Physician Quality Improvement Cohort 6

PROJECT SUMMARIES

October 2022

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 options 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 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, which consists of two Physician Advisors, a Manager and five support staff.

Cohort 6 began the program in September 2021. In October 2022, 14 medical staff graduated from Island Health PQI Cohort 6. This is a summary of their achievements.

Project Summary

Name & Specialty	Location	Project Aim
Dr. Khala Albert & Dr. Yakhshi Tafti Emergency Medicine	Victoria	To reduce the number of Emergency Department visits for patients with acute limb VTE at Royal Jubilee Hospital (Victoria, BC) by 50% by October 2022.
Dr. Caroline Ferris Addiction Medicine	Victoria	For clients of Victoria AOT (Addiction Outpatient Treatment), wait-times from referral to intake assessment will be reduced to 30 days for 90% of clients within 6 months.
Dr. Jessie Flear Addiction Medicine	Campbell River	To increase by 40%, the percentage of referrals to the Campbell River Hospital AMCS containing the minimum required information by May 2022.
Dr. Laura Fraser Internal Medicine	Victoria	To decrease the patient average length of admission by 1 hour from 170.2 hours for Internal Medicine patients on 5N at Royal Jubilee Hospital by June 2022.
Dr. Gina Gill Emergency Medicine	Victoria	To have cerebrospinal fluid (CSF) results available to clinician within 90 minutes of lumbar puncture for 75% of samples obtained in the VGH ED by May 2022.
Dr. Rachel Grimminck Psychiatry	Duncan	Decrease the LOS in seclusion in the ED at CDH by 50 % by June 2022 for patients experiencing a behavioural emergency
Dr. Paul Harris Family Medicine	Duncan	To increase patient adherence with Opioid Agonist Therapy (OAT) at initiation to at least 30 days by June 2022 at Phoenix Transformations.
Dr. Dan Horvat Family Practice	Victoria	By June 2022, to use data regarding unattached patients who are high users of the WUPCC to better understand their health concerns and to assist with identifying options for improving their care
Dr. Harold Hunt Gynecology	Victoria	To reduce the time from referral to consultation in women with urgent gynecologic problems in an outpatient setting from 24 days to less than 14 days in 90% of referrals over a six-month period from January to June 2022.
Dr. Jeff Kerrie Internal Medicine	Victoria	To increase the number of physician reported safety events by hospitalists/internists (as percentage of total physician reported events per month at RJH) in the PSLS system at Royal Jubilee Hospital by 25% by August 2022
Dr. Alison Kydd Rheumatology	Nanaimo	By June 2022, increase osteoporosis screening for female patients over 65 years at West Coast Rheumatology from 33% to 90%.
Dr. Trevor Tsang Family Practice	Duncan	By June 2022, we aim to have 50% of patient charts on CDH Medical Floor 2E actively utilizing the Criteria Led Discharge (CLD) form by the most responsible physician.
Dr. Victor Yuen Medical Microbiology	Victoria	The aim of the project was to decrease the average turn-around-times for microbiology deep cultures by 25% by the end of June 2022 for patients at Island Health.

Contents

Outpatient DVT Pathhway Decreasing Emergency Department Utilization and Improving Care 5
Osteoporosis Screening in a Rheumatology Practice 8
Streamlining access to Addiction Outpatient Treatment (AOT) Counseling Service 12
Using Data to Identify Opportunities to Improve Care for High Frequency Users of the Westshore Urgent Primary Care Clinic 15
Improving the timeliness of CSF results for patients in the Emergency Department at Victoria General Hospital 18
Improving Access to Care for Women with Urgent Gynecologic Conditions in an Outpatient Setting 22
Just the facts Doctor… Increasing Physician Engagement in Patient Safety Event Reporting by Internists & Hospitalists at Royal Jubilee Hospital 26
Completing the Puzzle Improve Addiction Medicine Consult Service Referral at Campbell River Hospital 28
Reducing Length of Admission for Internal Medicine Patients admitted to 5N at Royal Jubilee Hospital 30
Increasing Adherence with Opioid Agonist Therapy (OAT) 32
Reducing Coercive Care in Emergency Psychiatry at Cowichan District Hospital 34
Criteria Led Discharge Cowichan District Hospital 37
Improving Medical Microbiology Turn-Around Times for Deep Cultures Project 39

Outpatient DVT Pathway
Decreasing Emergency Department Utilization and Improving Care

Physician Leads: Dr. Khala Albert and Dr. Yakhshi Tafti

Location: Royal Jubilee Hospital
Specialty: Emergency Medicine

Background:

Emergency Departments in Victoria, like most across the country, are struggling to handle ever increasing volumes of patients seeking non-emergent/urgent care due to a lack of alternative outpatient options. Waiting rooms and the departments are overcrowded, with average wait times frequently exceeding 6 hours, creating an unsafe environment and limiting the community's access to emergent/urgent care if required.

There are approximately 100 outpatient US scans to rule out DVT at the Royal Jubilee Hospital (Victoria, BC) per month, with about 20 positives requiring therapy. Due to a lack of outpatient providers and timely follow-up, these patients are almost universally diverted to the ED. Vast majority will be started on oral anticoagulants (OACs) and may be sent to follow-up with GP/Hematology or Internal Medicine on a variable time frame. The inconsistencies in care creates the possibility for inappropriate duration in therapy, long term complications of inadequate therapy and/or redundant health care visits.

Problem: There is no standardized outpatient process for the work-up and follow-up management of Deep Vein Thrombosis (DVT) in Victoria, resulting in patients being diverted to Emergency Departments (ED) for anticoagulation initiation. This results in inefficient use of healthcare resources, contributes to ED overcrowding and leads to inconsistent and unreliable care for patients.

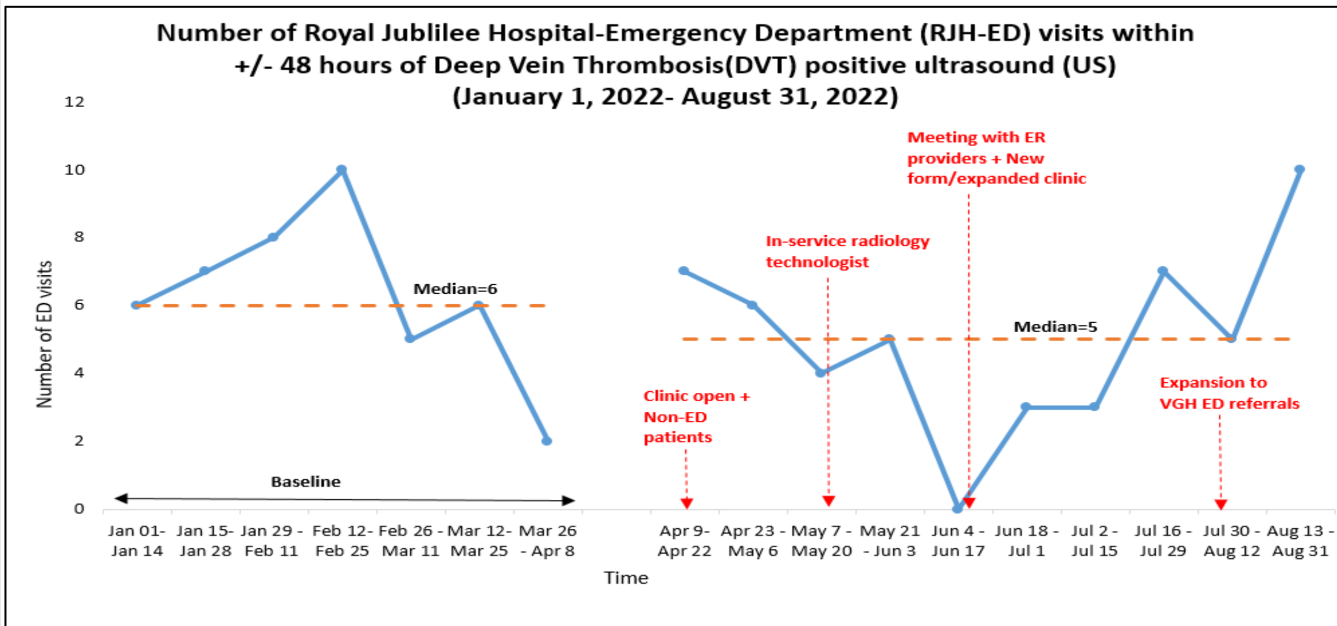
Aim of Project:

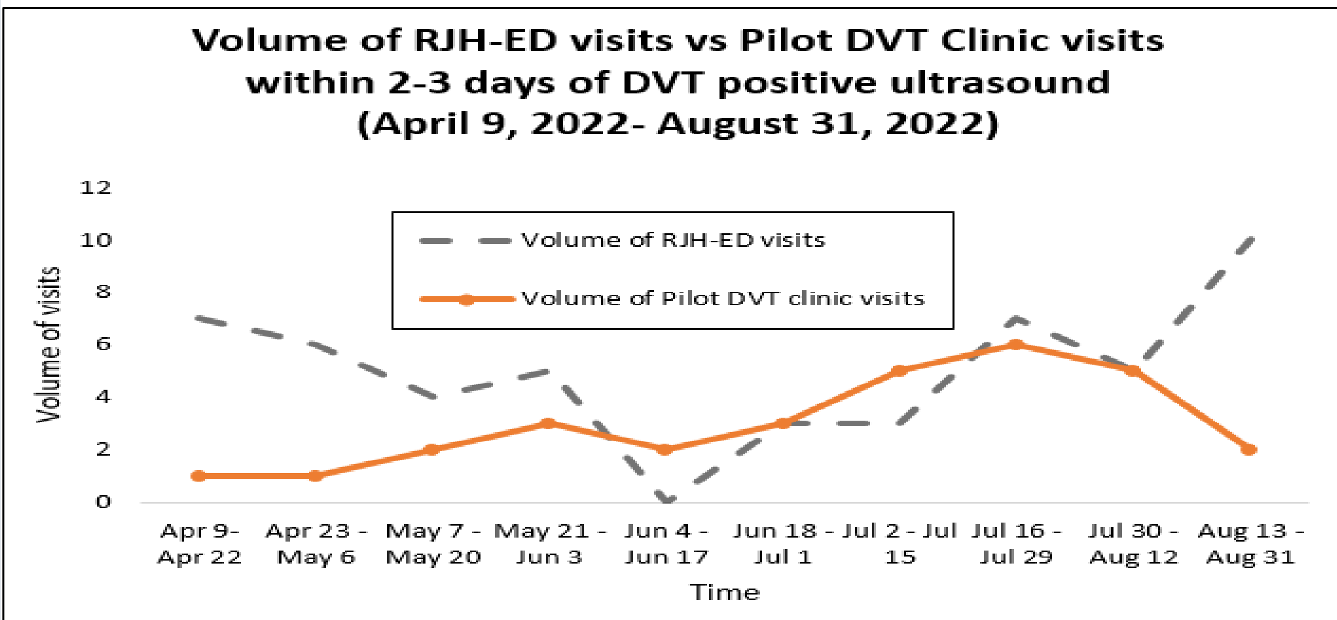
We will reduce the number of Emergency Department visits for patients with acute limb VTE at Royal Jubilee Hospital (Victoria, BC) by 50% by October 2022.

Action Taken:

1. The creation of the Pilot DVT clinic (April 13, 2022) for urgent follow-up of positive DVT ultrasounds was the first multi-layered change idea and fundamental to enable subsequent change ideas and PDSA cycles. Pilot Clinic started running M/W/F for 2hours each day.
2. In service Q&A session with radiologist and US technologist
3. In service Q&A session with ER physicians/Unit Clerks
4. DVT Pilot Clinic expansion to M-F 12-3pm daily, and oversight by Internal Medicine. Move to new location with nursing and administrative help. New referral with incorporation of stakeholder feedback.
5. Clinic recruitment expansion to patients seen at VGH ED

Data Analysis: Outcome Measure





To date, we have not achieved our aim of reducing ED visits for patients with limb VTE by 50%, but it is early days. The significant rise in ED visits and Low clinic volumes and referrals in August were attributed to 2-3 visits by a few patients and coincided with Project Lead absence and reduced stakeholder engagement

Our process outcome data and feedback from stakeholders at all levels suggest increased familiarity, uptake and utilization of the pathway and clinic, which should translate to reductions in ED visits going forward.

island health | PHYSICIAN QUALITY IMPROVEMENT An SSC Initiative | SSC SPECIALIST SERVICES COMMITTEE

Lessons Learned & Next Steps:

Keys to success:

- PARTNERSHIPS and COLLABORATION: Reducing ED volumes and wait-times requires engaged outpatient partners, which we have been lucky to have in multitude.
- COMMUNICATION, COMMUNICATION, COMMUNICATION: Key to keeping everyone engaged and invested in the project. Frequent meeting with stakeholders is key for gathering ground level feedback about change and helping clarify questions/concerns around specific processes or scenarios.
- CHANGE INFORMED BY END USERS: After the start of the clinic, further changes to the pathway, clinic and referrals were all informed by feedback from end-users, including unit clerks, nurses, technologist and or physicians.

Challenges:

- SPHERE OF INFLUENCE**:** The changes involved in this project are predominantly occurring outside of the ED by our colleagues, our control and ability to implement them relies heavily on their voluntary engagement in the project. We have been very lucky to have very committed and engaged partners, and this project would not have progressed without them.
- INFRASTRUCTURE: As a trial pilot clinic, we have been greatly supported by local leadership in getting this project up and running using available resources. The transition to more dedicated space and longitudinal nursing and administrative staffing at PDSA 5 was a big turning point which was anecdotally reflected in uptake of pathway use and provider satisfaction.

Next Steps:

1. The Pilot DVT Clinic is set to continue until January 2023, at which time a ROI analysis will be conducted to assess long term sustainability and possible evolution into a 'Thrombosis Clinic'.
2. SIFEI grant obtained to fund ongoing support and growth of pilot project once PQI funding ceases
3. Translation to outpatient providers: The next PDSAs cycle will aim to expand awareness and availability of the pathway to outpatient providers. We have identified local UPCC as an ideal cluster of providers to target.
4. Dr. Ben Schwartzentruber has joined Cohort 7 of PQI training with the hopes of building on the infrastructure/momentum created by the Pilot DVT Pathway Clinic.

Osteoporosis Screening in a Rheumatology Practice

Physician Lead: Dr. Alison Kydd

Location: Nanaimo
Specialty: Rheumatology

Background:

Osteoporosis is a common diagnosis with 11.9% Canadians over age 40 diagnosed. It is frequently under diagnosed with <10% of people having a bone density within 1 year of a fracture. When not diagnosed it leads to fracture, hospitalization and increased morbidity and mortality

Problem:

Patients seen in rheumatology offices are at an inherently higher risk of osteoporosis due to their comorbid medical conditions and medications. Currently, screening for osteoporosis in rheumatology offices is often performed on an inconsistent and ad hoc basis thus missing an opportunity to screen this high-risk population.

Over a 7 day period in our office 30 patients were seen but only 33% were screened for osteoporosis.
Improving osteoporosis screening in a high-risk population will hopefully lead to improved care of osteoporosis and prevention and, ultimately, a decrease in fractures, hospitalizations and surgery.

Aim of Project:

By June 2022, increase osteoporosis screening for female patients over 65 years at West Coast Rheumatology from 33% to 90%.

Patient Voice:

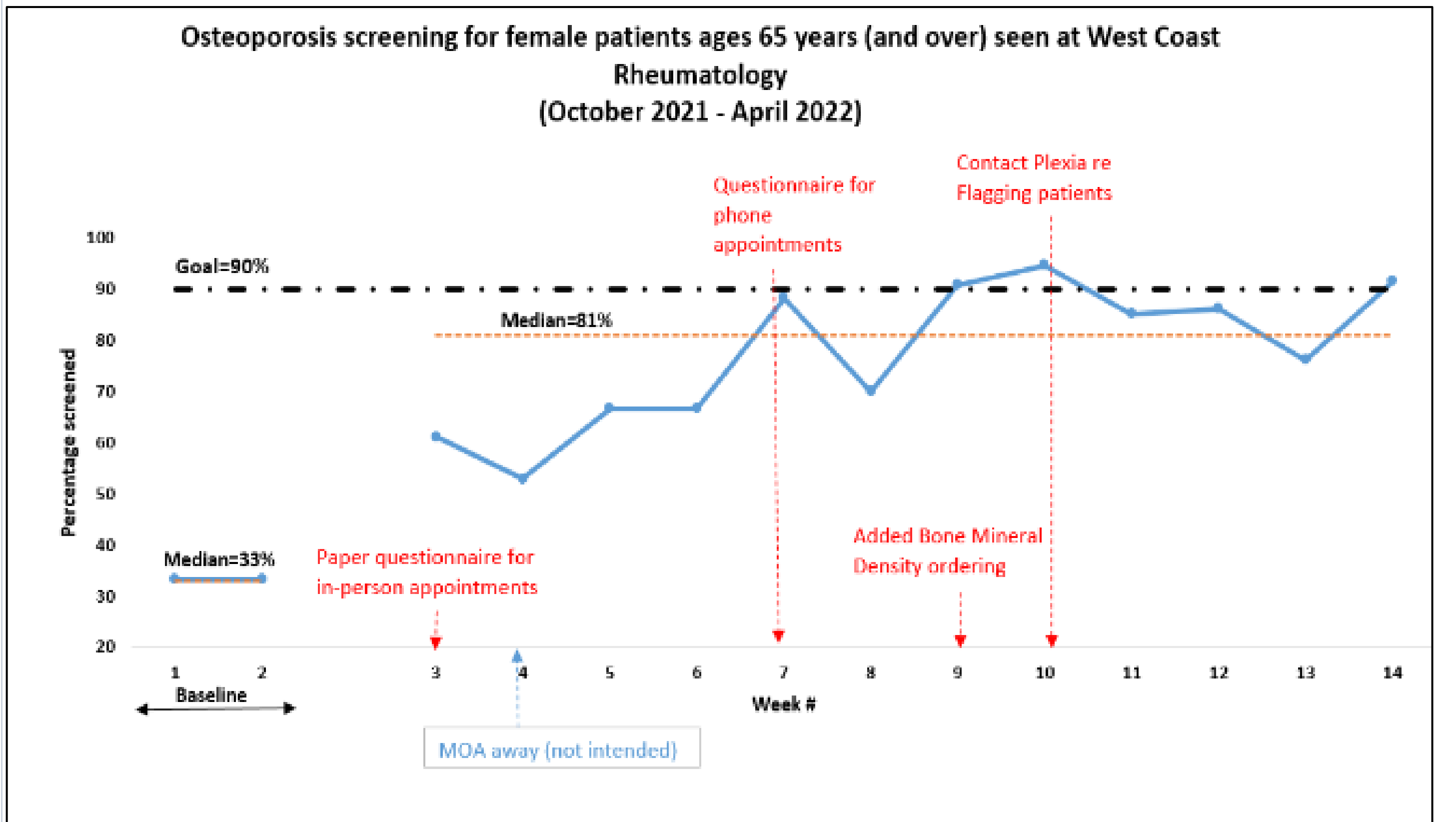
Prior to screening, she had “never thought” of her bone health. She was “somewhat surprised” to find out about her fracture risk but now feels that she is being proactive in starting therapy. She has “many acquaintances that would benefit from early bone protection interventions”.

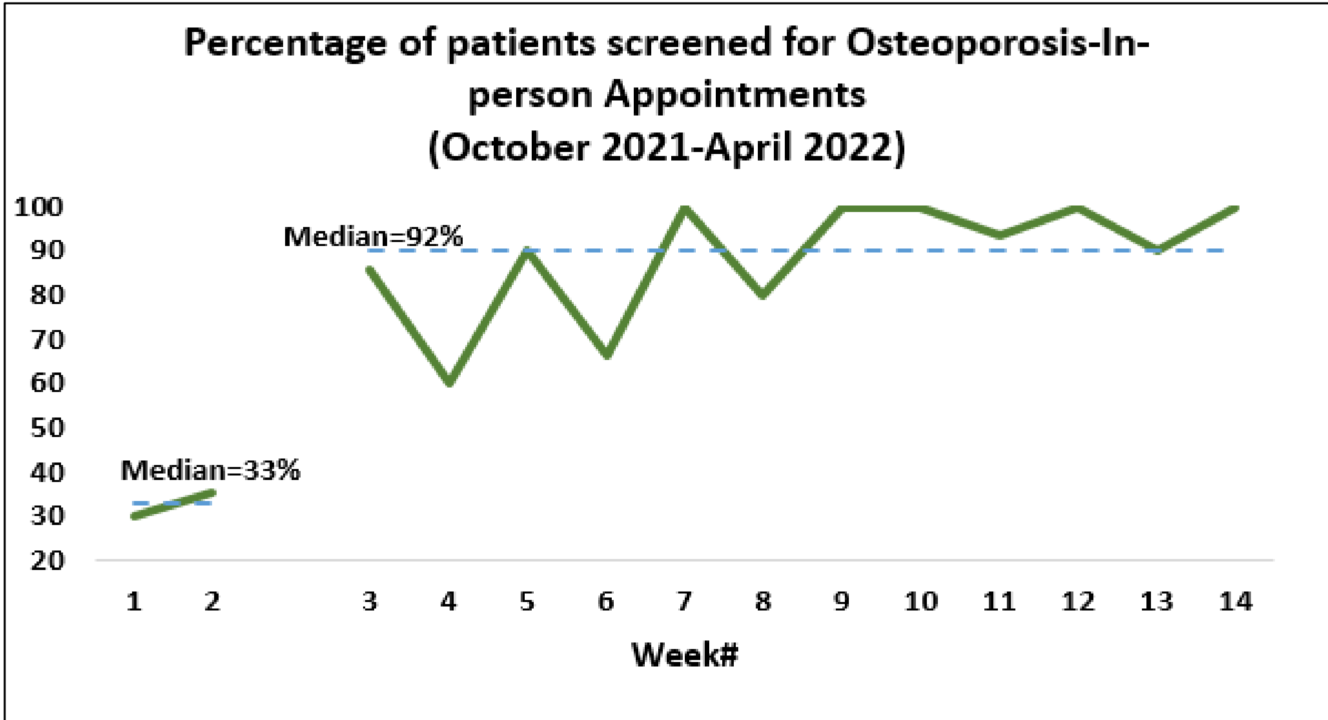
Action Taken:

1. Flagging of patients by medical office staff who meet criteria for screening
2. Incorporation of a questionnaire into in-person appointments
3. Incorporation of a questionnaire into telephone appointments

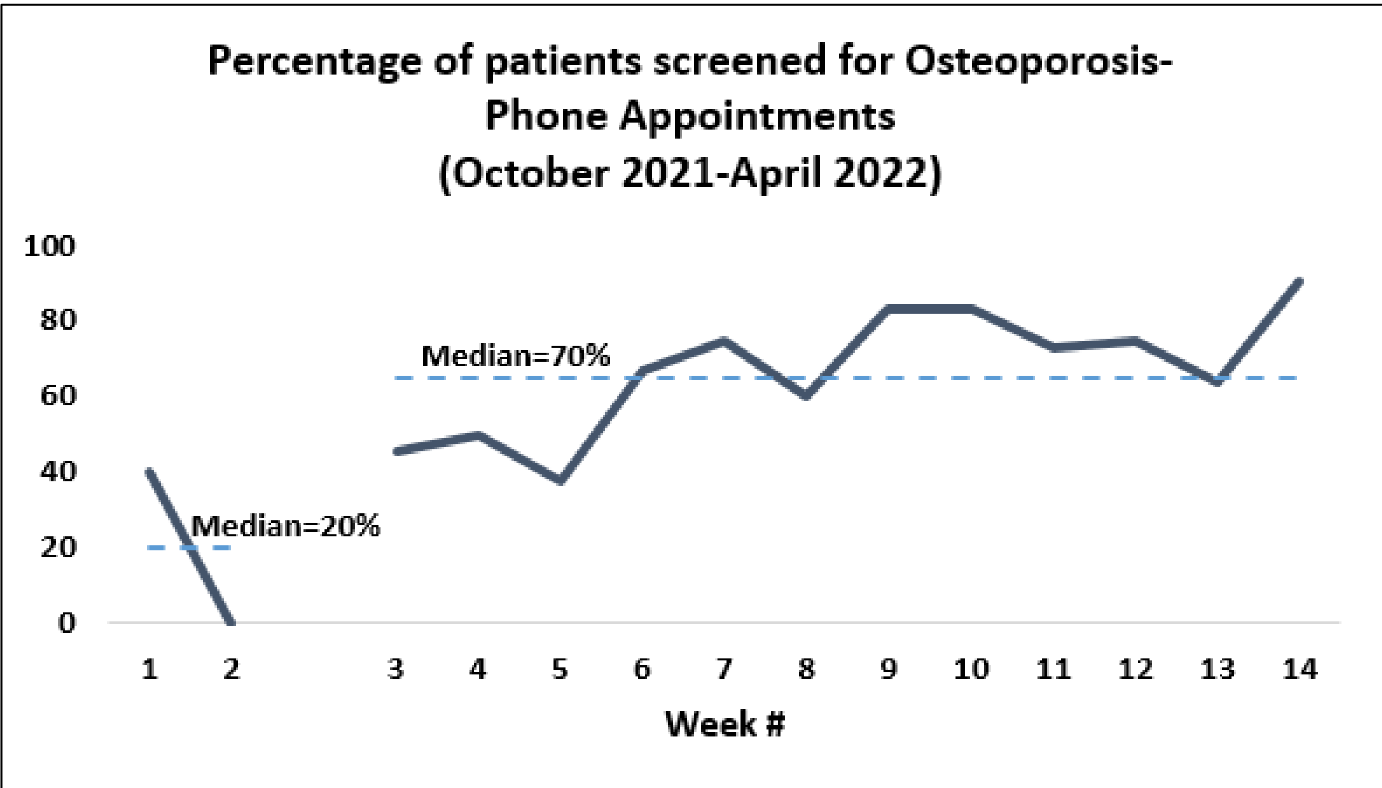
Data Analysis:

- Our first change idea of adding paper questionnaires for in person appointments was rolled out mid January 2022, following which we saw a striking increase in percentage of patients getting screened
- With screening rate increasing almost to our goal of 90% by week 7 (early March 2022), we rolled out our second change idea of adding questionnaires for the phone appointments. Implementation of our two change ideas followed shortly; adding bone mineral density ordering (week 9) and flagging patients (week 10).
- By the end our project in April 2022, median percentage of females screened for osteoporosis had increased to 81% (from 33% at baseline).





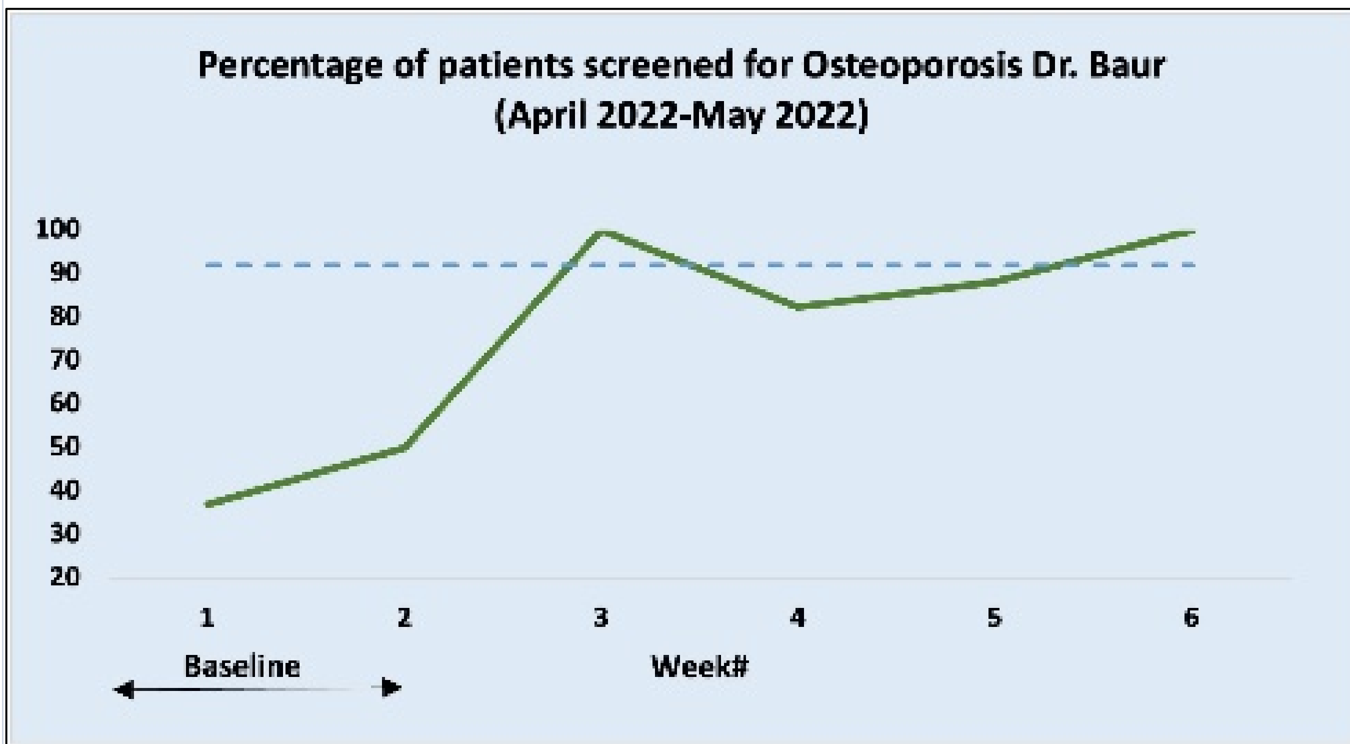
We also wanted to track our improvement in osteoporosis screening for different appointment types (In-person vs Phone). Screening rates were up to 91% (from 33%) for in-person appointments and 70% (from 20%) for phone appointments



These encouraging results motivated us to expand our tests of change to our colleague Dr. Baur's practice.

Data for screening rates at her practice was recorded for six weeks (April 2022- May 2022).

Screening rates substantially increased at her practice with almost 90% patients getting screened.



Lessons Learned & Next Steps:

Starting with small tests of change and then scaling up was the key lesson learned in this project.

Next Steps:

1. Improve screening in primary care by incorporating a flagging system in other practices
2. Incorporate screening into other rheumatology practices on Vancouver Island
3. Feedback forms for primary care practitioners regarding bone density reports and management suggestions

Streamlining access to Addiction Outpatient Treatment (AOT) Counseling Service

Physician Lead: Dr. Caroline Ferris

Location: Victoria
Specialty: Addiction Medicine

Background:

Timely access to counseling support for clients seeking help for problematic substance use is helpful for clients to understand the drivers behind their substance use and acquire non-chemical coping skills

Problem:

Wait-times for outpatient counseling (AOT) were nearly 8 months long post-pandemic. By the time of contact, many clients have relapsed, moved away, or are no longer interested in services. Outcomes may include deterioration in health/mental health, ER visits, hospitalization, or relapse with potentially fatal outcome.

Aim of Project:

For clients of Victoria AOT (Addiction Outpatient Treatment), wait-times from referral to intake assessment will be reduced to 30 days for 90% of clients within 6 months.

Patient Voice:

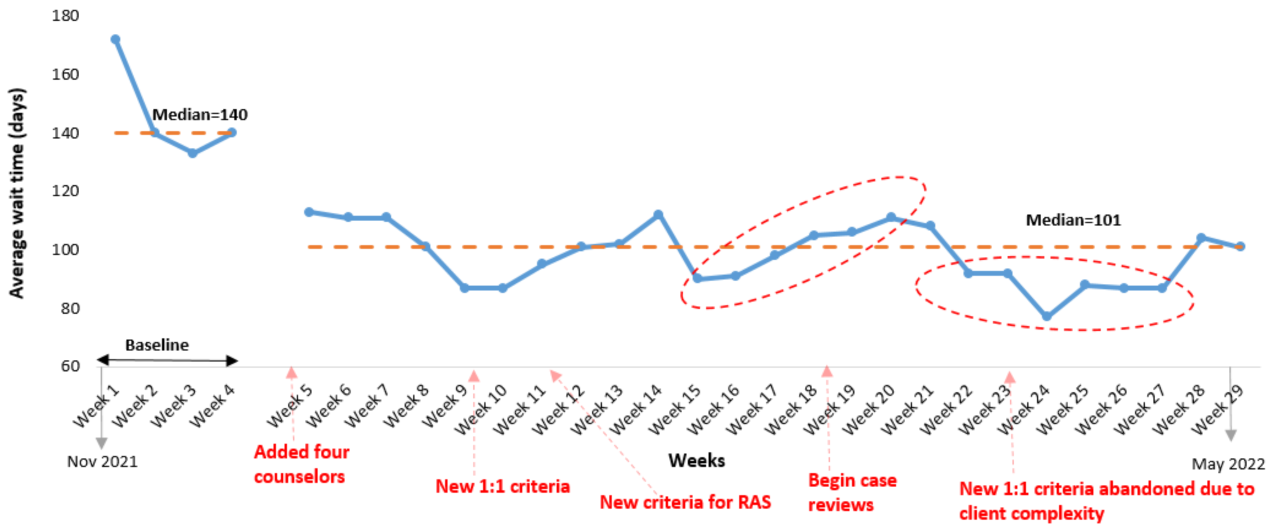
"I was in and out of Detox 12 times in 18 months. Finally, I was offered counselling, and now I've been sober for 4 years. Counseling really helped me deal with the reasons I was drinking" Michael F.

Action Taken:

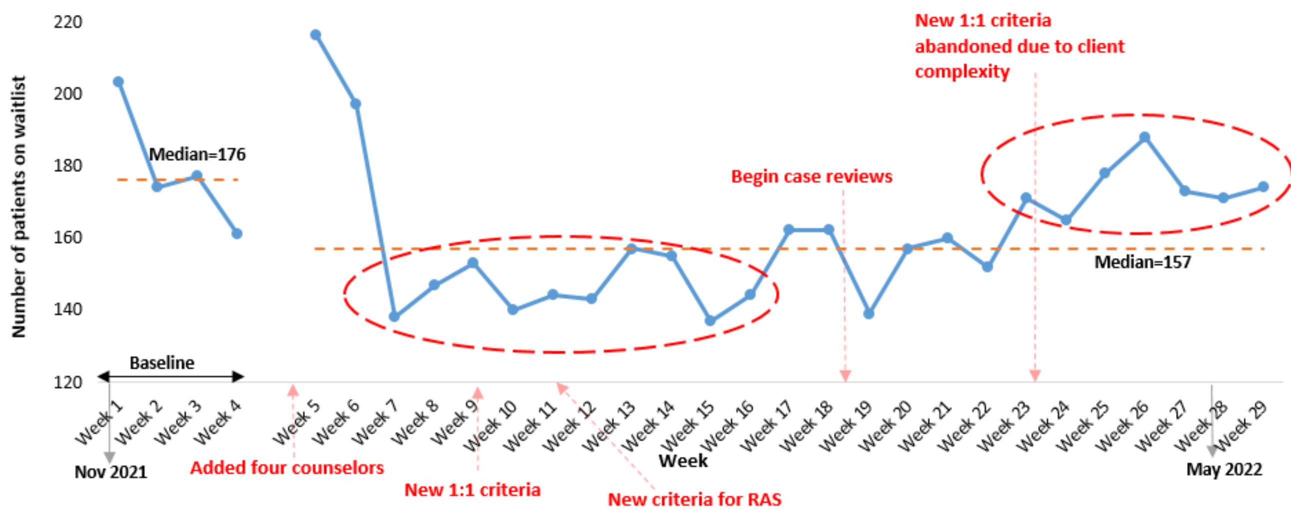
1. Adding extra counselors from another service.
2. Developed new criteria for 1:1
3. Developed new Criteria for RAS
4. Began Case Reviews

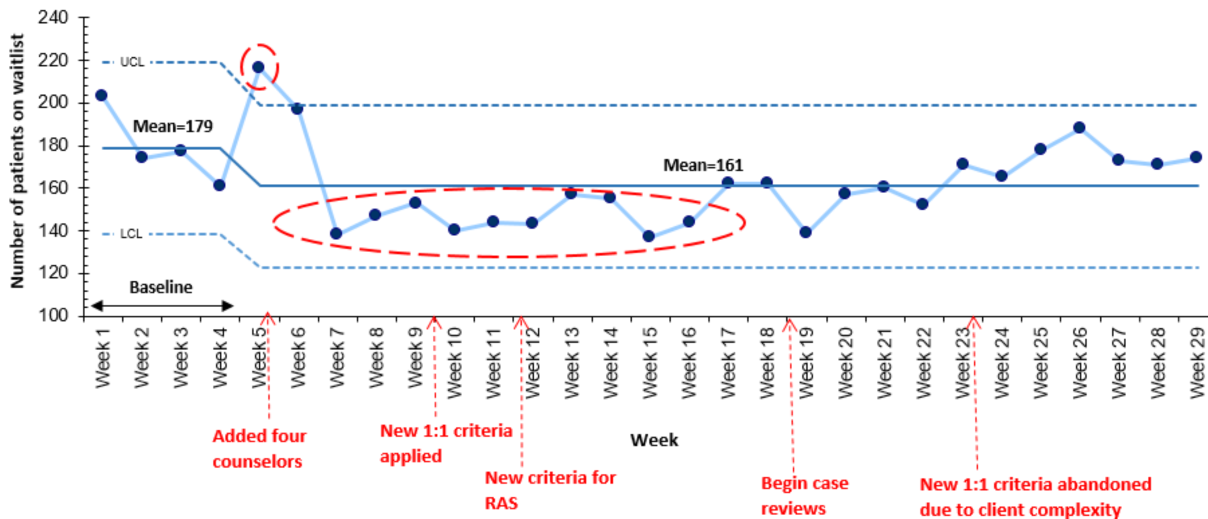
Data Analysis

Outcome Measures



Wait-times for substance-use counseling at Addiction Outpatient Treatment (AOT) were reduced to a median of 100 days, still 3 times longer than we had hoped. Limitations in clinician numbers and space to accommodate groups are significant barriers.





Balancing measure: Attempts to direct clients to groups were met by moral distress from clinicians, who found that many clients needed some 1:1 sessions before they were group ready. This was related to client complexity, which tends to increase the longer the clients wait. An additional balancing measure was the high number of ongoing referrals to the service with new referrals outstripping our capacity to further reduce wait-times.

Lessons Learned & Next Steps:

The current focus on mental health service funding and dynamic nature of services can make data collection challenging as the system is not stable.

1. Staff will continue to refine the criteria for 1:1 counseling, potentially limiting clients to 4 sessions of 1:1.
2. Staff will continue to do case reviews and discharge planning.
3. Referring agencies will be encouraged to leverage other resources, both Island Health and community-based, while people are on the waitlist.

Using Data to Identify Opportunities to Improve Care for High Frequency Users of the Westshore Urgent Primary Care Clinic

Physician Lead: Dr. Dan Horvat

Location: Colwood
Specialty: Urgent Care/Family Practice

Background:

There is considerable evidence (Hollander, Starfield) that patients who are attached to a primary care provider (PCP) that provides proactive, relationship based, longitudinal care have better health outcomes, a better experience of health services and their care is less costly. Unfortunately, there are a growing number of patients in BC who are unattached/unable to access this type of care.

The West shore Urgent Primary Care Clinic (WUPCC) was established in November 2018 to provide episodic care to patients with urgent care needs that do not require the services of an Emergency Department. Increasingly, the WSUPCC (as well as other episodic care services – other UPCCs, walk in clinics, the Emergency Dept. or virtual care only providers) are seeing patients who have no alternative except episodic care. Some of these patients have complex health issues and need access to health services frequently.

1. Starfield B, Shi L, Macinko J. Contribution of Primary Care to Health Systems and Health. Milbank Q. 2005;83(3):457-502.
2.Hollander, M.J., Increasing Value for Money in the Canadian Healthcare System: New Findings on the Contribution of Primary Care Services

Problem:

Episodic care, particularly for patients with complex health needs that require ongoing care, is suboptimal from the perspectives of patient experience and efficiency. Patients have long waits to receive care, there is uncertainty regarding being seen and they often must retell their stories to each new provider that they see. Providers must sift through significant material, which usually requires accessing multiple different software programs, each time such a patient is seen in order to understand the patients' issues so that their presenting complaint, as well as any other health issues they may have, can be addressed appropriately. Given that there are a growing number of complex patients who are unattached*, episodic care resources are being overwhelmed. This is resulting in even more limited access for patients as well as provider burn out. Provincial efforts such as UPCCs, Primary Care Networks (PCN), incentives for PCPs and additional resources to support team-based care have not yet turned the tide in this trend.
**it is estimated that there are nearly 1,000,000 people in BC without a PCP, although the numbers are not clear on the South Island, anecdotal evidence suggests that the proportion of unattached patients on the South Island is higher than in most parts of the province.*

Aim of Project:

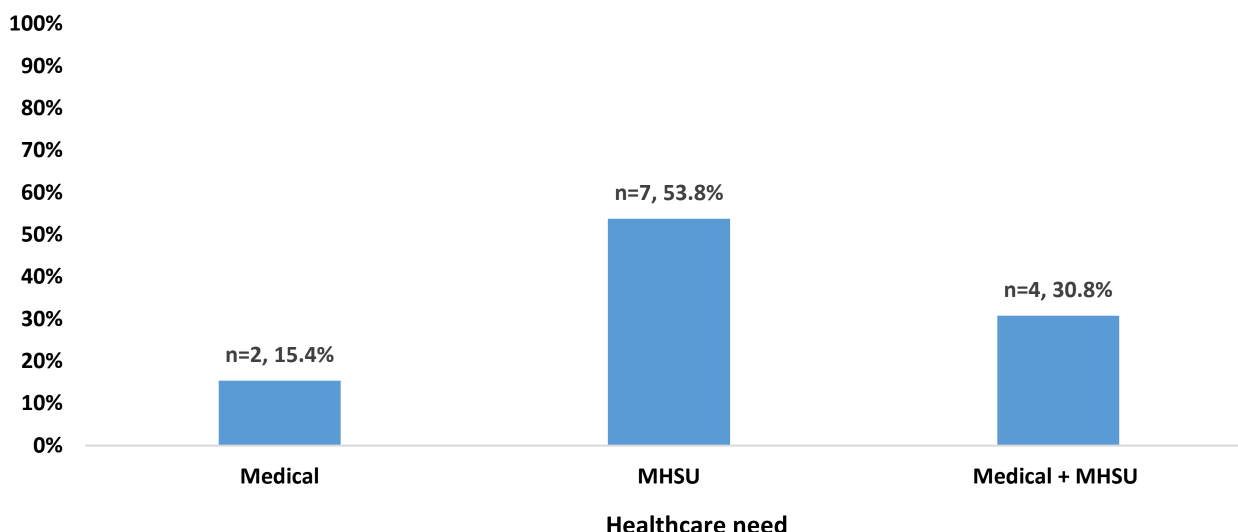
By June 2022, to use data regarding unattached patients who are high users of the WSUPCC to better understand their health concerns and to assist with identifying options for improving their care

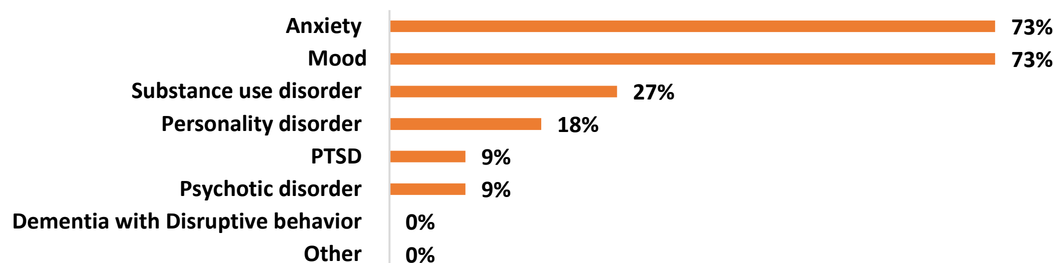
Action Taken:

1. Used Cerner generated data to identify the most frequent unattached users of the WSUPCC;

2. Collaborated with other physicians, Island Health and PCN staff to determine useful patient characteristics to identify and to create a spreadsheet that captures this information so that the health issues of high frequency users can be better understood;
3. Reviewed the charts of identified patients and capture their information in the spreadsheet,
4. Collaborated with other physicians, allied health professionals, iHealth, PCN and Transitions in Care staff to use the health information collected (in aggregate) to identify opportunities to improve patient care.

Data Analysis:





Note: Patient could have more than mental health issue

Lessons Learned & Next Steps:

Fully understanding the problem before testing changes is a foundation of Quality Improvement. The data collected on the high frequency users of the WUPCC will help guide our future improvement efforts

Next Steps

1. Discussions with stakeholders regarding how the use of data could be used led to a better understanding of the health needs of unattached patients who frequently use the WUPCC and generated a range of ideas regarding how the experience of care for this population could be improved, their needs better met and provider's time better used.
2. Share the findings with the WSUPCC physician group, IH site and area leadership, and the South Island Division of Family Practice and PCN Leadership.
3. Quarterly review and characterization of the health needs of high frequency users of the WUPCC – starting with the approximately 75 patients who have over 10 visits in a year;
4. Actively seek to place appropriate patients with services where there is a match/capacity;
5. Refer those who cannot be placed using the high priority referral form;
6. While waiting for attachment – continue work with site physicians, leadership & allied health professionals, ER physicians, the iHealth team and other services who have done similar work to create and use care plans.
7. If a high frequency user is attached already and if they consent, reach out to their PCP to see if an improved plan of care can be created.

Improving the timeliness of CSF results for patients in the Emergency Department at Victoria General Hospital

Physician Lead: Dr. Gina Gill

Location: Victoria
Specialty: Emergency Medicine

Background:

Patients undergo a lumbar puncture (LP) in the Emergency Department (ED) to rule out serious diagnoses, such as meningitis, encephalitis, and subarachnoid hemorrhage. Current practise of ordering cerebrospinal fluid (CSF) laboratory tests for these indications in the ED is non-standardized and may be prone to errors and delays. A Survey of ED unit clerks indicated that there is significant variation in the tests ordered by different physicians. A survey of emergency physicians indicated that the unpredictability and inconsistency of the timing of results causes challenges, and that the uncertainty may increase patient anxiety and frustration.

Problem:

Baseline turnaround time for CSF cell counts varied seven-fold (range 41-294 minutes), and all the while, patients wait. In the words of one emergency physician, "we are never doing an LP for a benign diagnosis" in the ED.

Aim of Project:

To have cerebrospinal fluid (CSF) results available to clinician within 90 minutes of lumbar puncture for 75% of samples obtained in the VGH ED by May 2022.

Patient Voice:

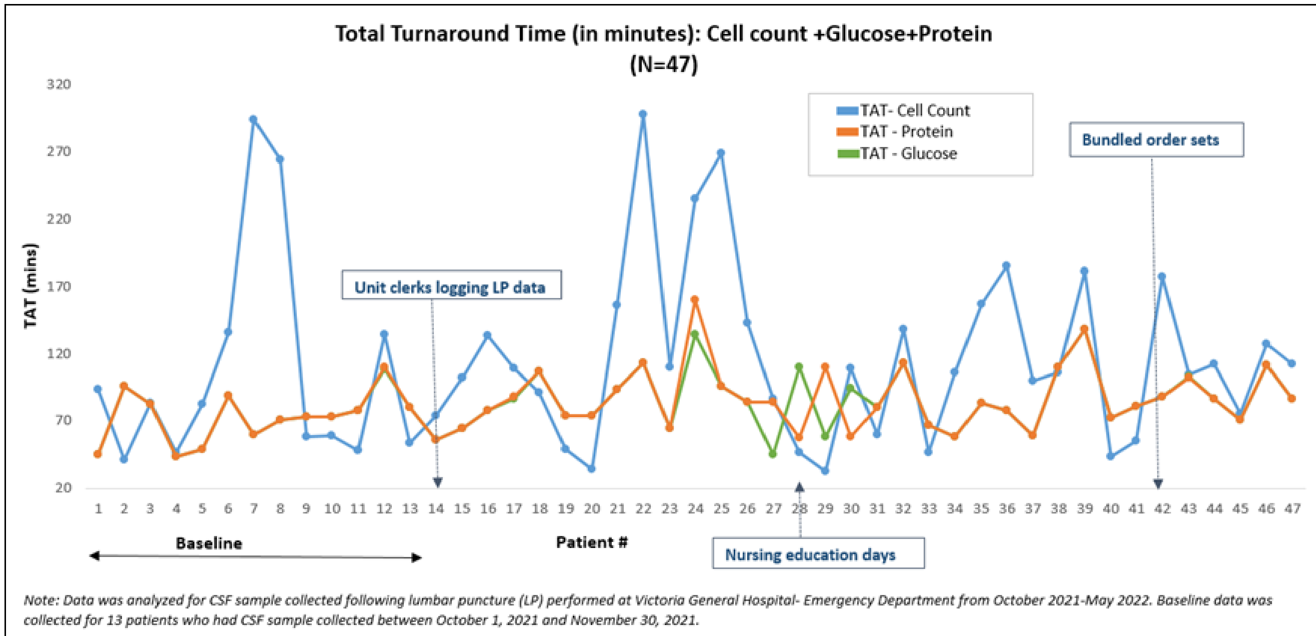
A patient partner who had recently undergone a lumbar puncture in the ED shared their experience, including the fact that they were extremely anxious just to be in the emergency department, and were quite stressed while waiting to have a serious diagnosis ruled out with certainty.

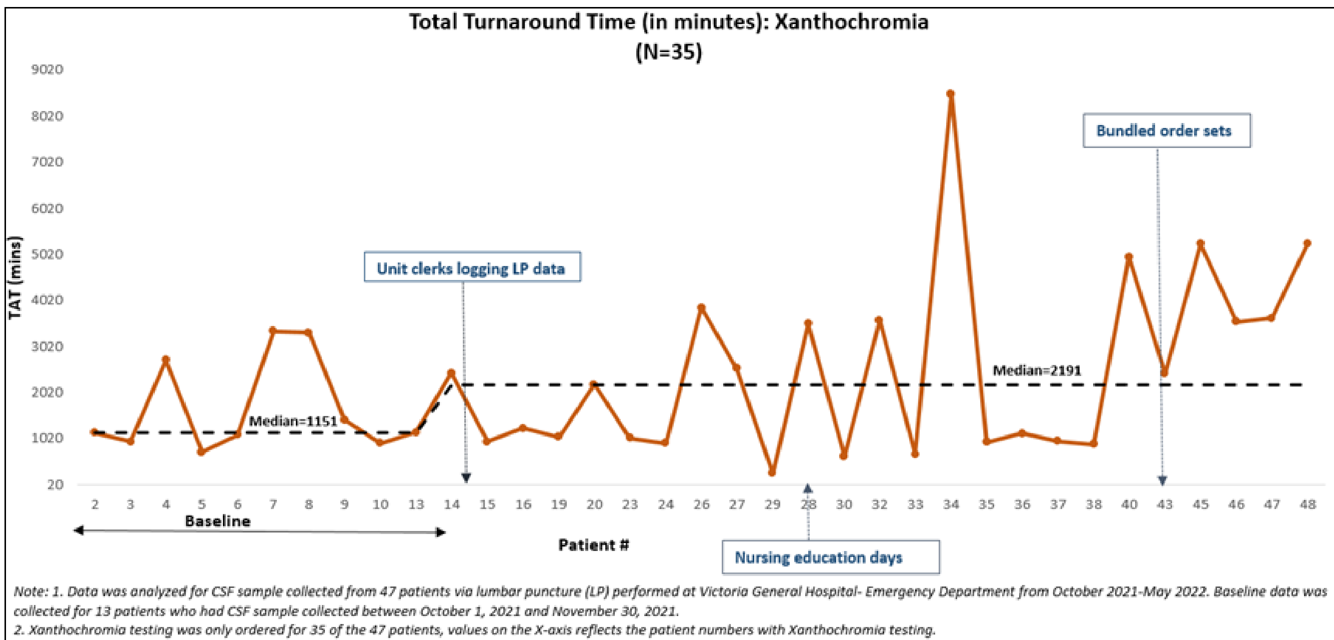
Action Taken:

1. Unit Clerks log all lumbar punctures performed, and record time of procedure and time samples leave ED to go to the lab for analysis.
2. Nursing Education seminars on lumbar punctures and CSF analysis
3. Evidence based standardized physician order sets

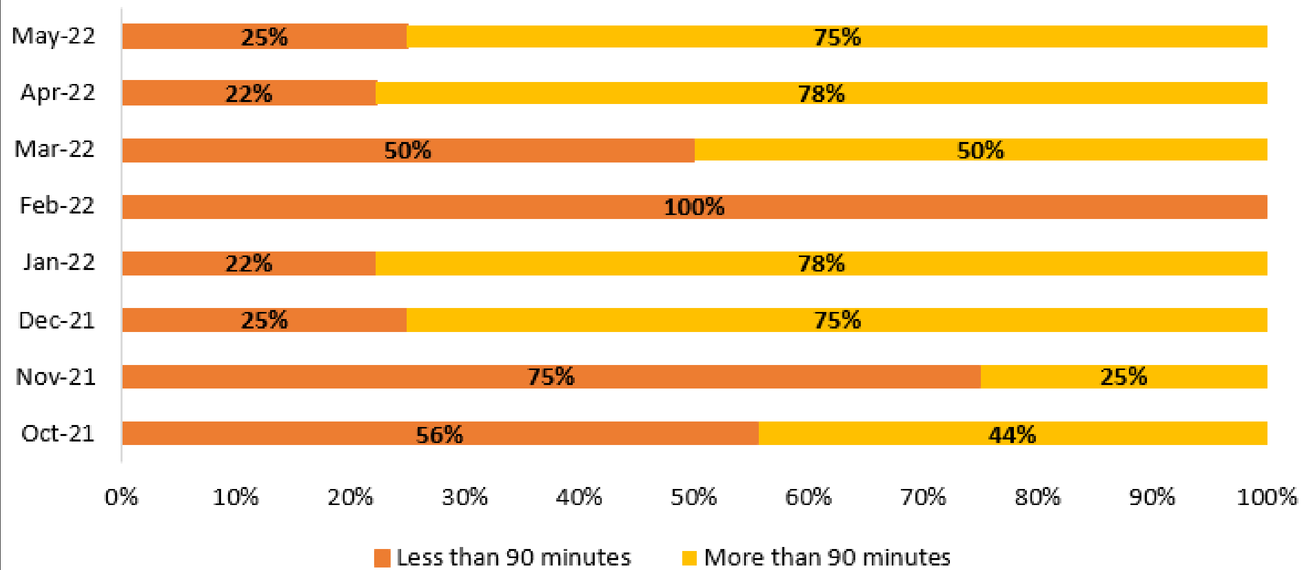
Data Analysis:

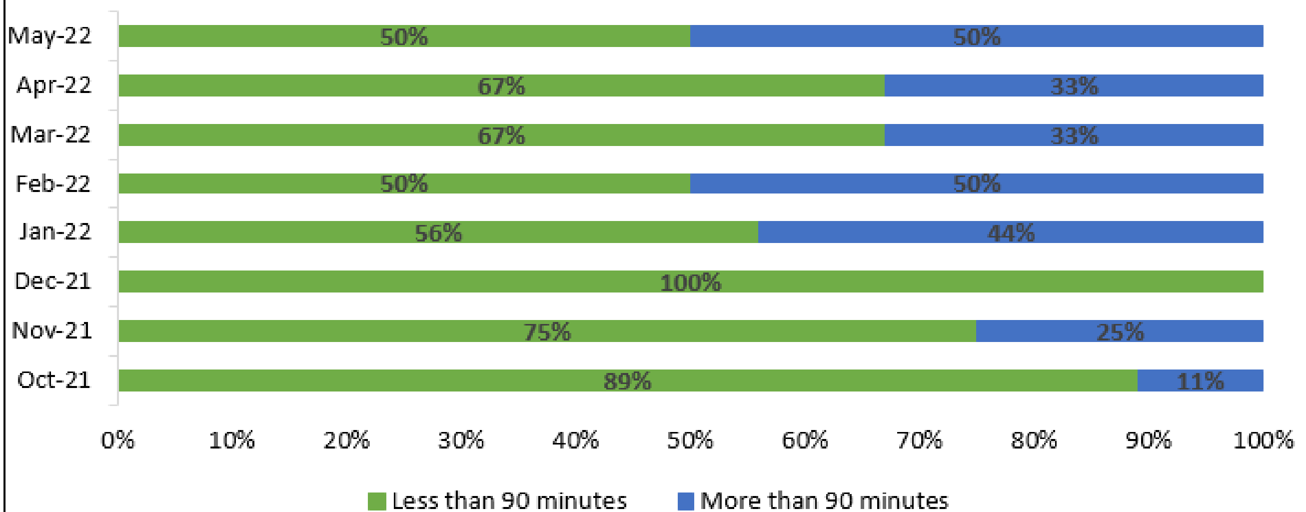
Outcome Measures



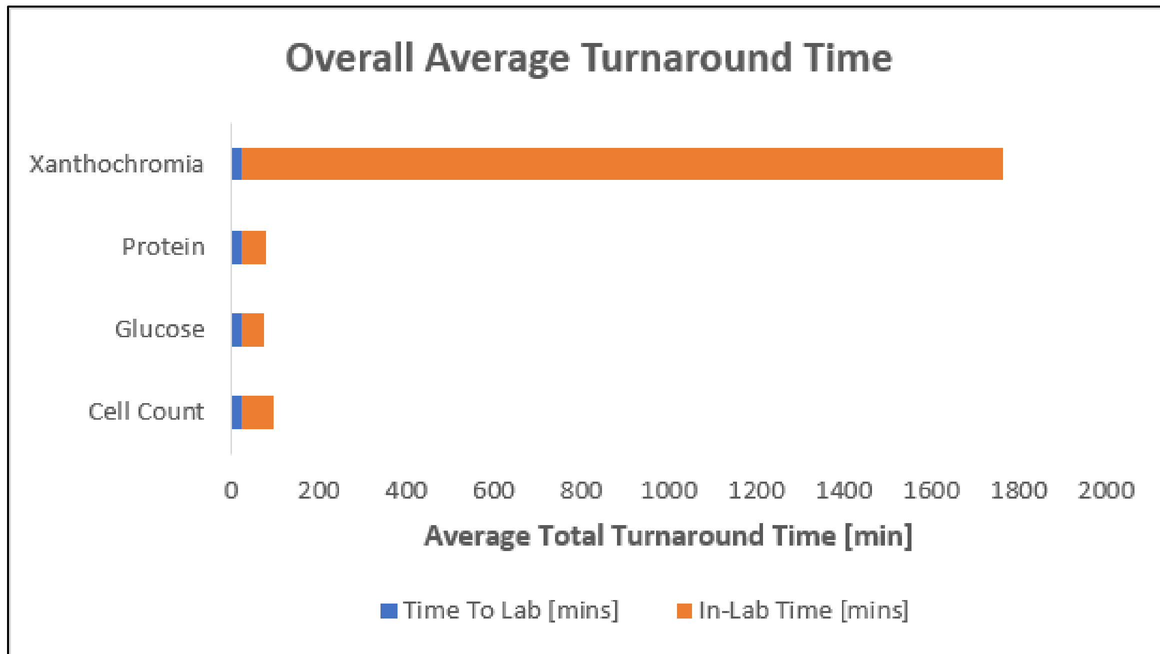


Overall, TAT did not improve during our project timeline only 25% of cell counts were back within 90 minutes in the final month of our project





This project was limited by time, and the newly developed order sets that were created could not be approved during the project timeline, requiring the ongoing use of the paper requisitions throughout the project duration. Timely review and implementation of evidence-based order sets could reduce barriers to meaningful change.



Lessons Learned & Next Steps:

When you want to improve a process that crosses multiple disciplines and departments it takes time to build team and collaborative relationships to achieve good outcomes. Although beyond the sphere of influence of this project, optimizing TAT in the lab would logically reduce time to disposition and potentially length of stay for patients who have negative tests.

Adapting a bundled approach with advance orders, consistent use of order sets, and consistent location for samples was perceived to be helpful and could be considered for other body fluids beyond CSF (including peritoneal, pleural, and joint fluid).

Next Steps

1. ED unit clerks: promote efficient processing orders, transportation of CSF samples
2. ED nurses: promote safe space for patients, optimization of communication
3. ED physicians: ensure timely use of standardized order sets for appropriate indication, communication with laboratory colleagues when needed for emergent results.
4. Lab medicine team: collaborate on updating order set and reducing variability in turn-around-time for STAT CSF results. Reduce burden of testing that is not clinically relevant or indicated, such as the use of spectrophotometric testing for xanthochromia when there is no clinical concern for subarachnoid hemorrhage. Hopefully this will save time and resources for the laboratory team.

Improving Access to Care for Women with Urgent Gynecologic Conditions in an Outpatient Setting

Physician Lead: Dr. Harold Hunt

Location: Victoria
Specialty: Gynecology

Background:

Wait times for outpatient consultation by gynecologists in Victoria are increasing, typically up to one year for non-urgent problems. This can make it challenging to see urgent patients in a timely manner as offices have limited booking capacity. With increasing numbers of patients orphaned from primary care providers, many patients are now accessing care through the emergency departments, this is well documented by ER data. This is placing further strain on offices to accommodate these patients in a timely manner.

Problem:

Our practice data demonstrated patients with urgent problems are waiting on average 24 days to be assessed, an excessive wait, possibly resulting in poor outcome, more emergency room visits and increased patient stress.

Aim of Project:

To reduce the time from referral to consultation in women with urgent gynecologic problems in an outpatient setting from 24 days to less than 14 days in 90% of referrals over a six-month period from January to June 2022.

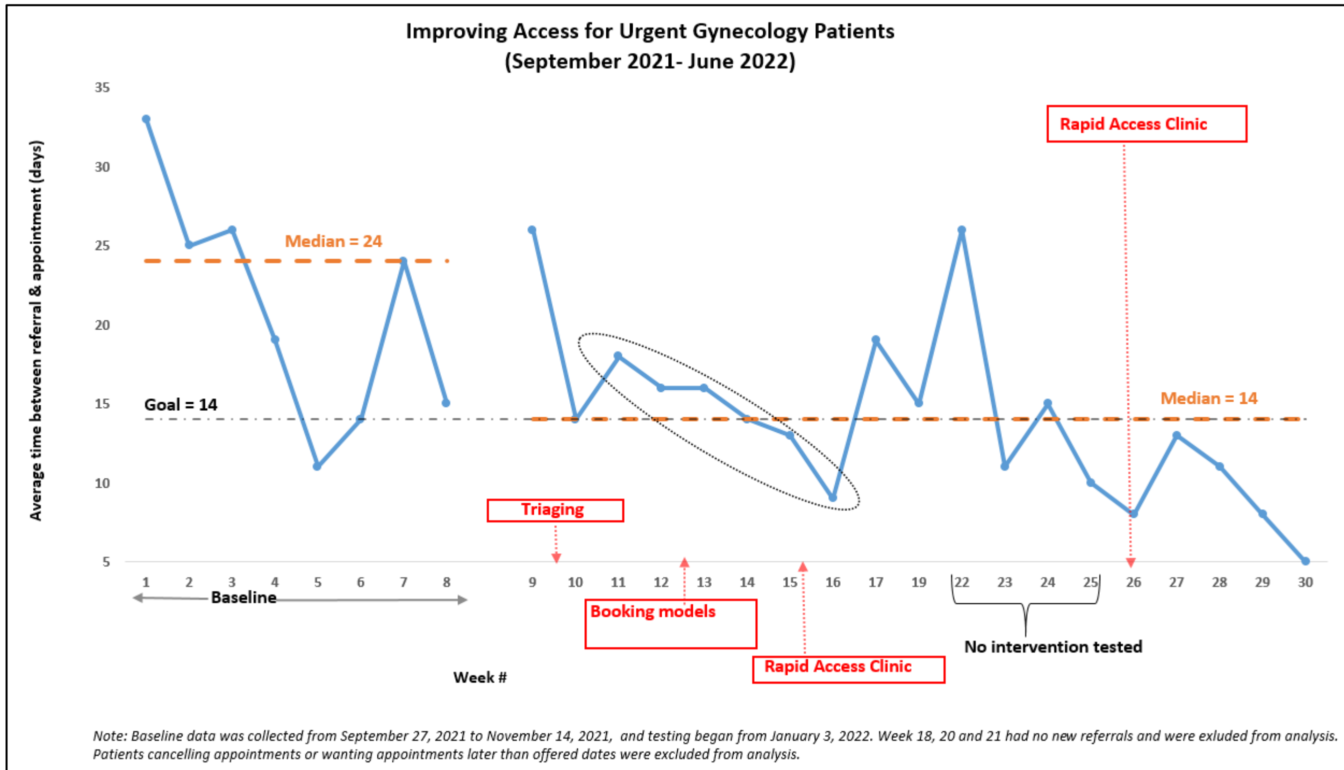
Action Taken:

We looked at three aspects of office management to see if we could decrease time from referral to consultation:

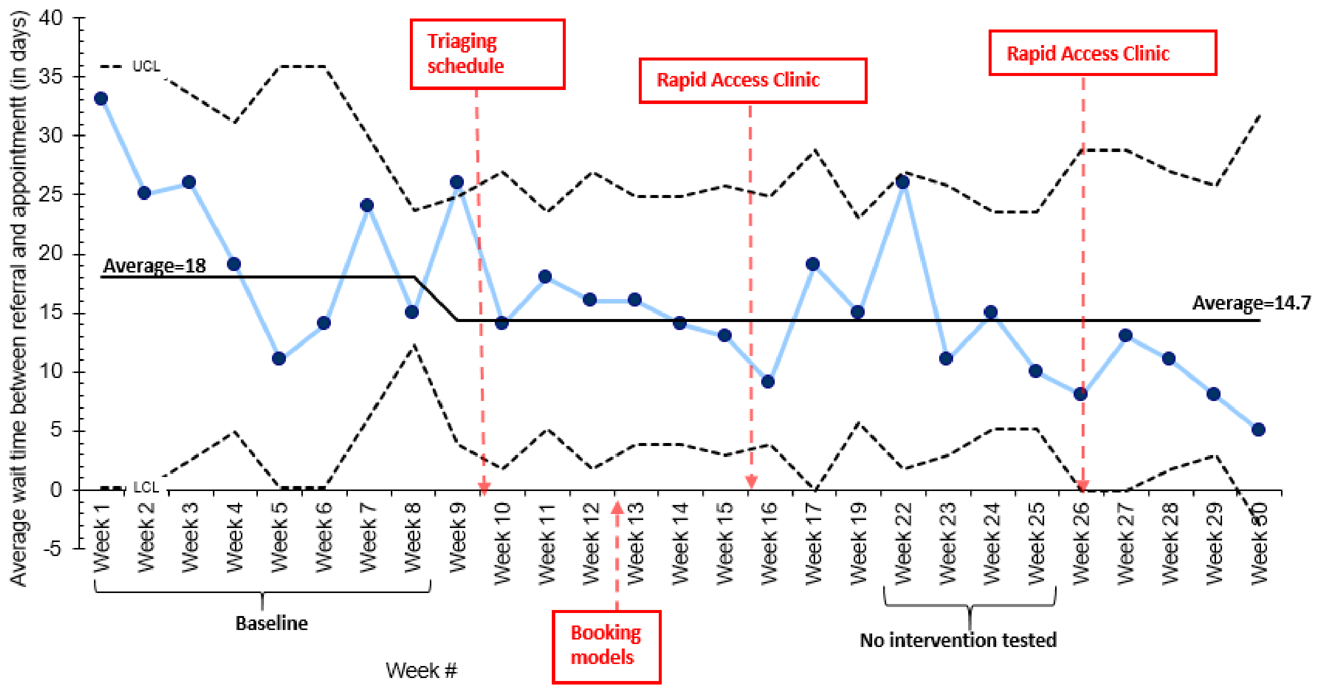
1. Triage - timing and frequency
2. Alternative Booking models for initial consults (Virtual or in-person)
3. Creating capacity by either using weekly blocked office time or a joint weekly Rapid Access Clinic combining resources from several independent offices.

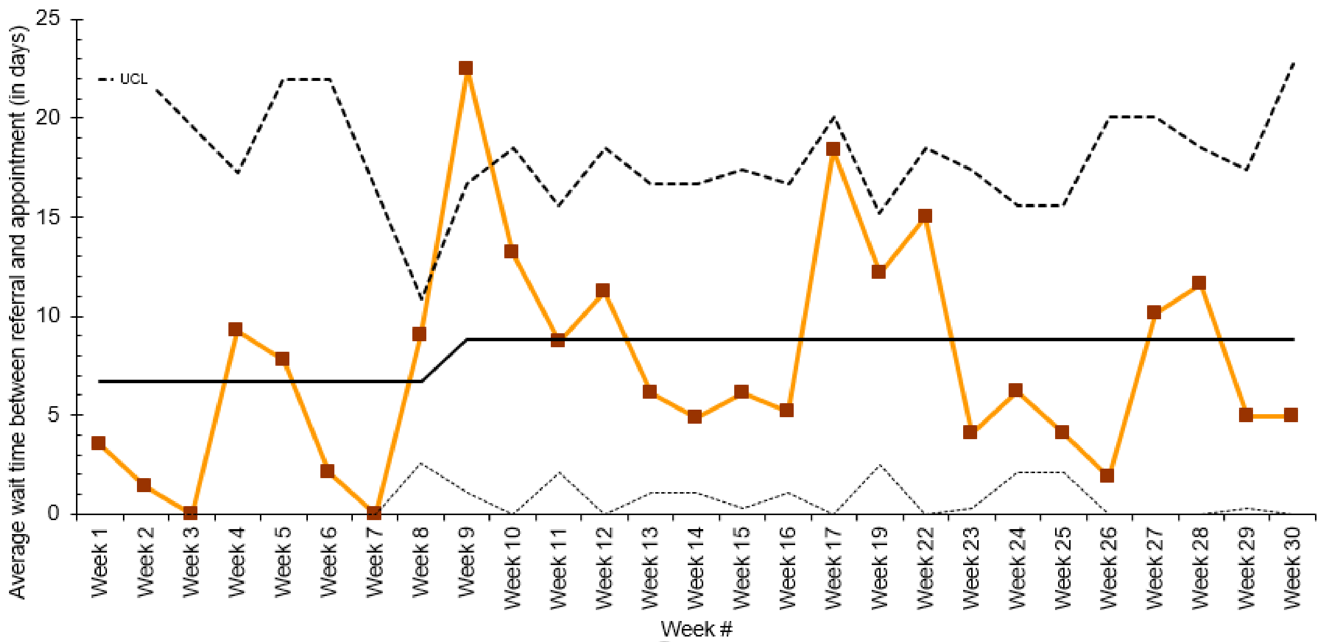
Data Analysis:

Outcome Measure



Median average wait time at baseline was observed to be 24 days. Starting implementation of first PDSA (Week 9), we noticed a downward trend across five weeks (week 11-16) highlighting reduction in average wait times. It was during these five weeks that we ran PDSA 2, 3, 4, 5, 6 testing changes in methods of triage, booking models and office capacity. Weekly average wait time was lowest at 9 days during week 16 following implementation of Rapid Access Clinic (Week 15). In order to test the effectiveness of this specific change idea we temporarily halted implementation of changes returning our practice to baseline state. This resulted in increased average wait times. We then re-introduced our change idea of piloting Rapid Access clinic and as expected a reduction in average wait times was again observed, adding further support to the utility of this clinic providing improved access to patient care. By the end of the project, we noticed a reduction in average wait times to 14 days which met our envisioned goal. Unfortunately, we couldn't run the study long enough to have the number of data points needed to meet significance; but based on the trend seen and the operational functioning of the Rapid Access Clinic, we believe this would have ultimately been demonstrated.





Our process and balancing measures showed changes in intended direction too. To study the effects of proposed changes, we surveyed patients to obtain feedback on RAC acceptability. Out of the 132 patients, only one patient wished to be seen by the gynecologist they were specifically referred to and only 9 patients (6.8%) could not attend their expedited appointment for various personal reasons.

Staff satisfaction was identified as a balancing measure. Survey results/focus groups with booking staff showed staff were very satisfied with the RAC model, finding the process of booking patients into the clinic easy and taking stress off the office to find spots for these patients in an already overburdened system. The staff were relieved in not having to find additional capacity for the urgent referrals or cancel and rebook non-urgent referrals. This has the intent to improve overall office booking efficiency.

Lessons Learned & Next Steps:

Key lessons learned from this project were to start improvement projects within our sphere of influence first before spreading and building a team of those who actually do the work provides the best change ideas.

Our next steps will be:

1. Scoping out the Rapid Access Clinic to include other gynecologists both within and outside of our office and running it weekly.
2. Develop a single letter referral process to streamline triage and include patients coming through the South Island Emergency Departments.
3. Present the data at our Division journal club to see if this can be scoped out to the entire group; and to Quality Council and Island Health to see if this could possibly be run as a staffed clinic with teaching capability through the Island Medical Program.

Just the facts Doctor… Increasing Physician Engagement in Patient Safety Event Reporting by Internists & Hospitalists at Royal Jubilee Hospital

Physician Lead: Dr. Jeff Kerrie

Location: Victoria
Specialty: Internal Medicine

Background:

Reporting of patient safety events through a non-punitive system is imperative for improving the care of patients and creating a safe culture at Island Health The BC Patient Safely Learning System (PSLS) is a mechanism for all health care workers to report safety events that could lead to harm, or have harmed, those in care. Physicians have a unique viewpoint on patient care, and their contribution to the safety system is imperative. Despite this, MDs are difficult to engage in the PSLS process.

Problem:

At Island Health a low percentage of PSLS events are reported by physicians. Most MDs (76%) in our target group had never reported a safety event despite approx. 30,000 reported annually in Island Health. This means the physician perspective on patient safety may not be being heard, and thus may make physicians feel less empowered to make positive change.

Aim of Project:

To increase the number of physician reported safety events by hospitalists/internists (as percentage of total physician reported events per month at RJH) in the PSLS system at Royal Jubilee Hospital by 25% by August 2022

Patient Voice:

Was felt not to be necessary as the project was specifically about engaging physicians in an administrative process. We emphasized the importance of a safety culture and its impact on patients to the physicians during education sessions.

Action Taken:

Early survey on barriers to use of PSLS by doctors found 4 categories. We chose to focus on those related to:

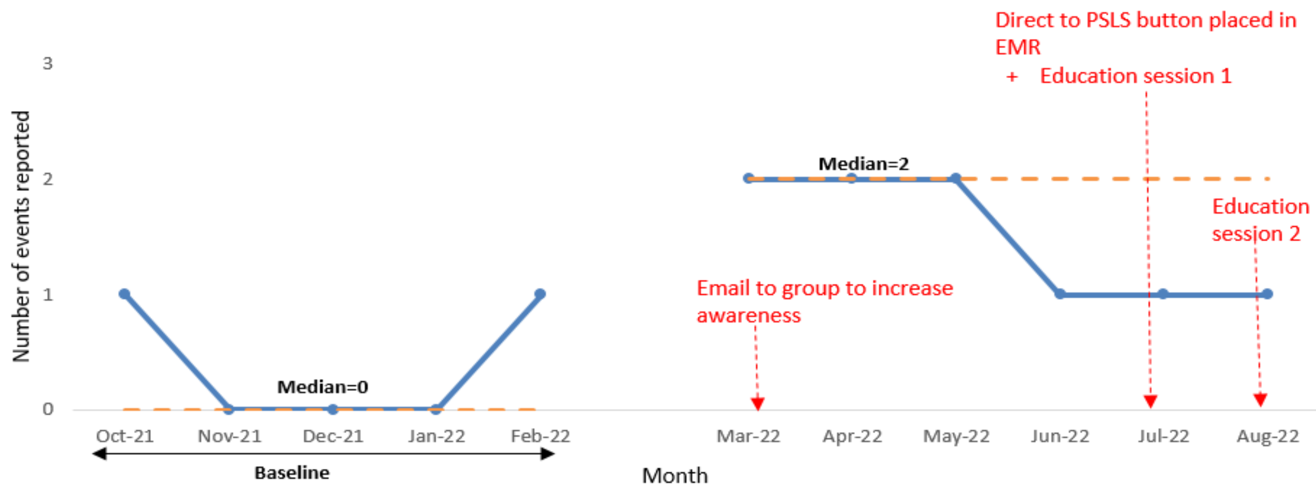
1. Awareness/Motivation to Report – educate on Why reporting is important, increase awareness of the system
2. Ease of access to PSLS system – provide a direct button in the EMR
3. Ease of use of the system – educate on minimal fields needing to be filled out in the form

island health

PQI PHYSICIAN QUALITY IMPROVEMENT An SSC Initiative

SSC SPECIALIST SERVICES COMMITTEE

Data Analysis:



We were able to increase the percentage of reporting physicians from our subgroup with our brief interventions over the course of 3 months by 25% though that number seems to have plateaued quickly. We note that we were able to make change such that each month after our interventions started (other than one) there was a report from someone in our subgroup, thus indicating a small change from baseline.

Lessons Learned & Next Steps:

In the in the post COVID era it was difficult to engage physicians. Doctors report feeling burned out and overwhelmed with work. Even with the offer of lunch and a sessional stipend we had very low turnout at our education session. We do believe that using the "Why" (for internal motivation) and "How" (to make the process more efficient) methods are more likely to lead to lasting change based on internal drivers

NEXT STEPS

1. We will continue to educate/increase awareness to physicians on the need for safety reporting and the effects on patient care. We hope once the new system is released by the province that it will be even less burdensome to fill out the standardized forms and we will publicize heavily
2. We will continue to monitor monthly numbers of PSLS reports in physicians and our subgroup to see if there is a lasting effect. If we do have success we would consider working with other health authorities on how to increase spread.

Completing the Puzzle
Improve Addiction Medicine Consult Service Referral at Campbell River Hospital

Physician Lead: Dr. Jessica Flear

Location: Campbell River
Specialty: Addiction Medicine

Background:

The Campbell River Hospital Addiction Medicine Consult Service (AMCS) provides inpatient care to patients who are experiencing substance use. Inpatient consults provide a vital opportunity to allow patients to get started on pharmacotherapy for substance use disorders and become connected to important community resources. Patient engagement with AMCS services while hospitalized has been shown to provide several benefits including higher substance abstinence rates, less readmissions and greater engagement in outpatient treatment after discharge.

Problem:

Our baseline data shows that 50% of referrals to the AMCS are incomplete, lacking in important information such as substance of choice, clinical question at hand and urgency of consultation. This missing information can lead to delays in patient consultation by up to 24 hours. This preventable delay in patient care has the potential to harm to patients by decreasing the amount of time for stabilization onto pharmacotherapy in hospital as well as limiting time for patient engagement & rapport building with AMCS team.

Aim of Project:

To increase by 40%, the percentage of referrals to the Campbell River Hospital AMCS containing the minimum required information by May 2022.

Primary Care Provider Voice:

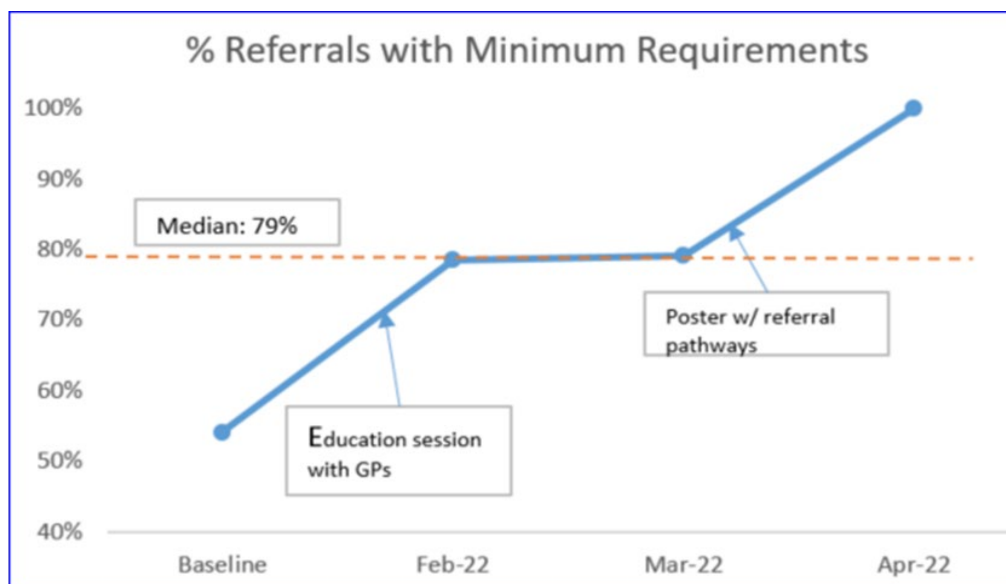
"We don't know how the AMCS team wants us to get a hold of them."

"The AMCS at CRH provides such a valuable service to our vulnerable patients, and allows primary care physicians to focus on the medical issues at hand, while trusting that the patient's substance use is also being appropriately addressed."

Action Taken:

1. Education: present about service and referral at rounds and family medicine dept. meetings
2. Physician access: update on-call directory message with contact information and referral process information
3. Visibility: Informational posters and cheat sheets

Data Analysis:



Initial data collected suggested a significant improvement in referral completion after educating referring providers and improving the information on the directory and posters around the hospital. However, data was limited due to early wrap-up of project for personal reasons. I was unable to collect follow-up data regarding referring and consulting physician satisfaction with the streamlined referral process, though anecdotal evidence through discussion with colleagues suggests that both groups noticed an improvement in the ease and clarity of referring to AMCS.

Lessons Learned & Next Steps:

AMCS is a highly valued service at Campbell River Hospital. Mapping the referral process was important to understand areas for improvement.

As our next steps we will:

1. Continue to collect robust data around referral patterns to AMCS and test change ideas that we were unable to test.
2. Collect data around referring and consulting physician satisfaction. Improving experience of consulting physicians on service may contribute to efforts to recruit more physicians to the service and improve capacity and coverage, which has shown to be a significant challenge.
3. Include patient voice around experience with AMCS team.

Reducing Length of Admission for Internal Medicine Patients admitted to 5N at Royal Jubilee Hospital

Physician Lead: Dr. Laura Fraser

Location: Victoria
Specialty: Internal Medicine

Background:

The Internal Medicine department at Royal Jubilee Hospital (RJH) consists of 3 clinical teaching unit (CTU) teams. Each CTU team involves medical students and residents and is led by a staff physician. The team cares for a list of admitted patients with multiple complex medical issues and often functional and social barriers to discharge. Prevention of discharge in an appropriate timeline affects overall hospital and critical care capacity. Patients whose discharges are delayed have an increased risk of iatrogenic complications and adverse events leading to morbidity and potential further hospitalization.

Problem:

Patient hospital length of stay is closely monitored at Royal Jubilee Hospital. However, often the patient discharge is delayed by non-medical barriers that are often preventable if addressed earlier.

Aim of Project:

To decrease the patient average length of admission by 1 hour from 170.2 hours for Internal Medicine patients on 5N at Royal Jubilee Hospital by June 2022.

Action Taken:

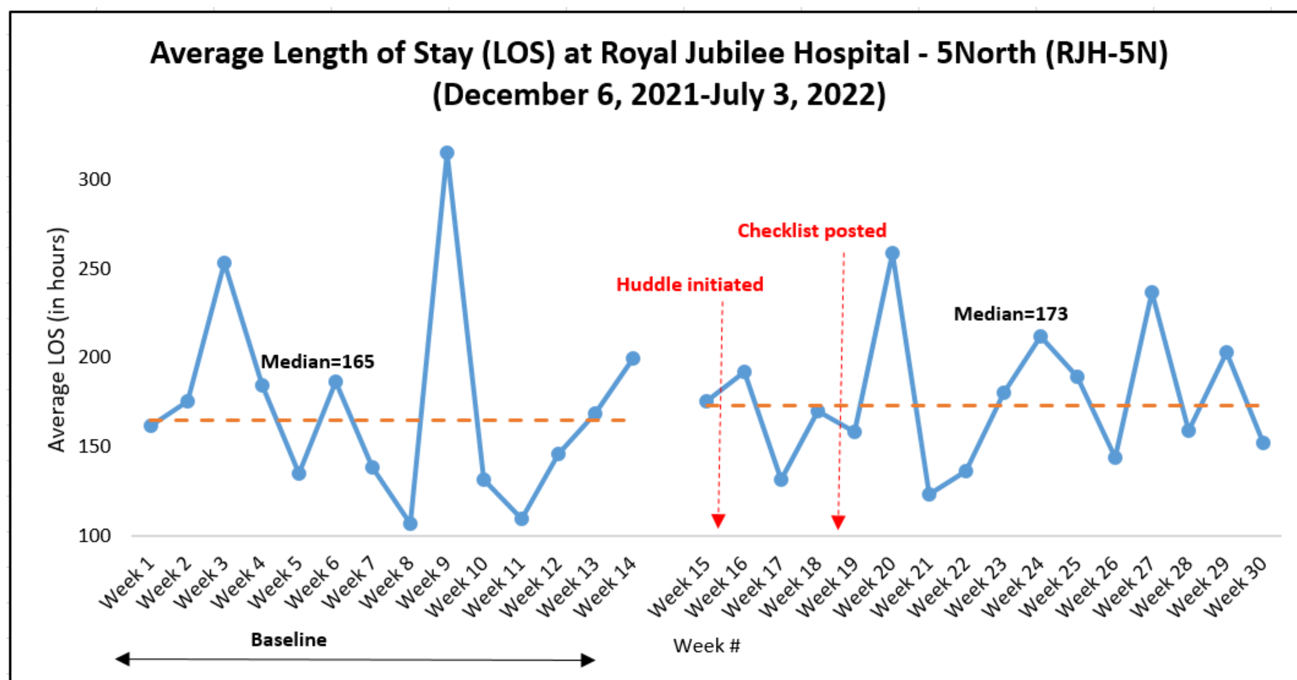
1. Implement daily interprofessional team huddles
2. Phone & in-person reminders re: huddles to staff & residents
3. Introduce patient discharge checklist to guide huddle discussion

island health

PHYSICIAN QUALITY IMPROVEMENT
An SSC Initiative

SSC
SPECIALIST SERVICES COMMITTEE

Data Analysis:



It remains unclear at the moment if the huddle or checklist truly impacted discharge efficiency, or simply if using weekly average length of stay as an outcome may require longer intervals of data to see trends due to the wide range in values.

Lessons Learned & Next Steps:

This project had the important outcome of sustained implementation of a daily huddle with CTU physicians and CTU allied health. Staff reported the huddle allowed healthcare disciplines to work collaboratively regarding discharge planning, and improved communication. There was suggestion of improved work satisfaction with the more streamlined process.

It was revealed that senior residents had the best compliance for performing huddles, and reminders targeted at seniors were effective in sustaining the huddle practice.

Next Steps:

1. Expanding discharge huddles to include other professions: OT, PT, pharmacy
2. Formal staff satisfaction surveys on discharge huddles & multidisciplinary communication
3. Implementing discharge checklists in patient charts or EMR
4. Monitoring use of discharge checklist
5. Student and team teaching on discharge planning using the checklist

Increasing Adherence with Opioid Agonist Therapy (OAT)

Physician Lead: Dr. Paul Harris

Location: Duncan
Specialty: Family Medicine with addictions focus

Background:

Most patients on opioid agonist therapy (OAT) are unlikely to die of an overdose if they remain on an opioid substitute such as methadone or buprenorphine. It has been shown that patients who stay on their OAT for at least 30 days will likely remain on it for longer. By increasing the number of patients initiated on OAT to 30 days we hope to reduce deaths from overdose

Problem:

Adherence to opioid agonist treatment is a major challenge to patients when first initiating OAT. There are competing interests for the newly initiated patients as they transition from using street drugs to being on prescribed medication only. In order to effectively attract new patients to a new way of being drug exposed a number of ways of enticing patients would need to be devised.

Aim of Project:

To increase patient adherence with Opioid Agonist Therapy (OAT) at initiation to at least 30 days by June 2022 at Phoenix Transformations.

Patient Voice:

"I would be lost without the help. I probably would not be doing this (OAT) if it wasn't for my support person. I need their help and support in order for me to get through this, without her it wouldn't happen."

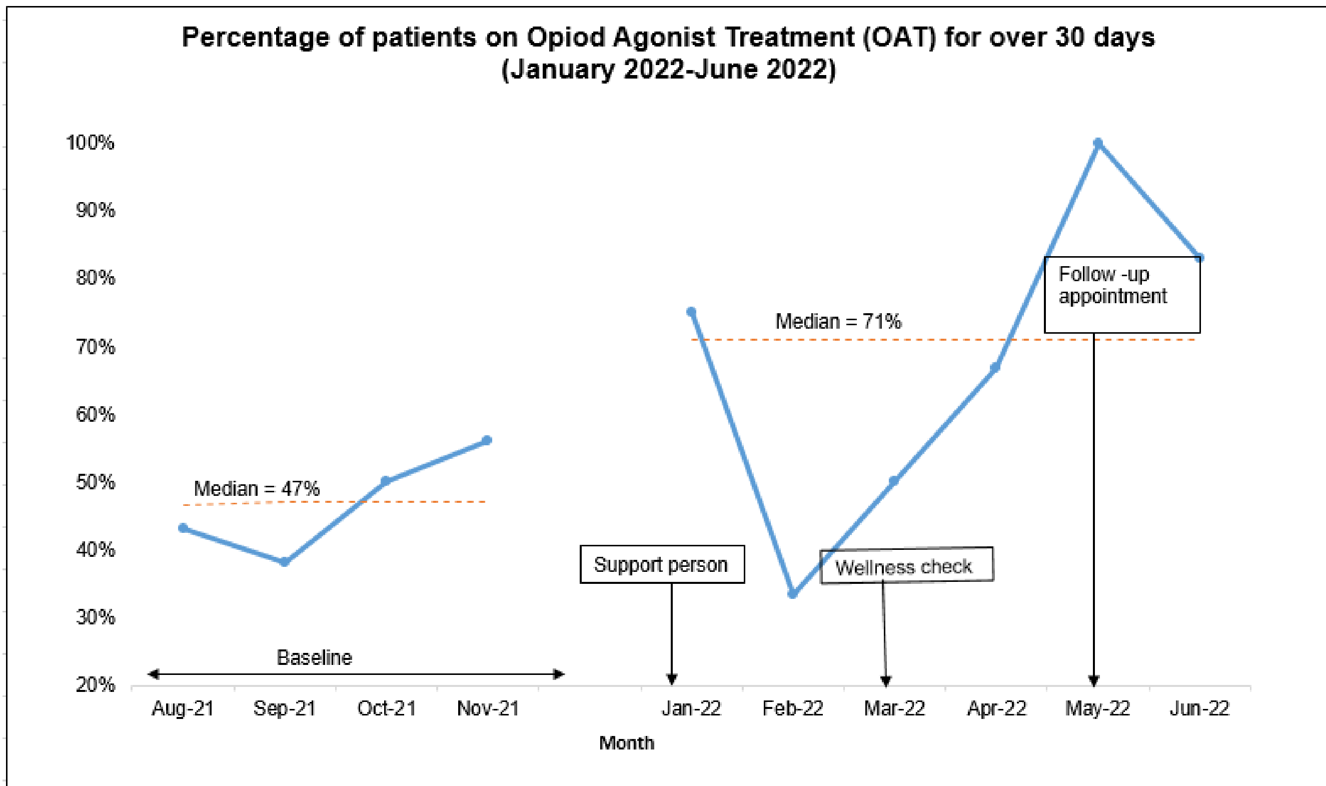
Action Taken:

1. Adding a support person to admission interview prior to initiating OAT
2. Doing a daily wellness check by phone.
3. Follow up appointment

island health PHYSICIAN QUALITY IMPROVEMENT An SSC Initiative SSC SPECIALIST SERVICES COMMITTEE

Data Analysis:

- Our first change idea of adding a support person was rolled out in January 2022, this was soon followed by implementation of our other two change ideas: daily wellness checks (March 2022) and follow up appointments (May 2022).
- By the end of our project the % of patients staying on OAT over 30 days increased from 47% at baseline to a median of 71% after implementation of our change ideas



Lessons Learned & Next Steps:

The recruitment of a support person was in many cases challenging but was identified by the patients as a key factor to success for staying on OAT.

Next Steps: We will adopt these changes and continue to look at data to ensure sustainability.

Reducing Coercive Care in Emergency Psychiatry at Cowichan District Hospital

Physician Lead: Dr. Rachel Grimminck

Location: Duncan
Specialty: Psychiatry

Background:

The BC Ombudsperson's report "Committed to Change: Protecting the Rights of Involuntary Patients Under the Mental Health Act") in 2019. Outlines significant levels of non-compliance with the Mental Health Act (MHA) in BC. Island Health MHA audits demonstrated consistent with lack of compliance locally.

The Cowichan District Hospital (CDH) ED/MHSU working group identified gaps between current site practice and the Provincial Seclusion Guidelines for BC (2014). Areas of concern included issues in safe practices for the use of seclusion and specific recommendations regarding patient rights.

Problem:

In the last three years, 74 PSLS events have been filed with various levels of harm related to the use of seclusion of MHSU patients in the CDH Emergency Department.

A seclusion checklist was implemented in May 2021 in the CDH Emergency Department to close the gap between current care and the provincial seclusion guidelines which includes compliance with the BC Mental Health Act. There was good uptake with the nursing staff and poor uptake with physicians.

Aim of Project:

Decrease the LOS in seclusion in the ED at CDH by 50 % by June 2022 for patients experiencing a behavioural emergency

Patient Voices – Experiences of Seclusion:

"You feel like you're not worthy of other people actually caring. You feel…abandoned, … shuffled off, tucked away, left to your own devices and without any sense of time…nobody tells you anything"

"Showering? There is no showering in seclusion"

"I can't remember at all that I ever have gotten food in emergency"

"You're not human, you're not considered"

"It felt really isolating and trapped away from the rest of the world and not even knowing what's going on outside or anything like that"

"…it's just absolutely such a terrifying thing because you never know what you're going to be met with"

“The hospital wasn’t an option. It didn’t feel safe to talk to doctors or nurses, or anything”

“I spent a few nights in psych emergency and I was really not treated like a human there”

“It’s a situation where you feel like it’s a lost cause, whatever you do, it’s not really going to change anything because nobody really listens”

“Both times I’ve been to hospital were negative and I didn’t know if I could go back there. I was like, I couldn’t even have a conversation with them about how I felt”

Patient Voices – Suggestions for Improvement:

“Consider the patient’s perspective and why something might be happening”

“Instead of responding as if the person’s purposely doing something, like getting angry at them or treating them poorly or saying rude things to them, I think people just need to be heard”

“What has helped me luckily the last time, way, way more is that people engaged with me. They weren’t leaving me to my own devices”

“Having more patience with people, and if care providers are calm and receptive, then it could help a patient clam down and be in a better place to communicate”

“The nurses were just kind of assuming that the person is dangerous or that they’re going to do something bad or that they’re going to be uncooperative…they respond based on assumptions”

Team Reflections:

“As a team member, this project highlighted ways to reduce time in seclusion for patients held in the ED. The project created tools that helped clinicians look at alternatives to seclusion as well as what to consider when ordering seclusion which positively impacted our patients.”

“ We started improving care with small changes, which is leading our health care team on a journey of change to improve our care”

“ We are striving to decrease care that may be triggering or traumatic into supportive and empathetic”

“ Our goal is to improve patient experience by fostering an environment that is supportive and safe”

“The project created much awareness to the ED team. Awareness and tools such as the checklists directed and prompted care, resulting in decreased or appropriate use of seclusion”

“ Hearing the patient partners experience was humbling as is fuel to create a supportive care environment”

Action Taken:

a) Investigate way to track time in seclusion

b) Develop Physician Checklists for patient in Seclusion

c) Revise Physician Checklist based on Physicians Feedback

Lessons Learned & Next Steps:

This is a complex issue requiring a coordinated response and ongoing work will be required in this area. Comprehensive MHSU policy for Island Health would support front line staff to deliver high quality care by developing regional standardization around seclusion practices/processes

It's hard to capture complex change including stigma reduction, attitude change

Our next steps will be to:

1. Present to Cowichan Quality Council (May 2022)
2. Present at the Emergency Nurses Association of BC presentation, "10 Simple Ways to Improve Psychiatric Care in the ED" (Sept 2022)
3. BCPSQC 2021/2022 Patient Voices Network (PVN) Annual Report (Sept 2022)
4. Share Cowichan ER Podcast on the management of agitation for nurses and physicians - https://open.spotify.com/show/49LlBuStVSO15jKMisXfqZ?si=5badf0cd754442a3
5. Present at Quality Forum 2023

Criteria Led Discharge
Cowichan District Hospital

Physician Lead: Dr. Trevor Tsang

Location: Duncan
Specialty: Family Practice

Background:

Patient bed capacity and management at the Cowichan District Hospital has been challenged with an outdated hospital servicing an ever growing population. Efficient bed utilization becomes paramount in balancing patient admissions and discharges all the while maintaining a satisfactory level of care that preserves safe and effective outcomes for our patients. It is known that effective discharge planning involves active communication between the physician lead and the allied care team early in a patient's hospital admission and continues throughout the patient stay. Criteria Led Discharge is a tool that has been employed at other hospitals across the world that have demonstrated improved inpatient discharge outcomes.

Problem:

The use of Criteria Led discharge at CDH Floor 2E is inconsistent. Inefficient discharge of inpatients results not only in unnecessary costs to the health care system but also compromises patient outcomes.

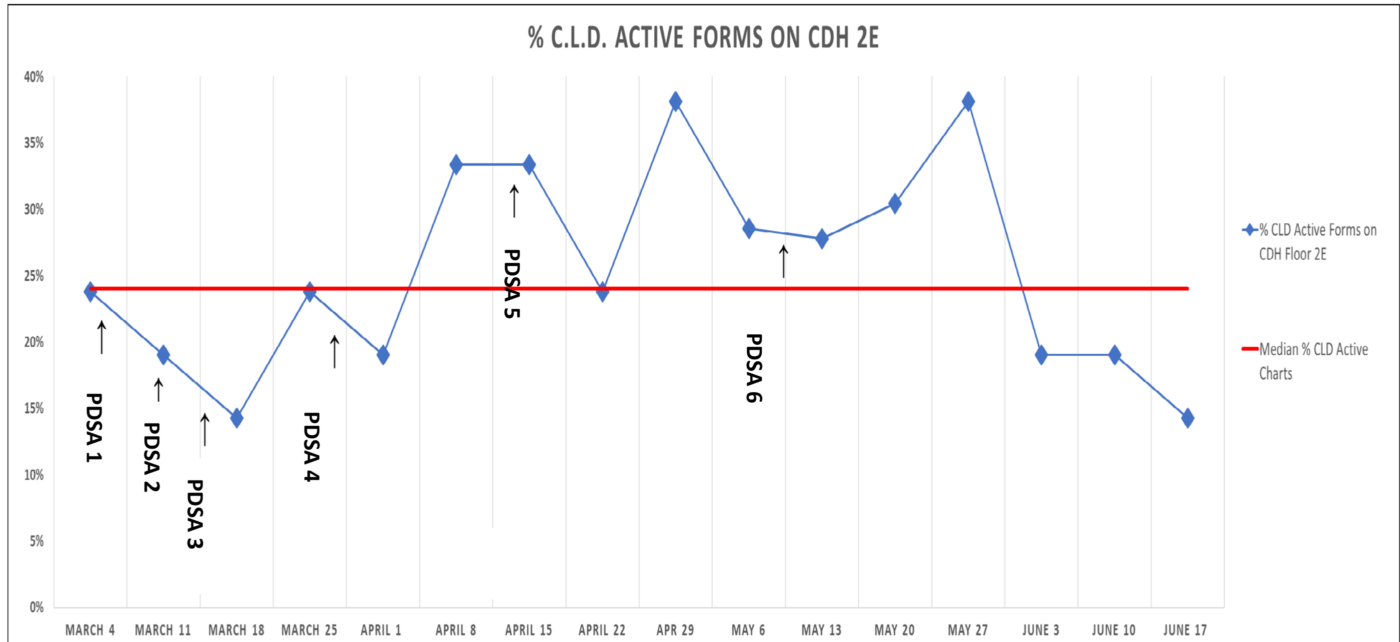
Aim of Project:

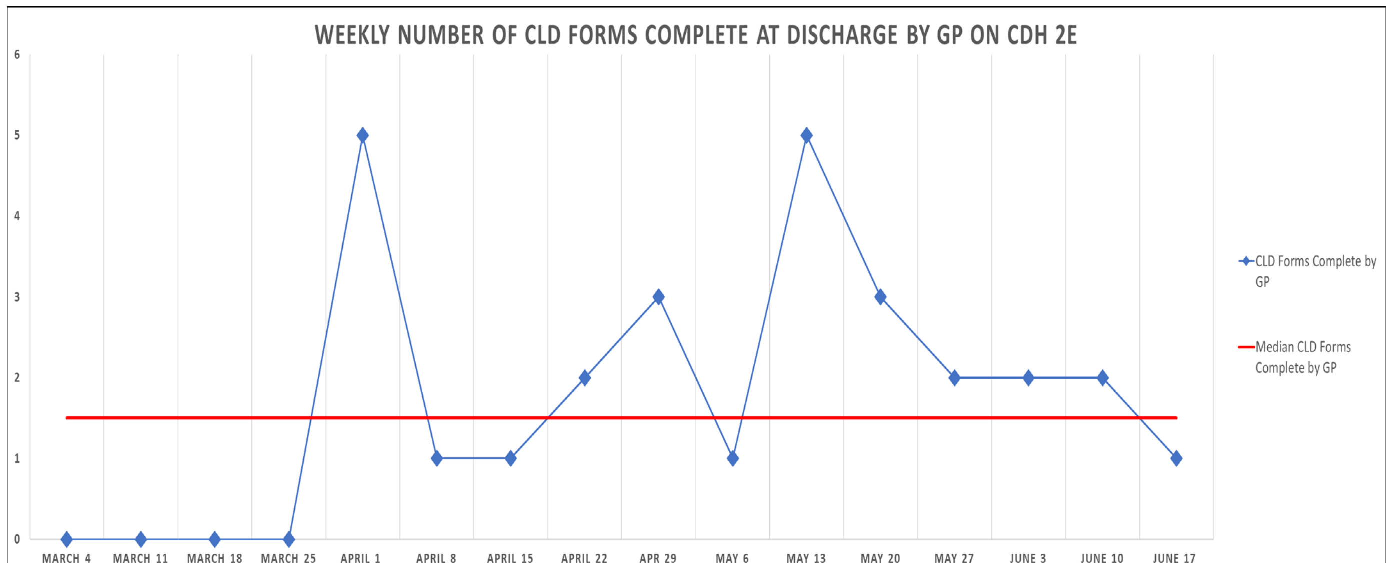
By June 2022, we aim to have 50% of patient charts on CDH Medical Floor 2E actively utilizing the Criteria Led Discharge (CLD) form by the most responsible physician.

Action Taken:

1. Team Meeting/education involving all Hospital Allied Care Team Leads.
2. CNL educates Nurses during Structured Team Report in morning for dayshift nurses.
3. Clinical Nurse Educator implements educational poster in nursing meeting room.
4. Dr. Trevor Tsang delivers verbal presentation of CLD Form to GPs at an inpatient department meeting and provided encouragement towards participation.
5. CNL reminds dayshift nurses involved in discharge to complete Part C of CLD Form.
6. Hospital department-wide email communication sent to remind relevant participants of progress of project and encourage participation.

Data Analysis:





With the implementation of the PDSA cycles, there was a gradual upward shift towards improved uptake of the CLD Form. Near the latter part of the project, there appears a positive trend in uptake of the CLD Form by physicians.

Lessons Learned & Next Steps:

Key to success in quality improvement is understanding the team's motivation and what they need for a change to be successful.

We have determined that keeping the current pilot project running or expanding the project to the rest of hospital is not feasible at this time given competing changes actively underway with transitioning all health workers to iHealth electronic records for clinical documentation. Once iHealth is well established & health care staff have normalized its usage, we can consider introducing an electronic platform for criteria led discharge.

Improving Medical Microbiology Turn-Around Times for Deep Cultures Project

Physician Lead: Dr. Victor Yuen

Location: Victoria
Specialty: Medical Microbiology

Background:

Turn-around time (TAT) is a major indicator for evaluating the quality and performance of a clinical laboratory. When we aggregated time stamp data from the Island Health Cerner information system and the BD Kiestra total laboratory automation instrument, we noticed that the average TAT for workup of microbiologic cultures for body fluids, operative tissues, and deep swabs had been increasing since 2017.

Problem:

The average TAT for microbiologic cultures for body fluids, operative tissues, and deep swabs had been increasing since 2017, from 78 hours to 104 hours. TAT is a major indicator for evaluating the quality and performance of a clinical laboratory with implications for patient outcomes such as duration of antimicrobials, length of stay, and drug adverse effects.

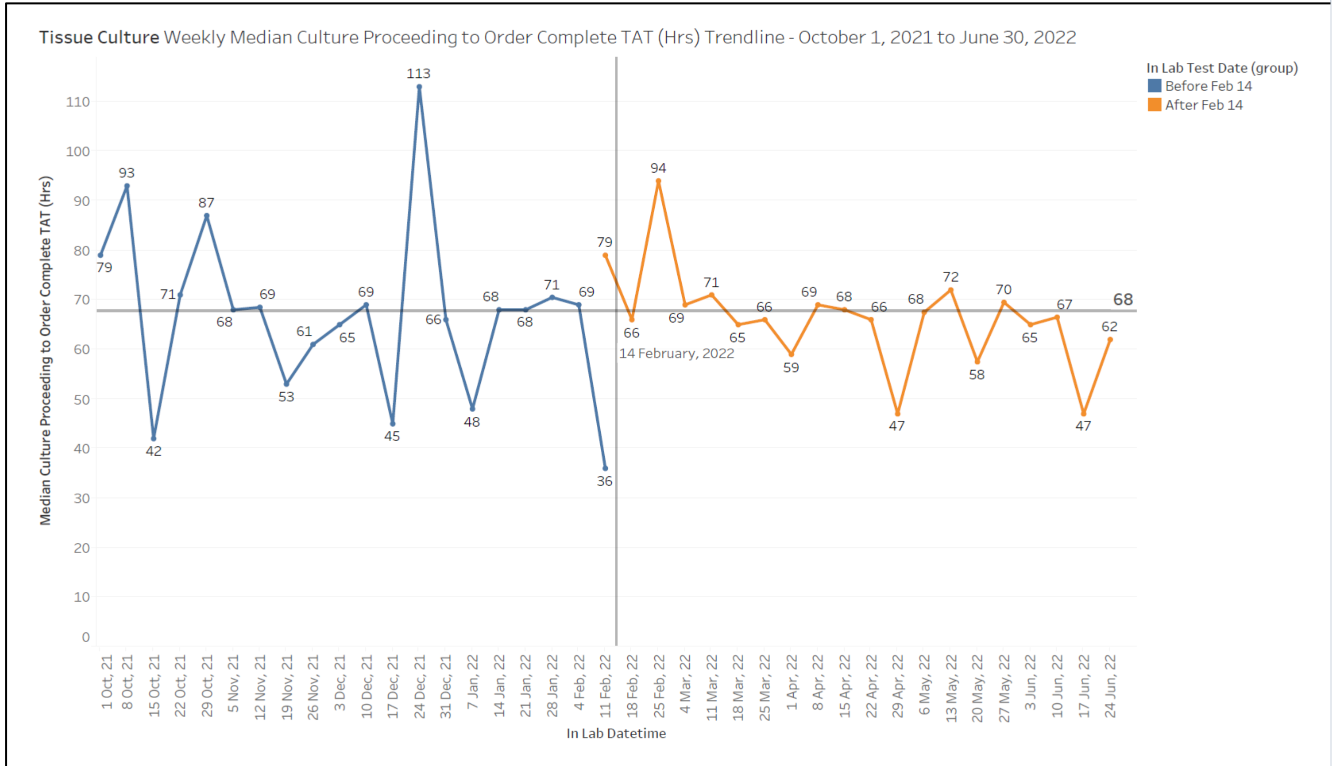
Aim of Project:

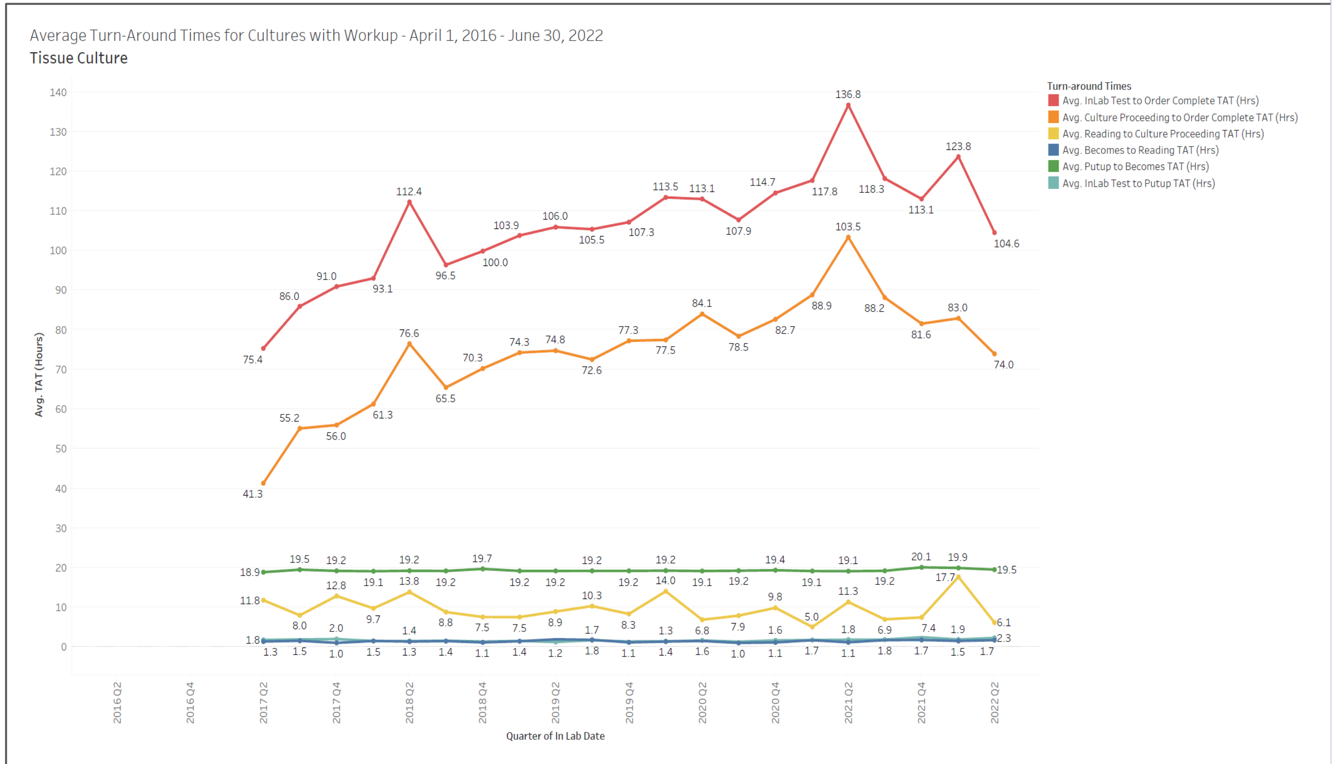
The aim of the project was to decrease the average turn-around-times for microbiology deep cultures by 25% by the end of June 2022 for patients at Island Health.

Action Taken:

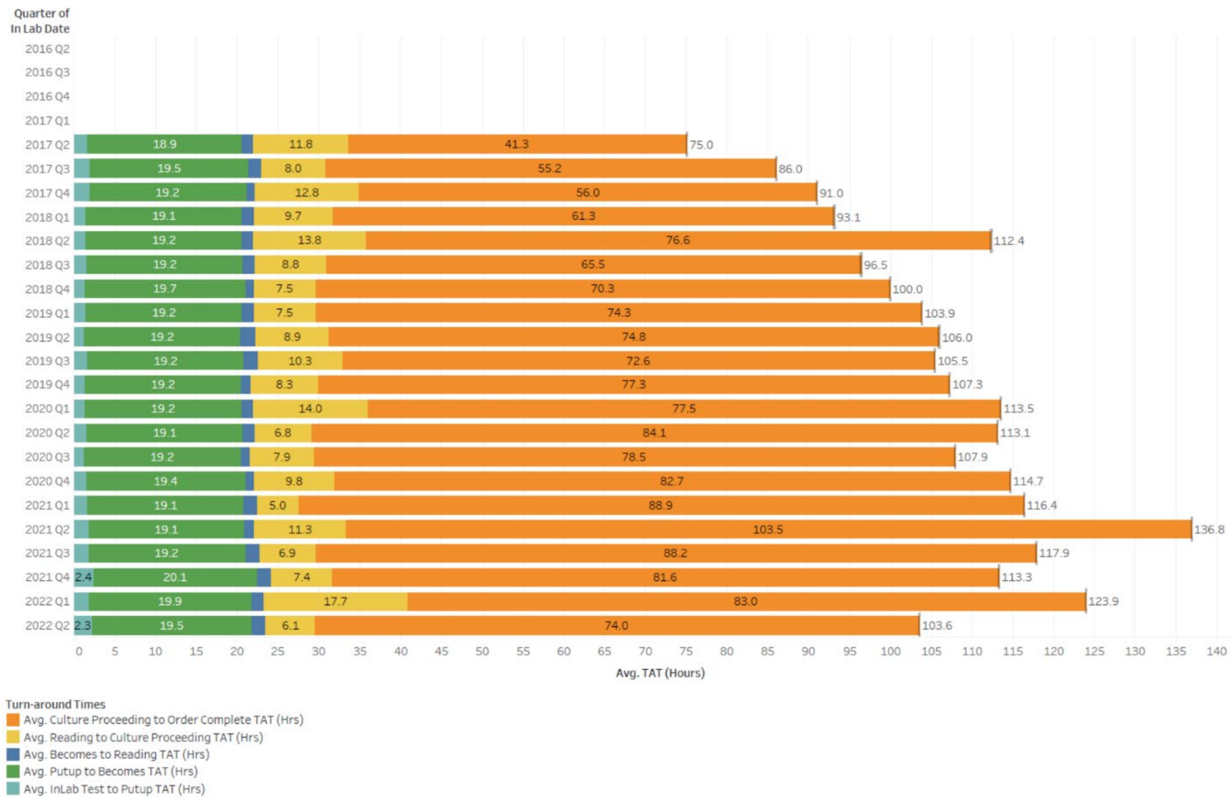
The key change was to reduce the number of deep cultures that automatically undergo extended incubation. Previously all samples with high neutrophil count were incubated for 10 days, even though the neutrophil numbers were artificially overestimated by centrifugation. The RJH Microbiology technologists' Standard Operating Procedure manual for the deeps bench was revised and released on 14 Feb 2022 with the intention of minimizing repetitive non-value added work in the lab.

Data Analysis:





We did not see the improvement in TAT we had aimed for.



Lessons Learned & Next Steps:

We learned in this project that wide day-to-day fluctuations made short-term effects difficult to observe. Instrument failures had an unexpected negative impact to TATs.

We will disseminate results to bench technologists, colleagues, leadership, and stakeholders. Going forward we will continue develop other change ideas for deep cultures and other culture types and test them using the QI approach.

2021- 2022 PQI TEAM

Dr. Adele Harrison	PQI Authority Sponsor
Dr. John Galbraith	PQI Steering Committee Chair
Dr. Alex Hoechsmann	PQI Physician Advisor
Dr. Dana Hubler	PQI Physician Advisor
Dr. Alan Buckley	PQI Physician Mentor
Dr. Albert Houlgrave	PQI Physician Mentor
Dr. Alicia Power	PQI Physician Mentor
Dr. Jennifer Oates	PQI Physician Mentor
Dr. Michael Chen	PQI Physician Mentor
Jennie Aitken	PQI Manager
Marion Sollazzo	PQI Consultant
Jacob Hart	PQI Coordinator
Julia Porter	PQI Coordinator
Kamla Gage	PQI Coordinator
Shruti Kaushik	PQI Data Analyst
Stephanie Goult	PQI Program Associate

2021–2022 STEERING COMMITTEE

Members Island Health	Dr. David Butcher, HAMAC Dr. Chris Hall, Executive Medical Director, Medical and Academic Affairs Dr. Adele Harrison, Medical Director, Medical & Academic Affairs (PQI HA Sponsor) Kristine Votova, Director, Medical & Academic Affairs (SQI HA Sponsor) Scott McCarten, Executive Director, Capital Management and Finance
Clinically Active Physicians	Dr. Hector Baillie, Internal Medicine Dr. John Boldon Dr. John Galbraith (Chair) Dr. Alex Hoechsmann (PQI Physician Advisor) Dr. Dana Hubler (PQI Physician Advisor) Dr. Jennifer Kask Dr. Colin Landells Dr. Grant Larson (MSA) Dr. Jason Wale
Specialist Services Committee	Dr. Gordon Hoag, Physician Representative, SSC Aman Hundal, Initiative Lead, SSC Asia Hollingsworth, PQI Manager, SSC Dr. Curt Smecher, Physician Representative, SSC
Patient Representatives	Andrea Zoric, Patient Partner, Cowichan Valley Laura Bobbitt, Patient Partner, Victoria
Standing Observers (non-voting)	Adrian Leung, Director, Economics and Policy Analysis, SSC Jennie Aitken, Manager PQI, Island Health Stephanie Goult, Program Associate PQI, Island Health (recorder) Deborah Bartley, SSC Leader, Island Health (secretariat)