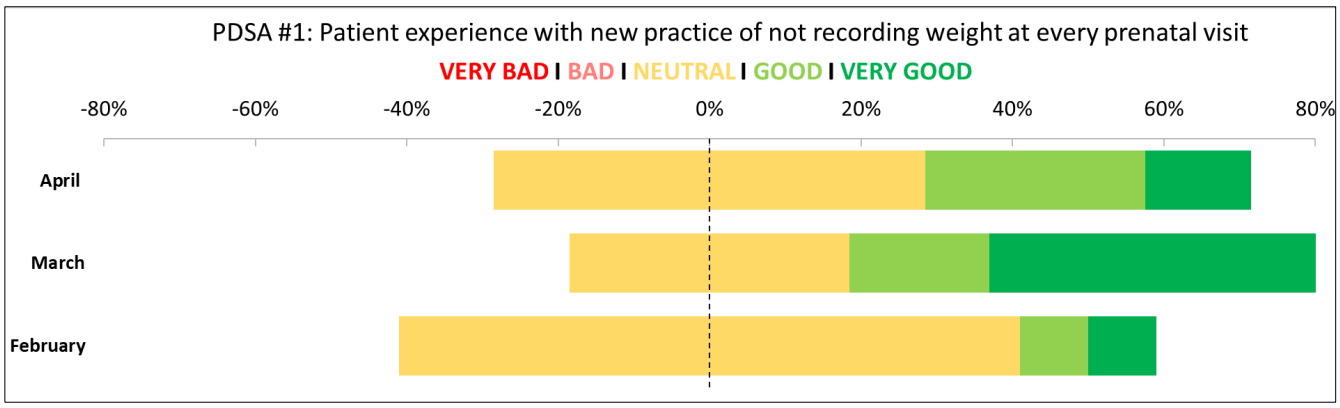
Data was collected weekly via digital survey completed by patients at the end of the clinic visit on a mobile tablet from January 15, 2024 – June 2, 2024. The experience of care remained "Good or Excellent" for all patients throughout the project despite the changes made targeting improving the care experience for a minority of patients (Figure 1). The practice change to not weigh pregnant patients at every prenatal visit also improved the experience for some without negatively impacting the care experiences for all (Figure 2).

Figure 1:



Note: Survey disseminated to patients (n=68) seeking care at Wavecrest Medical Clinic. Data collected weekly from January 15 -June 2, 2024; except for weeks of Jan 29, Feb 19, Mar 18, Apr 22, May 20, 2024.

Figure 2:



Note: Data graphed from survey disseminated to patients (n=26) seeking care at Wavecrest Medical Clinic during PDSA #1 (February-April 2024).

Lessons Learned:

- Discontinuing routine weighing at each pregnancy visit was a neutral change for most pregnant individuals, and a big positive for some – meaning nobody suffered, and those who really needed the change benefited the most.
- Making space for people to share what's most important to them in a private way opened up key conversations that may have otherwise been missed and made us more effective in our time together.

Next Steps:

- Publishing a weight neutral 'one-pager' with health behaviour advice for pregnant people in collaboration with Public Health Dietitian
- Publishing a decision aid for supported evidence-based care planning for plus-sized birth, in collaboration with anesthesia, obstetrics, and midwifery.

The Critical Air Project: Decreasing Inhaler Related Carbon Footprint in the Acute Care Setting

Physician Lead: Dr Valeria Stoynova

Location: RJH

Specialty: Internal Medicine

Background:

- Climate change is the single greatest threat to human health in the 21st century. Critical climate events such as forest fires are leading to increased frequency of heart attacks, strokes and exacerbations of respiratory disease which puts additional strain on a healthcare system that is already stretched thin.
- Yet, this overburdened healthcare system is paradoxically contributing to the climate crisis through outsized carbon emissions. Healthcare accounts for 4.6% of Canadian Greenhouse Gas emissions (GHGe), which is on par with the aviation industry.
- Medications account for 25% of all healthcare related emissions.
- Within medications, inhalers deserve special mention. Metered-dose inhalers (MDIs) contain a potent GHG, the role of which is to propel the medication from the device – each MDI can have a carbon footprint equivalent to driving up to 170km by car.
- At a systemic level, MDIs alone contribute up to 3.5% of the healthcare system's carbon footprint. Yet little is known about the processes and procedures by which we can reduce inhaler-related carbon emissions in the inpatient setting while maintaining high quality patient care.

Problem:

- Island Health dispenses ~2,900 inhalers per month, the carbon footprint of which is equivalent to driving around the circumference of the earth 4.5 times.
- Inhaler waste and inhaler loss contribute disproportionately to these emissions without meaningfully contributing to patient care; up to 80% of patients have more than one identical inhaler dispensed during their hospital stay and up to 97% of doses per inhaler are wasted.
- This waste contributes to Island Health's rising healthcare costs, drug shortages and takes a toll on our carbon footprint, without contributing to patient care.

Patient Voice:

Nearly 80% of patients find the carbon footprint of their treatment is an important consideration, on par with other "traditional" elements of care such as efficacy and cost.

Quote from a mother of a patient with asthma: "*My son was admitted with asthma when he was little, and I didn't realize that misplacing inhalers was such a big problem. Even if it is a few extra minutes, it makes a difference when you need a dose of medication and it's not there.*"

Aim of Project:

We aim to decrease the inhaler-related carbon footprint by 15% from inhalers dispensed in the Emergency Department and on 5 North at the Royal Jubilee Hospital by the end of July 2024.

Measures:

Outcome Measure

- The carbon footprint (in kgCO2e) of rescue inhalers dispensed from pharmacy and automated dispensing cabinets in the wards of interest (ER, 5N).

Process Measures

- Rate of duplicate dispenses to the ER defined as the rate of identical inhalers that are dispensed twice or more for the same patient within the same visit. This is a surrogate marker for inhaler loss within the ER.
- Rate of duplicate dispenses on the medical ward (5N), defined as the rate of identical inhalers dispensed to the same patient within 48hr of arrival to the ward. This is a surrogate marker for inhaler loss on transfer.

Balancing Measures

- Cost of dispensing, including the cost of the inhaler device and the associated labour cost.
- Perceived nursing and pharmacy workload.

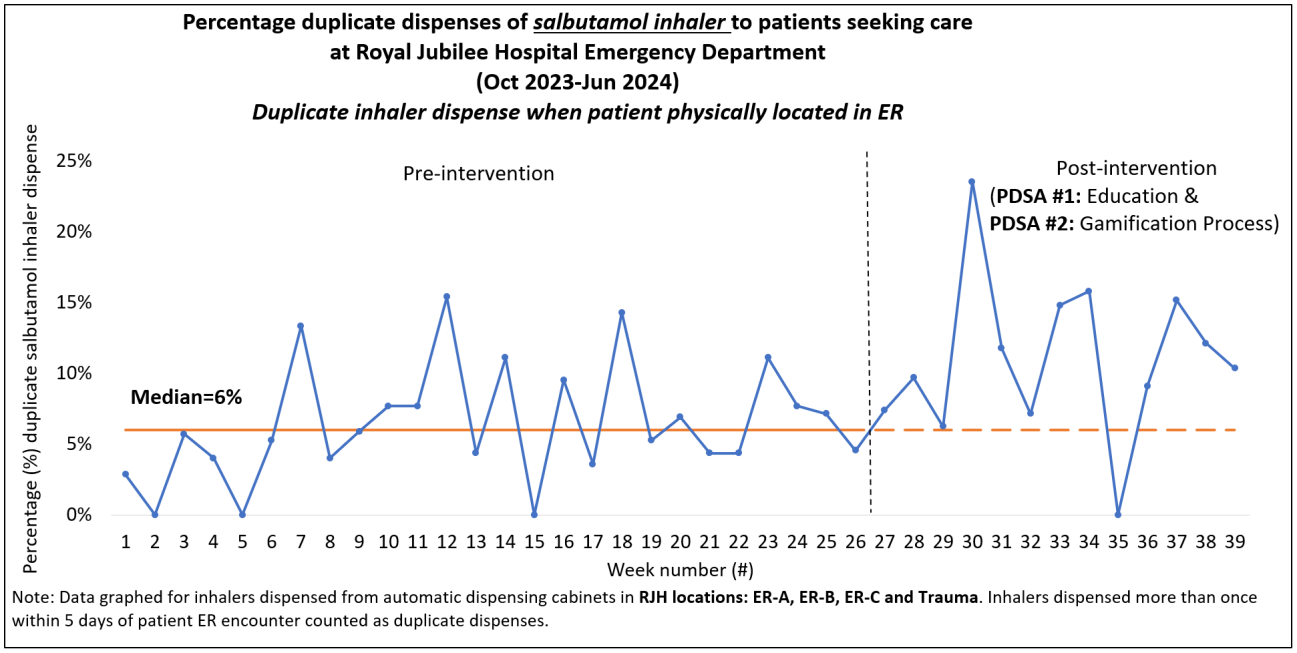
Action Taken:

The project was undertaken in the ER and the medical ward 5N at RJH, with interventions focused on nursing workflow and pharmacy operations practices.

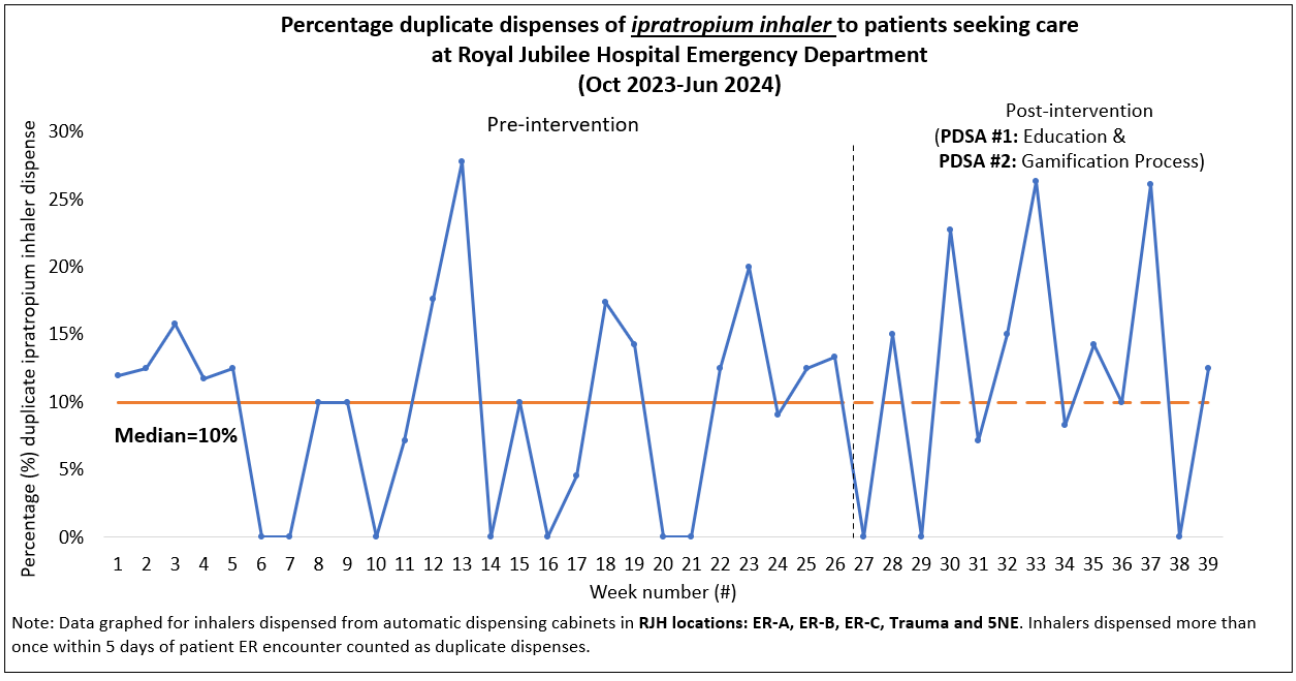
- PDSA 1 – Education.
    - Brief (10min) educational interventions were held with ER and 5N nursing staff during their morning huddle twice a week over three weeks.
    - The ER clinical pharmacist created a "White Board Talk" centred on inhaler related climate practices.
    - Educational posters with practical solutions were distributed through the mailing list and placed in high visibility areas.
- PDSA 2 – Gamification process. Large posters to track progress were placed in high visibility areas to encourage ongoing efforts. Taken down after a week.
- PDSA 3 – Automated dispensing cabinet prompts are programmed to alert when an inhaler dispensed is a duplicate and highlight the carbon footprint of the dispensed device. Not yet implemented.
- PDSA 4 – Standardized nursing handover sheet altered to include prompt to ask about sending inhalers and other multidose medication products with the patient on transfer. Not yet implemented.

Data Analysis:

No significant change was seen pre and post PDSA cycles 1 and 2.



Note: Data graphed for inhalers dispensed from automatic dispensing cabinets in **RJH locations: ER-A, ER-B, ER-C and Trauma**. Inhalers dispensed more than once within 5 days of patient ER encounter counted as duplicate dispenses.



Note: Data graphed for inhalers dispensed from automatic dispensing cabinets in **RJH locations: ER-A, ER-B, ER-C, Trauma and 5NE**. Inhalers dispensed more than once within 5 days of patient ER encounter counted as duplicate dispenses.

Lessons Learned:

- Seasonal variability in inhaler dispensing leads to large data fluctuations. Comparing historical cohorts (e.g. this year to last year) rather than a recent past cohort (e.g. this month to last month) gives us a more accurate benchmark when comparing data sets for dispensing.
- Air quality, respiratory virus patterns and patient volumes will affect dispensing and duplicate rates.

- It is particularly difficult to implement meaningful and sustained change in a time of fluctuation (e.g. the implementation of computerized order entry, which is – understandably – taking priority).
- Many of the interventions have been worked on over a longtime frame (12+ months prior to PQI) and are difficult to implement in a short 1-year turnaround time.
- Fluctuations in team member composition (e.g. changing roles and moving cities) can set the project back unexpectedly and a lot of flexibility is necessary.

Next Steps:

- Further discussion with key partners including Island Health leadership about implementation of future PDSA cycles once Computerized Order Entry has been implemented.

North Vancouver Island Emergency Room Burden Reduction

Physician Lead: Dr Anas Toweir

Location: Port McNeill

Specialty: Emergency Medicine & Family Practice

Background:

- In North Vancouver Island, Port McNeill Hospital (PMH) is the only acute-care hospital Emergency Department (ED) in the region open 7 days a week and 24 hours a day.
- Patients who choose to visit the emergency department for concerns that could be seen within community clinics contributes to the problem of ED's operating at an unsustainable state of being always over-capacity and burdens a system that is already understaffed with levels of burnout.
- All of these issues are compounded within rural communities where access to care is already challenging as is the ability to recruit new providers and staff to increase or even meet capacity.
- PMH's ED is staffed by physicians who also provide full-service family practice care outside of the ED, this contributes to the potential for community misuse and misunderstanding of appropriate use of emergency services.

Problem:

Port McNeill Hospital ED physicians and staff care for non-urgent and less-urgent patients who present to the ED who are appropriate to be seen in a primary care setting, leading to a caseload that is unmanageable and potential burnout (e.g., challenging work/life balance, challenges recruiting and retaining physicians and staff in the area).

Aim of Project:

By September 30, 2024, there will be a 20% reduction in the number of patients who seek medical attention in the Port McNeill Emergency Department (ED) who are triaged as less urgent (4) or non-urgent (5) using the Canadian Triage and Acuity Scale (CTAS) and appropriate to receive care in the community Primary Care settings.

Measures:

To access CTAS data in PMH ED, Dr. Toweir completed manual data collection during each of his ED shifts between April 2024 and September 2024. For each patient visit the following data was collected:

- Time of triage
- Presenting complaint
- CTAS score
- Time of physician visit
- Appropriateness to be seen in Primary Care within 48h*
- Postal Code
- If the patient had a primary care provider or not

*Primary Care appropriate refers to patients who are assessed as clinically appropriate to be seen in a primary care setting, there is access to primary care appointment within 48h and the patient lives within the region.

Outcome Measure

- Percent of less urgent or non-urgent (CTAS 4 +5) patients presenting to PMH ED who are appropriate to be seen in the community Primary Care clinics within 48h.

Process Measures

- Number of booked weekday "same day or next day" Primary Care appointments.
- Number of patients who present to PMH ED assessed as non-urgent or less-urgent (CTAS 4 +5) who are appropriate to be redirected to Primary Care

Balancing Measure

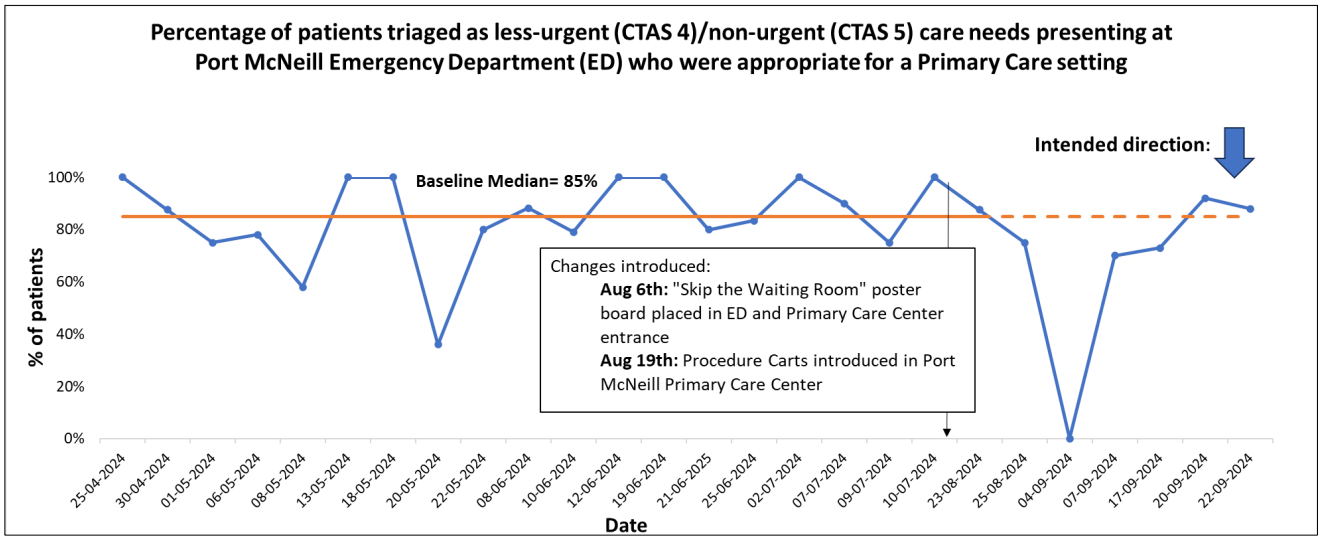
- Primary Care Physician satisfaction with changes in Primary Care booking and care services

Action Taken:

- PDSA #1 – Increased availability for same day or next day appointments in Primary Care Centre, with "Skip the Waiting Room" informational poster boards about Primary Care services placed in the entrances to 4-high traffic areas advertising this (PMH ED, Port Hardy Hospital ED, Port McNeill Primary Care Centre, Port Hardy Primary Care Centre)
- PDSA #2 – Introduced new "Procedure Carts" in Port McNeil Primary Care Centre to perform procedures that were formerly booked through the ED (e.g., sutures, biopsies, joint injections, others)

Data Analysis:

To date there has been no reduction in patients triaged as CTAS 4 or 5 in the PMH ED



Note: CTAS is the standardized Canadian Triage and Acuity Scale. Primary Care appropriate refers to patients who are assessed as clinically appropriate to be seen in a primary care setting, there is access to primary care appointment within 48h and the patient lives within the region. All data was manually collected by Dr. Anas Toweir on each patient encounter during each of his ED shifts between April 2024 and September 2024.

Lessons Learned:

- Not all patients who are triaged as a CTAS of 4 or 5 are appropriate to be seen in Primary Care within 48h.
- Patients who present to the PMH ED are not interested in being redirected to same day or next day appointments in Primary Care and would rather wait to be seen regardless of wait time.
- Many patients accessing Primary Care in North Vancouver Island are not comfortable using BC Virtual Visit appointments and will wait for phone or in-person appointments or present to the ED.

Next Steps:

- Refining and expanding our data collection to include more providers within the Port McNeill and Port Hardy communities.
- Testing more change ideas to improve community use of same day/next day appointments available in primary care (e.g., including listing types of services available in primary care on poster boards and expanding access to phone and in-person appointments).
- Expanding the services in the Primary Care Centres in Port McNeill and Port Hardy to include all services formerly pre-booked in the EDs (e.g., sutures, biopsies)

Patients as Partners in Psychotherapy Calibration

Physician Lead: Dr Michelle van den Engh

Location: Victoria

Specialty: Psychiatry

Background:

- Clinicians need to hear our patients' voices. How well we tune in to a patient's thoughts, emotions and needs (our '*attunement*'), and how well we respond to these cues in a helpful and supportive way (our '*responsiveness*') will shape our alignment with the patient's psychotherapeutic needs at a given moment. Patients who feel heard and understood have better outcomes and lower dropout rates. Clinicians who are listening detect earlier when things are starting to go downhill and can intervene sooner to change course. Provider productivity increases. Healthcare costs decrease.
- Research supports that when providers adapt to patient characteristics and context, and when patients receive their preferred treatment, outcomes improve. Regular progress monitoring with feedback to the therapist improves outcomes, decreases premature dropouts, allows for early identification and intervention when there is deterioration, and reduces costs related to length of treatment and provider productivity. We need to hear our patients' voices, and they need to know we are hearing them.

Problem:

For patients currently attending psychotherapy with Dr. Michelle van den Engh and resident physicians practicing under supervision, a lack of attunement with their clinician can lead to interventions that are not as calibrated to their needs and preferences as they could be. Additionally, therapist ratings of attuned responsiveness do not correlate as well with patient outcomes as patient ratings, suggesting we should actively invite their input.

Patient Voice:

Patients with lived experience on Vancouver Island:

"I was an adolescent and struggling mentally and getting really, really sick. I was explaining how I was feeling to a counsellor, and they said to me: 'Well, this is how you may feel for the rest of your life.' That was a light switch that turned on in my brain and I felt like I didn't want to live anymore."

"I had an acute/situational mental health episode and was diagnosed after a 30-minute Zoom call. While I understand that the physician based their diagnosis after I answered a series of questions, I wasn't recommended any treatment options other than pharmaceutical."

"Sometimes I'm not in a place where I can answer a question in the moment, and it's best to come back to it another time. "

Aim of Project:

To increase patients' experience of attuned responsiveness in psychotherapy by 15% by June 2024.

Measures:

Patients currently attending psychotherapy with participating project team members (Dr. Michelle van den Engh and resident physicians working in supervision with Dr. van den Engh) were informed about the QI project and invited to participate. Participation was entirely voluntary and did not affect access to the psychotherapy care being provided.

Outcome Measure

Total of patient ratings on 3 survey items (each scored 0-100) measuring attuned responsiveness (Figure 1):

- "Today's session provided valuable insight and helped me achieve greater self-understanding."
- "I felt understood (i.e. my thoughts, feelings, goals) during today's session."
- "I was able to feel my feelings and to be who I really am during today's session."

Process Measures

- Clinician level of comfort with assessing attunement (0-5).
- Percentage of sessions in which interventions were used.
- Qualitative feedback collected from team members during supervision sessions.

Balancing Measure

- Session duration (in minutes) (Figure 2).

Action Taken:

- **Development of Survey Tool:** The survey tool was developed in collaboration with patients and project team members. To minimise time burden and maximise practicality of survey administration and completion, 3 of 20 items were selected from the Patient Experience of Attunement and Responsiveness (PEAR) scale based on feedback about which items patients and providers felt would best capture the essence of a session within the three main subcategories of the PEAR scale: *perceived helpfulness*, *felt empathy* and *sensed accomplishment*. The wording of the items was then further adapted based on input from patients and project team members, to maximise a spirit of curious, non-judgemental inquiry and collaborative discovery.
- **Implementation of change ideas:** Three PDSA cycles were conducted from January 15 to July 14, 2024.
    - Intervention #1: Take 5-10 minutes at the end of each session to invite patients' feedback/perspective on the preceding session. - ADOPTED
    - Intervention #2: Promote the use of specific psychotherapeutic techniques to deepen emotional experience. – ADAPTED: Systematic use of these techniques was abandoned. However, the use of the techniques when they fit with the flow of the sessions was continued.
    - Intervention #3: Systematically incorporate collaborative reflection with patients about the process of the session. – ADOPTED

Data Analysis:

Figure 1

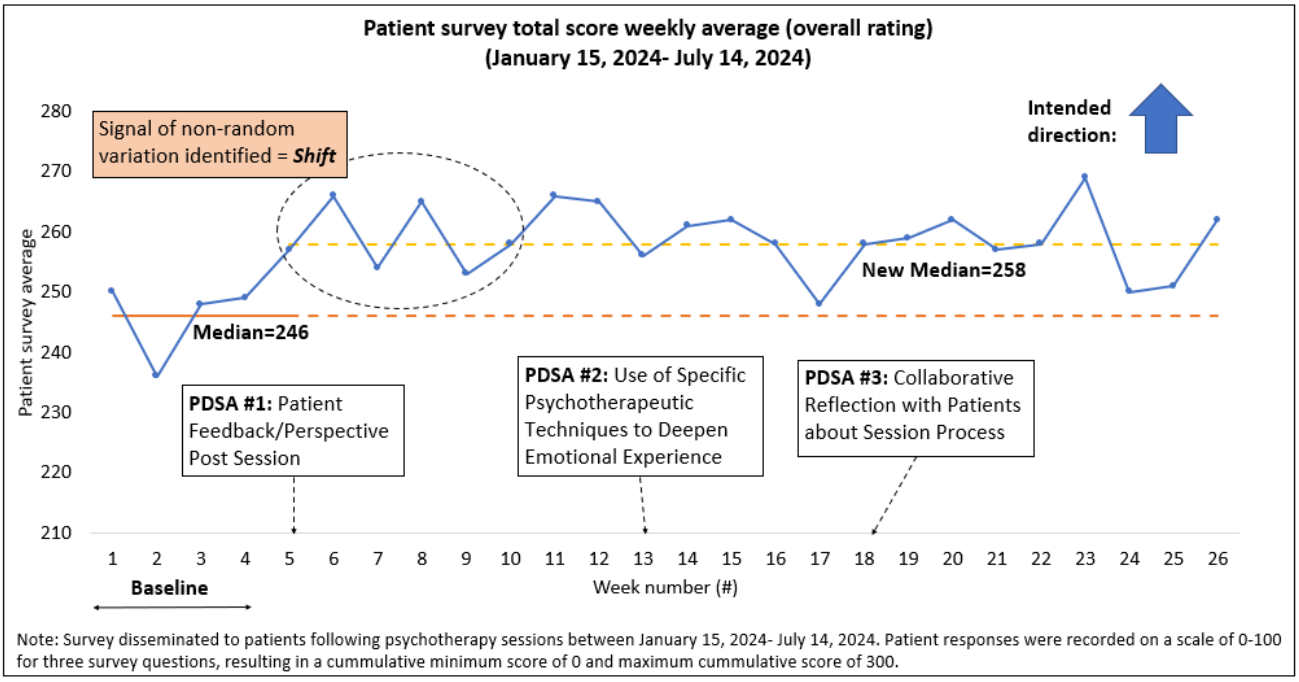
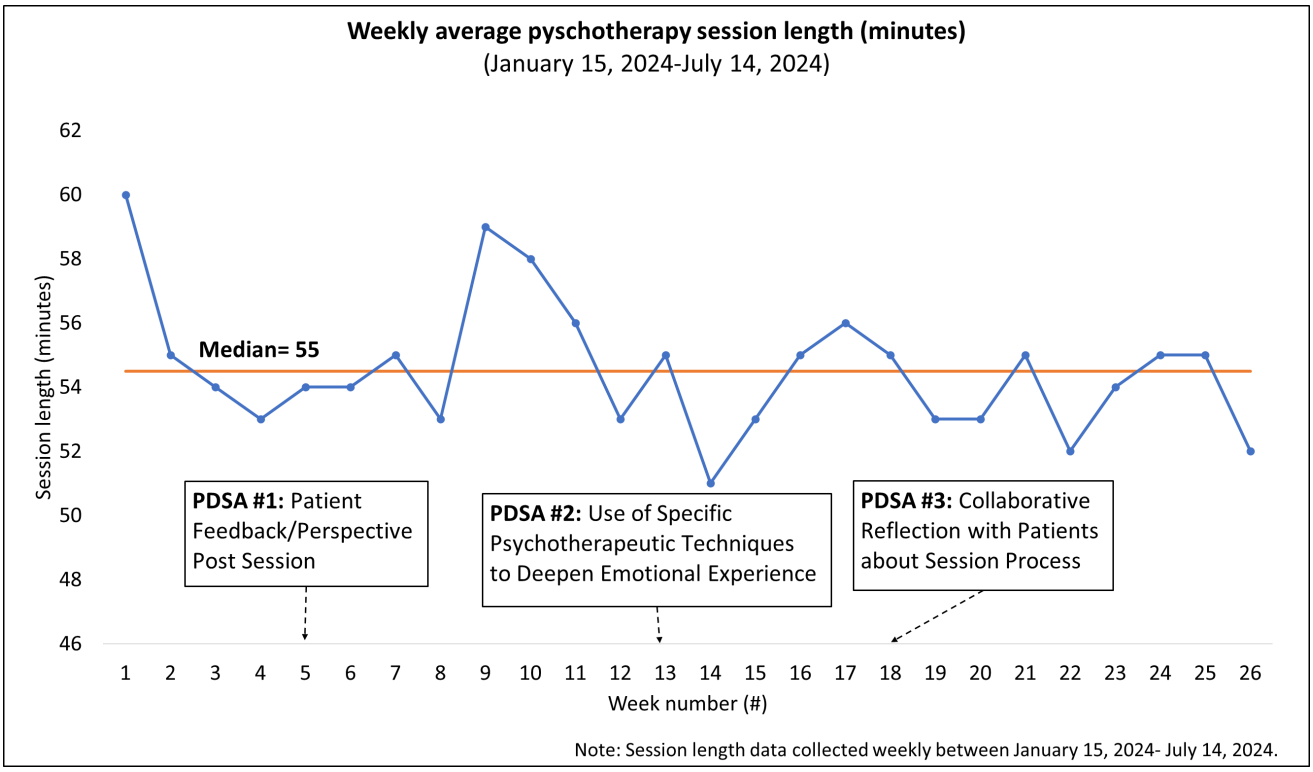


Figure 2



Lessons Learned:

- Quantitative findings signal that active, collaborative, in-session inclusion of the patient perspective improves patients' experience of attuned responsiveness. Not enough data points could be gathered during the limited timeframe of this QI project to demonstrate a statistically significant change.
- Qualitative feedback from clinicians was that they experienced the active invitation of the patient perspective as valuable and enriching, without added time burden.
- It was fundamental to attend to the patient experience in the moment and to emphasise that questions did not need to be answered if it did not feel right in the moment.
- Flexibility in terms of the exact phrasing of a verbal intervention was key, to allow clinicians to follow what felt authentic to them in the context of each unique clinician-patient relationship.
- Tracking process measures (percentage of sessions during which the interventions were used) was valuable to help identify during PDSA Cycle 2 that while the intervention might have been a good idea, the practicality of systematically implementing it was lower than expected, which helped inform the decision to abandon its systematic use and move on.
- The in-session invitation of the patient perspective by resident physicians emerged as an impactful tool during supervision sessions, with the patient feedback adding valuable "supervision" regarding what approaches best met their therapeutic needs.

Next Steps:

- **Sustaining Change:** All project team members involved in implementing and testing the adopted interventions #1 and #3 plan to continue routinely using these approaches in their psychotherapy work.
- **Increasing scope and scale**: Findings will be presented to other psychotherapy clinicians and supervisors to explore options for:
    - Testing the adopted interventions with larger numbers of patients, psychotherapy supervisors and resident physicians.
    - Expanding to other mental health settings and to mental health service providers with different professional backgrounds (e.g. family physicians, psychologists, social workers, nurses, and clinical counsellors).

A Dash of Cream: Making Needles a Dream

Physician Lead: Dr Katie Zhu

Location: Cowichan District Hospital

Specialty: Emergency Medicine

Background:

- Bloodwork collection is a painful procedure, and topical anesthetics are an effective way to facilitate early pain control. This leads to better patient and family satisfaction and increased procedural success rates. However, a significant gap exists in translating this into practice, especially in rural hospitals.
- Investigating and addressing this gap is imperative to enhance patient experience through evidence-based pain management strategies: effective pain relief, streamlining procedures, and aligning with best practices.

Problem:

- At Cowichan District Hospital (CDH) Emergency Department (ED) there exists a substantial gap between current and preferred practices regarding the standardized use of topical anesthetics in pediatric cases
- Data suggests an estimated application rate of only 10-20% during procedures such as bloodwork, IV placement, and suturing for children aged 0-12 years.

Patient Voice:

"I think right from the start, she already had this traumatic experience of being in an emergency room at three years old, with no numbing cream and having everyone stand around her trying to poke her with needles...so if it starts with the cream, and this is their first experience, they're like, 'Oh, that wasn't bad.' That it might be a different outcome."

- Mom of a pediatric patient partner, who was admitted to PICU with diabetic ketoacidosis at age 3.

Aim of Project:

By June 30, 2024, children under 12 years who present to CDH ER who receive bloodwork will have had topical anaesthetics placed 50% of the time.

Measures:

Outcome Measure

- Percentage (%) of patients who had topical anaesthetic applied prior to lab work.

Process Measure

- Tubes of topical anaesthetics supplied to the department.

Balancing Measure

- Length of stay in the department.

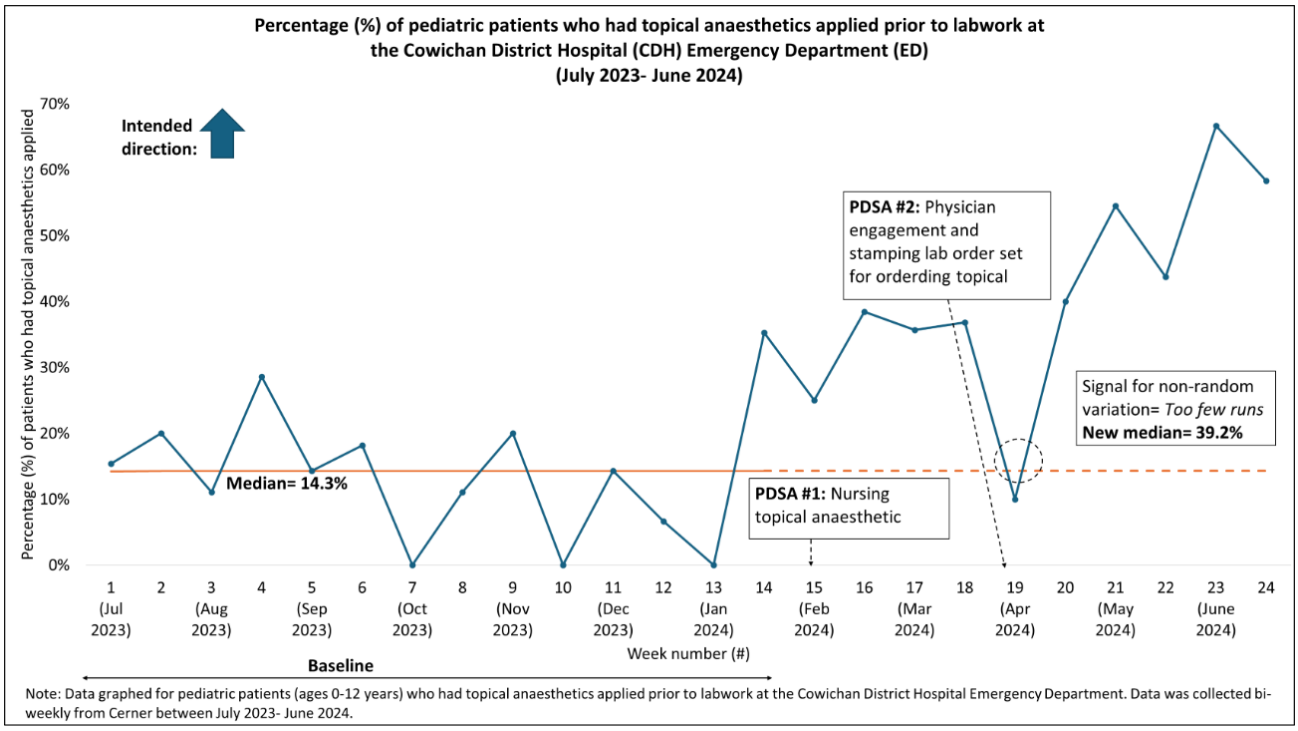
Context: The quality improvement project was conducted in the emergency department, involving nurses and physicians, focusing on children aged 0-12 years requiring bloodwork.

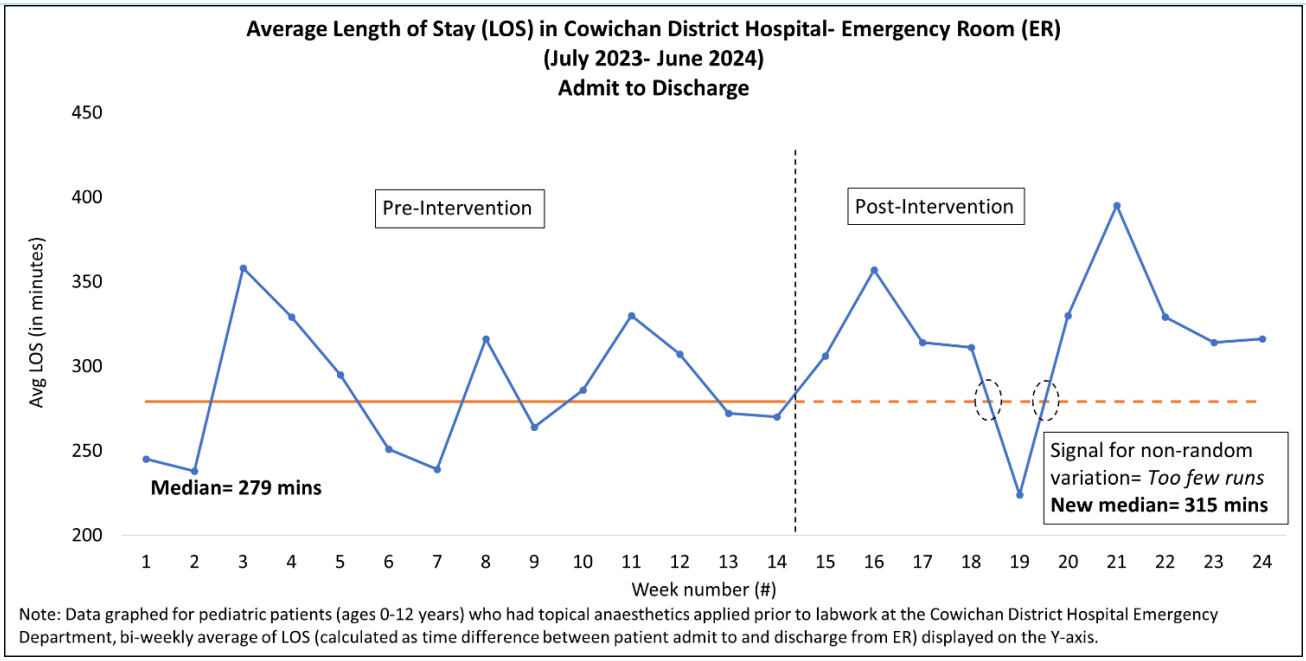
Action Taken:

- **PDSA 1**: Implemented a protocol for nurses to apply topical anesthetics to children likely needing bloodwork or IV placements. **Status**: Adopted.
- **PDSA 2:** Encouraged physicians to order topical anesthetics approximately 30 minutes before bloodwork or IV placement. **Status**: Adopted.
- **PDSA 2.5** Introduced stamps for unit clerks and physicians to easily request topical anesthetics on order sheets. **Status**: Adopted.

Data Analysis:

- The median application rate increased from 14.3% to 39.2%.
- The monthly application rate increased from 17.4% in July 2023 to 63.3% in June 2024.
- This improvement indicates that our interventions effectively enhanced the use of topical anesthetics in the ER.





Note: Data graphed for pediatric patients (ages 0-12 years) who had topical anaesthetics applied prior to labwork at the Cowichan District Hospital Emergency Department, bi-weekly average of LOS (calculated as time difference between patient admit to and discharge from ER) displayed on the Y-axis.

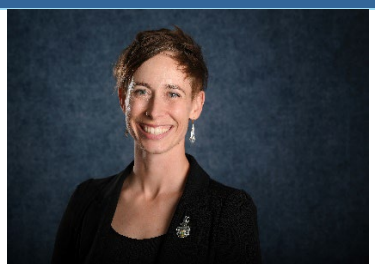
Lessons Learned:

- Stores of topical anaesthetics were used up faster than expected, which required multidisciplinary problem solving between pharmacy and clinicians.
- Mixed paper and EMR charting make data collection in the CDH ER particularly challenging. A unified documentation system would improve the ability to implement QI projects in this department.
- There was an association between the application of topical aesthetic and a slightly longer length of stay in the ED. Further studies could investigate if this adversely affected patient satisfaction.
- Infants often did not receive topical anaesthetics, as it is commonly believed they do not remember the pain, affecting overall application rates.
- Despite these challenges, the project showed significant improvement in the use of topical anaesthetics, highlighting the potential for continued progress with sustained efforts and resource allocation.

Next Steps:

- Continue monitoring and address any emerging challenges and ensure training for new team members and refreshers for current staff to maintain high compliance rates.
- Ensure supply of topical anaesthetics and other resources necessary are stocked and available.
- Consideration for spreading project to other departments.

PQI Team Members 2023/24



Jennie Aitken
Director, Medical Staff Quality & Improvement

Dr. Alan Buckley
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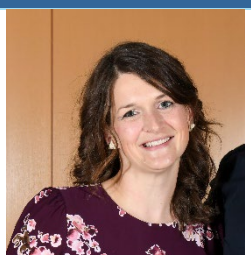

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